

THE USE OF KNOWLEDGE IN COUNTERINSURGENCY

by

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DEDICATION

This work is dedicated to my loving wife, Whitney, and my wonderful daughter, Maggie.

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I appreciate all of the Masonomists under whom I had the privilege of studying, but I would especially like to thank my committee chair for all of his guidance, feedback, and patience. All three were immensely valuable to me in this endeavor.

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DISCLAIMER

The views expressed in this academic research paper do not reflect the official policy or position of the United States government or the Department of Defense.

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LIST OF ABBREVIATIONS

Active Service Units	ASU
Al Qaeda in Iraq	AQI
Center for Army Lessons Learned	CALL
Commander’s Emergency Response Program.....	CERP
Department of Defense	DOD
Department of Defense Inspector General.....	DODIG
Diverse, Competing, and Overlapping Legal Orders.....	DCOLO
Functional, Overlapping, Competing Jurisdictions	FOCJ
General Army Convention	GAC
General Headquarters.....	GHQ
Government Accountability Office.....	GAO
Government of Iraq.....	GoI
Government of Republic of Colombia.....	GoRoC
Government of Republic of Guatemala	GoRoG
Government of Republic of Peru	GoRoP
Government of Republic of Sudan	GoRoS
Government of the Islamic Republic of Afghanistan	GIRoA
Government of United Kingdom	GoUK
Institute for Liberty and Democracy	ILD
Integrated Financial Operations	IFO
Irish Republican Army.....	IRA
Islamic Courts Union	ICU
Islamic State of Iraq and the Levant	ISIL
Money as a Weapon System.....	MAAWS
Operation ENDURING FREEDOM.....	OEF
Provisional Irish Republican Army	PIRA
Revolutionary Armed Forces of Colombia	FARC
Special Inspector General for Afghanistan Reconstruction.....	SIGAR
Targeted Killing Effectiveness	TKE
Transitional Federal Government	TFG
Trial-By-Ordeal.....	TBO
United Nations Transitional Administration in East Timor.....	UNTAET
United States	US
Virginia Political Economy.....	VPE
Weapons of Mass Destruction	WMD

ABSTRACT

THE USE OF KNOWLEDGE IN COUNTERINSURGENCY

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The security, governance, and development dimensions of counterinsurgency are examined through different economic lenses. Virginia Political Economy informs the effectiveness of targeted killing campaigns in creating security. Austrian Economics illuminates the performance of economic development initiatives. Finally, Institutional Economics guides an evaluation of competing strategies to achieve governance objectives. The generation, transmission, and consumption of information underlies all three cases, as the ultimate fitness of an organization, an economy, or an institution relies on its use of knowledge.

CHAPTER ONE: INTRODUCTION

The United States military's counterinsurgency experience began with the "Banana Wars" (1898-1934) and the Philippines Campaign (1899-1902). In spite of the Marine Corps having published the doctrine developed during those wars as the *Small Wars Manual* (1940), that experience was no longer part of the military's institutional memory by the start of the Vietnam conflict (1955-1975). Similarly, despite the experience of Vietnam, the military entered the 21st century viewing counterinsurgency as a distraction from 'major theater wars.' In the years since, the United States military has been called on to wage counterinsurgency campaigns in Afghanistan and Iraq, after toppling both countries' governments. But just as the 1897 obituaries of Mark Twain proved infamously premature, so too are modern day attempts to inter counterinsurgency. As counterinsurgency expert David Kilcullen has written: "our problem is not that we lack doctrine but that we continually forget, relearn, discard our corporate knowledge, and treat as exceptional one of the most common forms of warfare" (2006 p. 1). Despite having declared the end of to combat operations in both countries, the American military remains committed to operations in both Afghanistan and Iraq and the same geopolitical conditions that necessitated Operations ENDURING FREEDOM and IRAQI FREEDOM are certain to arise again.

While counterinsurgency theories and doctrine vary in their decompositions of counterinsurgency (e.g., Joint Chiefs of Staff 2018, Kilcullen 2006, United States Army 2006), this author follows the U.S. Integrated Civilian-Military Campaign Plan, which divided whole-of-government endeavors into three lines of effort: security, development, and governance.¹ Each line of effort has become a chapter of economic analysis herein.

As with other types of conflict, it is natural that counterinsurgency should have a security element wherein the combatants utilize violence against one another in pursuit of some relative advantage. While the local population tends to be the focus of security efforts in counterinsurgency, counterinsurgents must decide whether proactive pursuit of the adversary is part of their strategy. The second chapter informs that decision through an assessment of the efficacy of such campaigns.

The literature assessing the effectiveness of targeted killing campaigns fails to account for all identified effects on targeted organizations. The effects of decentralization on terrorist groups are examined through the lens of Virginia Political Economy. Two case studies—the Provisional Irish Republican Army and Al Qaeda—find the efficiency of organizational coordination and effectiveness of organizational control to be higher in the periods of relative centralization. These findings extend the literature on targeted killings in order to more completely assess the effectiveness of such campaigns.

The provision of quality governance is another dimension along which insurgents and counterinsurgents compete. As David Kilcullen has written: “a government that is

¹ As the campaign plan has not been publicly released, references herein are based on the Government Accountability Office’s 2010 report “The Strategic Framework for U.S. Efforts in Afghanistan.”

losing to an insurgency is not being outfought, it is being outgoverned” (2009 p. 60).²

The third chapter examines access to justice initiatives as part of governance line of effort.

The provision of justice is examined through the use of competition as a Hayekian/Kirznerian knowledge-generating discovery procedure. Modern cases of direct institutional competition—judicial institutions in Afghanistan, Liberia, and Peru—are evaluated, resulting in the identification of a relationship between Northian adaptive efficiency and institutional performance.

The economic development dimension of counterinsurgency involves a foreign force engaging in economic planning, while an indigenous force uses violence and other means to stymie the planner’s every move. Modern counterinsurgency campaigns attempt to deliver widespread economic growth, but often struggle with the relatively limited goal of achieving pre-determined output goals. The challenges facing planners of economic development in counterinsurgency are the fourth and final chapter.

The knowledge requirements of economic development inform a critical evaluation of the ability of the Commander’s Emergency Response Program (CERP)—a United States Department of Defense (DOD) reconstruction program in Iraq and Afghanistan—to achieve the Coalition’s economic counterinsurgency objectives. The shortcomings of the CERP program are illuminated through the analytic framework of economic calculation and the planner’s problem.

² Kilcullen was paraphrasing Bernard Fall (1965).

In spite of an expenditure of blood and treasure measured in the trillions of dollars, the United States and its coalition partners failed to achieve their counterinsurgency objectives in Afghanistan and Iraq. Echoing Pete Boettke's comments on economic development, the challenge in each dimension isn't to "know what" needs to be done, but to "know how" to accomplish it (1996). While the Coalition clearly specified its ultimate counterinsurgency objectives for each of the lines of effort discussed above, each of the schools of economic thought applied herein offer theoretical justification to doubt the means applied were ever capable of achieving the counterinsurgency ends they were designed to achieve. In response to these epistemic shortcomings, this dissertation explores the limits on our knowledge of how to execute counterinsurgency operations.

CHAPTER TWO: DECENTRALIZING TERRORIST ORGANIZATIONS

Section I: Introduction

Counterterrorist governments have many decisions to make when designing and waging a campaign to disrupt, degrade, and/or defeat a terrorist group. Among the most controversial decisions in this domain is whether or not to proactively hunt and kill members of the terrorist organization. The military's targeting of adversary leaders dates back at least to Alexander the Great's pursuit of Darius III (Jones 2001 pp. 24-25), but the strategy has become more widely practiced in the counterterrorism campaigns of Israel (see e.g., Bergman 2018) and the United States (see e.g., Kenney 2007, Mazzetti 2013, Naylor 2015). Illustratively, the first "Priority Action" listed in the 2018 National Strategy for Counterterrorism is "Target Key Terrorists and Terrorist Groups," where targets "will include terrorist leaders, operational planners, and individuals deploying their expertise in areas such as WMD, explosives, cyber operations, and propaganda" (Trump 2018 p. 13).

Numerous social scientists have attempted assessments of the effectiveness of targeted killings as a counterterrorism strategy, applying everything from in-depth case studies (e.g., Crenshaw 1991, Cronin 2009) to time-series analyses (e.g., Hafez & Hatfield 2006, Jaeger & Siddique 2011) and spatial models (e.g., Johnston & Sarbahi 2016, Tominaga 2014). History shows that targeted killings have been neither universally

effective, nor universally ineffective, leaving plenty of room for scholars to develop different opinions as to the variations in outcomes (e.g., Jordan 2009, Price 2009, Rigterink 2018). Rigorous assessments of targeted killing effectiveness (TKE) are vital to informing national strategy, as terrorism continues to plague countries big and small.

Factors such as ideology (e.g., Cronin 2006, Price 2009), organizational longevity/institutionalization (e.g., Jordan 2009, Freeman 2014), and popular support (e.g., Jordan 2014, Crenshaw 1991) are routinely identified in assessments of the effectiveness of targeted killing campaigns as a means of degrading, disrupting, or defeating terrorist organizations. One factor that is insufficiently explored in the TKE literature, however, is decentralization. This paper fills that gap by focusing on decentralization as a causal mechanism through which targeted killings impact organizational performance. The central argument is that targeted killings decentralize terrorist organizations, reducing their overall effectiveness.

It is widely accepted that terrorist organizations tend toward decentralization, with most characterized as networks.³ Most of the TKE assessments that account for organizational form, however, simply *assert* that the effectiveness of targeted killings varies with the degree of decentralization (e.g., Byman 2006, Cronin 2006, Cullen 2008, David 2002 & 2003, Everton & Cunningham 2013, Frankel 2011, Freeman 2010 & 2014, Hutchinson & O'Malley 2007, Kober 2007, Langdon *et al.* 2004, Long 2014, Price 2009,

³ See, for example, Arquilla and Ronfeldt (2001) and Raab and Milward (2003). The term decentralization is also used interchangeably with network (e.g., Arquilla & Ronfeldt 2001, Brafman & Beckstrom 2006) and defined primarily in contrast to hierarchies (e.g., Burns and Stalker 1961, Podolny and Page 1998; Powell 1990; Powell and Smith-Doerr 1994, Sanin & Giustozzi 2010) throughout this literature.

Smith & Walsh 2013). Some TKE assessments, however, propose that a causal relationship exists from targeted killing to decentralization.⁴ Jenna Jordan (2009) and Jacob Shapiro (2013) are among the most prominent scholars to argue that terrorist organizations make a conscious decision to decentralize in direct response to targeted killing campaigns and related counter-terrorist pressures. Other scholars argue that decentralization results from targeted killings through the creation of a leadership vacuum (e.g., Abrahms & Potter 2015, Kenney 2009, Wilner 2010) or from an increase in communications costs (e.g., Abrahms & Potter 2015). If decentralization of the terrorist network occurs in response to targeted killings, the TKE literature should be considering the implications of decentralization within its larger calculus (rather than treating decentralization as exogenous, as is typical among TKE assessments), as that has the potential to move the net assessment of the effectiveness of targeted killings.⁵

Network science provides theoretical support for a relationship between network structure and resilience to targeted removals. A network's susceptibility to the targeted removal of hubs (the most well-connected entities) is a function of the distribution of connectivity across entities, for example (e.g., Albert, Jeong, & Barabási 2000; Borgatti 2006).⁶ The translation of network science ideal types (i.e., random, scale-free, and small

⁴ Patrick Johnston offers an opposing view, in noting: "there is little empirical evidence that decapitation flattens militant organizational structures" (Johnston 2012 p. 53). In doing so, Johnston contrasts his position with Daniel Byman (2006) and Stephen David (2002), who he cites as having "suggested that leadership decapitation makes defeating insurgencies more difficult by decentralizing them" (ibid).

⁵ My use of econometric terminology is intended to clearly present the hypothesized relationships. With one notable exception (Price 2012), however, none of the cited works even attempt an econometric examination of the relationship between decentralization and TKE, relying instead on case studies or unsubstantiated assertions.

⁶ Scale-free networks are characterized by skewed distribution of links across nodes, meaning the most well-connected nodes constitute a significant portion of the overall connectivity and therefore the

world) and concepts (i.e., centralization, fragmentation) to the organization science ideal types (i.e., hierarchy, market, and network) and concepts (i.e., centralization, output) that typify terrorism research, however, is fraught.⁷ There has been little empirical evaluation or even detailed applied research (e.g., rigorous case studies) of this hypothesized relationship and its real-world implications for the effectiveness of targeted killing campaigns (Johnston 2012, Price 2012).

Organizational research finds ample evidence of a relationship between network structure and performance (e.g., Ferguson 2017, Lawrence & Lorsch 1967, Nohria & Eccles 1992, Podolny & Page 1998, Powell 1990, Powell and Smith-Doerr 1994, Rittel & Webber 1973, Saxenian 1994 & 1996, Simon 1973). On the rare occasion this is discussed in the TKE literature, however, it is channeling business literature about networks' relative strengths—reportedly adaptability/flexibility, and learning, especially as relates to non-routine tasks.⁸

removal of those nodes potentially has significant network-wide implications (Albert, Jeong, & Barabási 2000). Links are more evenly distributed in random or small-world networks, on the other hand, meaning hubs are rare and therefore overall connectivity tends to be unaffected by targeted removal of well-connected nodes.

⁷ Some scholars asserting the fragility of hierarchies are implicitly equating centralized hierarchies to the scale-free ideal type (e.g., Bakker, Raab, & Milward 2012; Everton 2012a). Suffice it to say the definitions of each are nuanced (see e.g., Broido & Clauset 2019) and imprecise analogies lead to imprecise conclusions (Eilstrup-Sangiovanni & Jones 2008)—just as centralization in the former deals with the variance of nodal centrality scores (Everton 2012a), while centralization in the latter is characterized by a leader's ability to impose direct control (Jackson 2006), for example. Empirical assessments of terrorist organizations' network topologies vary greatly in their conclusions (e.g., Helfstein & Wright 2011; Lindelauf, Borm, & Hamers 2009; Kenney, Coulthart, & Wright 2017; Xu & Chen 2008).

⁸ Jenna Jordan, is illustrative, in assessing networks to be "more adaptive" and generally "stronger" (Jordan 2009 p. 740). Notable examples from outside of TKE literature include Arquilla & Ronfeldt (2001), Brafman & Beckstrom (2006), and Raab & Milward (2003). Abrahms & Potter (2015). Price (2012) and Riggerink (2018) are exceptions in the TKE literature. Notable exceptions from outside the TKE literature include Eilstrup-Sangiovanni and Jones (2008) and Shapiro (2013).

One paper summarizes the literature in saying: “Decentralization is characteristically described as an unconditional best practice against the defender [...] decentralization is thought to unleash the human potential of militant groups by making them more adaptive, flexible, inclusive, innovative, resilient, and specialized” (Abrahms & Potter 2015 pp. 317-8). But if decentralization were an unalloyed good—avoiding the (hypothesized) resilience deficiencies of hierarchies while benefiting from the (hypothesized) performance benefits of networks—terrorist organizations would be well-served to decentralize into “leaderless resistance.”⁹

Virginia Political Economy (VPE)—which represents the confluence of the Austrian and Public Choice schools—provides a cohesive analytic framework for comparative institutional analysis of decentralization within the context of TKE that doesn’t fall victim to Demsetz’s Nirvana Fallacy (1969). Scholars who understand the complexities of “the organizational side of terrorism” (Shapiro 2013) tend not to write of VPE, in part because these once revolutionary ideas are now among the mainstream, but brief discussions of the omniscience and benevolence assumptions illustrates the applicability of VPE.

Ludwig von Mises (1920, 1922, 1949) and Friedrich Hayek (1945) attacked the omniscience assumption of central planners by emphasizing the challenges associated with distributed local knowledge. This dimension of the Austrian tradition is central to the effectiveness of terrorist organizations because: “An organization, in the words of

⁹ Louis Beam’s “leaderless resistance” and Marc Sageman’s “leaderless jihad” are exemplars of “Loosely-Coupled Movements,” in contrast to “Tightly-Coupled Groups” and “Coupled Networks,” both of which are more cohesive (Jackson 2006).

Chester Barnard, is a ‘system of consciously coordinated activities or forces of two or more persons.’ The most important thing to know is how that coordination is accomplished” (Wilson 1989 p. 24).

James Buchanan (1949, 1984) critiqued the benevolence assumption that had typified earlier economic analyses of government, preferring instead the study of “politics without romance.” This critique from Public Choice theory would seem to apply to the modern study of terrorist groups, with many TKE scholars romantically ignoring away preference divergence, principal-agent problems, and all other challenges present in organizations of all stripes.

The rest of the paper is organized as follows: Section II derives some preliminary findings from the theoretical framework provided by Virginia Political Economy. Sections III evaluates those findings against the historical record, drawing on the well-documented cases of the Provisional Irish Republican Army and Al Qaeda. Section IV concludes.

Section II: Virginia Political Economy

Virginia Political Economy has significant potential to illuminate the organizational effects of decentralization. This section will draw on the Austrian Economics to evaluate coordination and Public Choice Economics to explore control, before exploring how VPE theory will be operationalized in the evaluation of two historical cases.

Subsection II.I: Coordination of Divided Knowledge

One might assume that the Austrian tradition would unequivocally favor decentralization, as key concepts such as economic calculation (Mises 1920) and the knowledge problem (Hayek 1945) are best known for their illumination of foundational shortcomings of centralized planning. But such conclusions are predicated on the institutional context in which they were derived.

One must start with recognition of “the unavoidable imperfection of man’s knowledge and the consequent need for a process by which knowledge is constantly communicated and required” (Hayek 1945 p. 530). Hayek’s “man on the spot” was able to combine his “limited but intimate knowledge of the facts of his immediate surroundings” with knowledge of “the larger economic system” (e.g., the relative scarcity of goods and services) because the latter information emerged through market interactions and was conveyed through the price mechanism (Hayek 1945 p. 524).

No such price mechanism is available to guide critical decisions facing a terrorist decision-maker (e.g., who/what to attack and when/where/how to do so), it remains necessary for decisionmakers to interpret distributed knowledge in the context of the larger system in which the decision is to be made. The coordination mechanism is different, however, because “coordination is the work of the price-mechanism in one case and of the entrepreneur in another” (Coase 1937 p. 389). In the terrorist context, this coordination presents an opportunity for discovery by counter-terrorist forces, but it is required because “achieving their political goals requires regular communication” (Shapiro 2013 p. 2). That is especially true because change is omnipresent: “As long as

things continue as before, or at least, as they were expected to, there arise no new problems requiring a decision, no need to form a new plan” (Hayek 1945 p. 523).

Austrian economics teaches us to observe: “Which of these systems is likely to be more efficient depends mainly on the question under which of them we can expect that fuller use will be made of the existing knowledge” (Hayek 1945 p. 521). So now let us examine how decentralization affects coordination in a terrorist organization.

Decentralization provides subordinates with increased autonomy (Abrahms & Potter 2015, Mulder 1960). When considering decentralization within a terrorist organization, it can be useful to differentiate between control at the strategic, operational and tactical levels, as each has different communication profiles:

Because of its time-sensitive nature and the specificity of the interactions involved, significant tactical control or influence [...] will likely require direct and ongoing contact. Operational control or influence could require much less [...] provided appropriate mass communication modes exist to transmit opinion leaders’ statements to their followers. (Jackson 2006 pp. 244-245)

Decentralization of tactical decision making, on the other hand, moves the decision-making authority to the holder of the local knowledge. While the need to transmit local knowledge has significantly decreased, it comes with a commensurate increase in the need to disseminate strategic guidance down to the decision-maker at the tactical edge. This is where differentiating levels of control proves critical, however, as strategic guidance can often be broadcast and thus requires little or no direct contact (Jackson 2006). The replacement of voluminous direct contacts with a limited number of

broadcasts of strategic intent represents a gain in efficiency in the transmission of information within the organization.¹⁰

In summation, an increase in autonomy holds the potential to improve information processing—as the addition of lower-level decision-makers allows for the distribution of the cognitive load associated with required decisions—and information transmission—as the broadcast of strategic guidance replaces the direct communication of local knowledge.

Subsection II.II: Problems of Control

As Gordon Tullock pointed out: “When the problem of communication is satisfactorily met, when the subordinate understands the orders given to him, the problem of ensuring his compliance remains” (Tullock 2005a p. 197). The potential for agency problems—whether “doing too little (shirking)” or “doing the wrong thing (subverting)” (Wilson 1989 p. 156)—arises any time a principal¹¹ delegates to an agent¹² whose preferences deviate from the principal’s. Such a model of organizational decision-making relies on economic assumptions including rationality¹³ and methodological individualism¹⁴ and stands in stark contrast to political theorists engaged in a “grail-like

¹⁰ This also holds the potential to reduce the distortion of the message that occurs in each retelling—Tullock’s “whispering down the lane” (Tullock 2005a p. 148)—as the broadcast is able to relay the exact same message to all levels of the bureaucracy.

¹¹ The principal—who Tullock calls “the sovereign” (Tullock 2005a p. 57)—is the leader on whose behalf the agent acts.

¹² The agent is the actor, which, in a terrorist organization, could be an individual terrorist or middle management.

¹³ Much has been written on the rationality of terrorists (e.g., Caplan 2006, Um 2011), but Gordon Tullock perhaps said it best: “individuals engaging in conflict and violence are not necessarily behaving irrationally, although they are normally playing a negative-sum game” (Tullock 2005b p. 7).

¹⁴ “We shall reject at the outset any organic interpretation of collective activity” (Buchanan & Tullock 1962 p. 11).

search for some ‘public interest’ apart from, and independent of, the separate interests of the individual participants in social choice” (Buchanan & Tullock 1962 p. 12). Terrorists join other organizations in experiencing agency problems.

The preferences of agents often differ from that of their principals. A person granted any degree of autonomy has the potential to become an entrepreneur capable of “boldness, imagination, [and] drive” (Kirzner 1997 p. 70). It is important to note, however, that entrepreneurship takes many forms and can be productive, unproductive, or even destructive (Baumol 1990, Coyne & Leeson 2004) from the perspective of the organization because different people want different things, as: “the goals and motives that animate leaders are evidently as varied as the dreams of men” (Dahl 1961 p. 95).

Preference divergence pervades terrorist organizations. Jacob Shapiro (2013) reports:

Overall we see three internal dynamics leading to preference divergence over tactics: (1) individuals recruited because of their skills in violence tend to have an underlying preference for more action, or different actions, than leaders would prefer; (2) leaders and their covert operatives receive different information about the world; and (3) the cognitive dynamics of underground organizations lead operational units to see the world differently than their leaders, typically interpreting the same information as implying more violence. All three result in agency problems. (p. 48)

Differing perspectives on resource allocation are another frequent source of agency problems in terrorist organizations (Shapiro 2013, Shapiro & Siegel 2007).

Agency problems increase in complexity when the principal’s ability to monitor and/or discipline the agent is imperfect. Such imperfections can arise, for example, from difficulties assessing individual performance in team production environments (Alchian & Demsetz 1972) or due to an increase in the number of subordinates (Tullock 2005a). This is certainly true in a terrorist context, with the added complexities that principals’

monitoring of agents presents a security risk and “there is a substantial random component to whether or not an attack succeeds” (Shapiro 2013 p. 31). Discipline is especially complicated within terrorist organizations, as agents have information sought by counterterrorist governments and are often capable of violence (Shapiro & Siegel 2012).

Agency problems have a significant effect on terrorist organizations: “They reduce their effectiveness, shape their operations, and push them to adopt institutions that are clearly problematic from a security perspective” (Shapiro 2013 p. 101). In fact, “it is exactly the terrorist organizations that most effectively deal with agency problems that stand out for being most effective and resistant to counterterrorism” (Shapiro 2013 p. 33).

Decentralization increases the amount and scope of tasks delegated to agents, and thus is likely to increase agency problems within the organization. Such problems are likely to be exacerbated by the reduction in coordination (Jackson 2006 pp. 247-8, Mobley 2012 p. 12) and difficulties in monitoring and discipline (Mobley 2012 p. 4) brought about by decentralization.

Section III: Historical Cases

To simplify the comparison of cases in a domain where the potential for confounding variables is boundless, the selection of cases is herein limited to within-case comparison of terrorist organizations before and after the group underwent a significant reorganization. As opaque as terrorist organizations are, insight into a group’s organizational form sometimes leaks out in the form of a defector or captured

documents.¹⁵ In truly exceptional examples, such sources illustrate the form of an organization both before and after a change in organizational structure.

The capture in December 1977 of the “Staff Report,” discovered in conjunction with the arrest of Provisional Irish Republican Army (PIRA) Chief of Staff Seamus Twomey, delivered to the British government a detailed outline of the organizational changes the PIRA had implemented in 1976 (Gill *et al.* 2014, Mobley 2012, O’Brien 1995). The report, which was prepared for the PIRA’s General Headquarters provided direct insight into not only the changes that were implemented, but the security rationale behind them and context surrounding them (Coogan 1994, Horgan & Taylor 1997). This unparalleled (if unintended) transparency makes the 1976 reorganization of the PIRA—probably history’s most studied terrorist organization—an ideal case study for evaluating the impacts of a terrorist organization’s degree of centralization.

Al Qaeda also ranks among history’s most studied terrorist groups and also made a significant shift in its level of centralization. In late 2001, decentralization was imposed on Al Qaeda through the counterterrorist pressure applied after the September 11th attacks. Just as the “Staff Report” was supplemented by the organizational analysis of countless security experts, academics, and others, the declassified documents from the “treasure trove” of data recovered from the 2011 Abbottabad raid that killed Al Qaeda founder Osama bin Laden are similarly supplemented by expert organizational analyses

¹⁵ Notable examples include the Sinjar Records—documents captured by Coalition Forces in 2007, which provided extensive insight into Al Qaeda in Iraq—and the defection of Jamal Ahmed al-Fadl—an associate of Osama bin Laden, who provided unique insight into the core of the Al Qaeda organization when he walked into the American embassy in Eritrea in 1996.

(e.g., McCulloh & Carley, 2011; Mishal & Rosenthal, 2005; Mobley, 2012; Sageman, 2004).

In addition to the availability of information on these two groups, these cases also make ideal selections for this evaluation as one case (PIRA) illustrates centralization, while the other (Al Qaeda) represents decentralization of control. This aids in analysis by helping to differentiate factors relating to ordering or the passage of time.

Subsection III.I: Provisional Irish Republican Army

A. Background

The PIRA was founded in 1969 when the Irish Republican Army (IRA) fractured over “differences in political and military strategy” (Jackson 2005 p. 94). Despite humble beginnings (Coogan 1994, Jackson 2005), within a year the PIRA had become the primary organization combatting Protestant militias and the British government in Northern Ireland and beyond (Shapiro 2013).¹⁶ By the time of the Good Friday Agreement in 1998, more than 3,300 had died, about half of whom had been killed by the PIRA (O’Brien 1995).

The PIRA initially adopted the military organizational structure of its predecessor organization (Field 2017, Mobley 2012, Moloney 2002).¹⁷ The 1975 ceasefire had a deleterious effect on the PIRA at a time when the counterterrorist pressure they faced was

¹⁶ While the PIRA campaign conducted attacks in continental Europe and even the United States, “[t]he vast majority of PIRA terrorist operations were carried out in Northern Ireland and on the British mainland” (Jackson 2005 p. 94).

¹⁷ This would seem to support Tullock’s claim that most organizational structures are “more readily explained by their history than by any analysis of their ‘functions’” (Tullock 2005a p. 167).

only increasing, leading the PIRA to initiate a centralizing reorganization in 1976 (Field 2017 pp. 14-5, Mobley 2012 p. 43).

B. Initial Period (1969-1976)

At its founding, the PIRA organized like an army, with volunteers organized geographically into brigades, battalions, and companies (Drake 1991, Gill *et al.* 2014, O'Brien 1995, Soule 1989). The General Headquarters (GHQ)—led by the Chief of Staff—sat atop the brigades and answered in turn to the Army Council (Field 2017, Horgan & Taylor 1997), which had “overall responsibility for directing the armed struggle” (Field 2017 pp. 12-13).¹⁸ Functional specialization occurred within the members of the Army Council and departments comprising the General Headquarters Staff (Field 2017, Horgan & Taylor 1997).

Coordination within the PIRA's initial organizational structure—in the assessment of the PIRA's own 1976 “Staff Report”—was “burdened with an inefficient infrastructure of commands, brigades, battalions, and companies” (Coogan 1994 p. 465, Gill *et al.* 2014 pp. 55-6, O'Brien 1995 p. 109). The hierarchy was quickly overwhelmed, as “the organizational structure could not cope with rapid expansion and aggressive counterterrorism measures” (Field 2017 p. 14). As key personnel were removed by counterterrorist operations, it “disrupted internal lines of communication within the Provisional IRA and eroded the chain of command” (*ibid.*). All of this resulted in a system

¹⁸ The General Army Convention and Army Executive technically sit atop the Army Council, but are excluded herein as neither is a standing body and “In actual practice the purpose of the GAC is simply to elect (by ballot) an 'Army Executive' [...] who in turn elect the Army Council” (Horgan & Taylor 1997 p. 4).

where “communication between the Army Council and volunteers on the ground was intermittent” and the “structure functioned only sporadically” (ibid p. 13).

As a result, local commanders had significant autonomy, as: “IRA companies were encouraged to go their own way” (Moloney 2002 p. 107) and “Decisions are made by those close to the pointed end of the stick, often at the last possible moment” (Bell 2000 p. 166). This autonomy was almost complete, as “The vast majority of PIRA activities were carried out without direct intervention or control by the GHQ leadership” (Jackson 2005 p. 134). The consultation that did occur was often after the fact:

Decision arise from local vulnerabilities noted by the active and [...] If the target is appropriate, the necessary assets can be assembled, weapons, car, planning, volunteers, and action taken. Only the disasters, a British army ambush or civilians killed or a great success engender discussion at command centre. (Bell 2000 p. 166)

This was not autonomy by design, as: “The quasi-military structure of the Provisional IRA was supposed to ensure that the leaders of the Provisional IRA had control over rank-and-file operations” (Field 2017 p. 13). The reality, however, was that PIRA’s central leadership “had relatively little tactical or operational control over the activities of PIRA companies” (Moloney 2002 p. 24) and “clearly struggled to control operations on the ground” (Field 2017 p. 14).

Decentralized decision-making solely on the basis of local information may seem information efficient, as “there was very little coordination between areas such as Belfast, Derry, and South Armagh, or indeed within Belfast itself” (Drake 1991 p. 45). But the lack of coordination impeded organizational effectiveness: “While this gave maximum scope to local initiative it precluded the simultaneous execution of operations in order to

overstretch the army” (ibid). What resulted was “a highly-fragmented organization, with intermittent lines of communication, and competing centers of power” (Field 2017 p. 14).

Control by the PIRA senior leadership was aided by a degree of inherent like-mindedness among those “willing to risk their lives or long jail sentences for what they warned would likely be a dangerous and short career” (Staniland 2010 p. 182).¹⁹ In spite of that, however, the PIRA leadership was unable to control its members’ violence. Whether due to an independent streak like “the Republic of South Armagh”²⁰ (Bell 1998 p. 406), a “spur of the moment” decision like that to kidnap a German with a weak heart (ibid), “revenge for sectarian murders with tit-for-tat killings” (ibid), or a self-interested act like the robberies the PIRA called “homework” (Soule 1989 p. 39), volunteers acted with impunity.

This lack of control rarely came to a head in this period because “guidelines issued by Dublin were malleable and [...] transgressing them would not result in disciplinary action” (Mobley 2012 p. 25), but senior leadership’s “lack of control also imperiled some of the PIRA’s political strategies” (Mobley 2012 pp. 34-5). While the early PIRA was not as sensitive about civilian casualties as would later prove the case, incidents like “Bloody Friday” harmed their public perception and invited counterterrorist retaliation (Gill *et al.* 2014, Mobley 2012, Moloney 2002). PIRA members “caused unwanted trouble and deep embarrassment” by killing an Irish politician in the Republic,

¹⁹ Volunteering for the PIRA was therefore seen a separating equilibrium that, in some ways, revealed the volunteer’s private information about his devotion to the cause. Tullock’s “imperial system” (2005a p. 1818) was also at play, as most PIRA volunteers had come of age in a similar environment and had significant familial and social interconnections (Staniland 2010).

²⁰ Bell noted the same independent streak in saying: “no one was going to be able with any effect to tell the Republicans of South Armagh to restrain themselves” (Bell 2000 p. 142).

putting at risk their strategic safe haven and training ground (Bell 1998 p. 407). Also, politically problematic was the leadership's challenges credibly committing to ceasefires, as demonstrated in 1972 and 1975 (Mobley 2012). But perhaps most damaging to the PIRA's cause was the lack of discipline as related to operations security, which resulted in PIRA volunteers captured, confessing, and informing for the British (Drake 1991 p. 45, Moloney 2002 pp. 140-6).

C. Centralized Period (1977-1989)²¹

While incarcerated at Long Kesh Prison, Gerry Adams and Ivor Bell developed a plan to save the PIRA from the 1975 ceasefire, which they perceived as undermining discipline and organizational cohesion (O'Brien 1995, Shapiro 2013, Staniland 2010). Their plan—documented in the aforementioned “Staff Report—included significant changes to the PIRA command structure. Brigades in Northern Ireland and adjacent counties were subordinated to a new operations-focused Northern Command, while brigades in the rest of the Republic of Ireland would answer to Southern Command, which was focused on logistical support (Horgan & Taylor 1997, O'Brien 1995). Functionally specialized cells called Active Service Units (ASU) replaced traditional companies and battalions and answered directly to brigades (Coogan 1994, Mobley 2012). In addition to the reorganization, there was increased training as part of a “return to secrecy and strict discipline” (Coogan 1994 p. 465).

²¹ The second period has been truncated to remove the effect of the PIRA leadership's shift in focus to the peace process in the 1990s (Gill *et al.* 2014, Shapiro 2013).

Coordination efficiency—at the organizational level—was unaffected by the removal of a tier of bureaucracy below brigades and the addition of a tier above them altered the levels of authority and seniority of individual leaders, but, as the restructured PIRA experienced no net gain or loss in the number of bureaucratic tiers and thus the length of the transmission chain was unchanged.²² The reorganization increased functional specialization (Shapiro 2013). Both new command structures (Northern and Southern Commands, and ASUs) were functionally specialized, whereas their predecessors (companies and battalions) were regional in nature. Communications efficiency gains from specialization were more than offset by the introduction of strict compartmentalization. The “need-to-know” principle was strictly applied to restrict the spread of operational information (Coogan 1995 p. 244, Horgan & Taylor 1997 pp. 15 & 20). Only designated members were allowed to communicate outside of their ASU (Coogan 1995 p. 244). Members even withheld their names from their comrades in the interest of security (Horgan & Taylor 1997 p. 21). All of this served to drastically restrict information flow, trapping information locally within the organization (Jackson 2005 p. 130).

Control over the application of violence was centralized by the reorganization through the transfer of weapons from individual volunteers to brigade-level control. This resource centralization deprived ASUs (or individual volunteers) of the autonomy to conduct operations without prior approval,²³ meaning volunteers had to “apply for

²² Companies and battalions were removed, but ASUs and Northern/Southern Command were added.

²³ Brigade control of weapons was imperfect (Fields 2017 p. 17), but weapons were not generally provided for unauthorized operations (Shapiro 2013 p. 184).

equipment and then go through a vetting procedure to determine the guns were going to be put to proper use” (Field 2017 p. 15). While imperfect, this centralization of control over violence resulted in a “dramatic decline in civilian deaths caused by the PIRA” (Mobley 2012 p. 46), which was critical to popular support for the organization.

An interview by Ed Moloney provides an anecdote to illustrate the change in central control. An activist said of South Armagh PIRA volunteers in the earlier period: “The leadership would never try to give them orders” and “there was virtually no control from the center” (Moloney 2002 pp. 161). The activist saw a significant shift with the 1976 reorganization, however, saying: “that independence all but disappeared with the Northern Command” (ibid).

Implementation of the 1976 organizational reforms varied regionally, which has led some scholars to question the influence that PIRA’s senior leaders had on rural areas.²⁴ The deviation between rural and urban areas has been misinterpreted, however, as the guidance in the Staff Report treated them differently: “Rural areas, we decided, should be treated as separate cases to that of city and town Brigade/ Command areas. For this reason our proposals will affect mainly city and town areas” (Coogan 1994 p. 466). While one may argue the direction of causality,²⁵ the variation in organizational structure

²⁴ A sample of illustrative quotes includes: “In the rural areas the existing system was preferred by the local volunteers and was therefore retained” (Drake 1991 p. 47). “Particularly in the rural areas, the ASU structure was never embraced and they continued to use their traditional method of organization” (Fields 2017 p. 17). “Because of different demands in rural and urban areas, PIRA’s reorganization into a cell system was not uniformly implemented across the group” (Jackson 2005 p. 130). “In spite of the push to reorganize the entire PIRA, the restructuring process was not uniform across the organization. Units in rural areas fought harder to retain their old structures and operational habits” (Mobley 2012 p. 267).

²⁵ Historian J. Bowyer Bell wrote of PIRA decision making as being “engage[d] in the diplomacy of control” (Bell 2000 p. 144). He has written that “Commanders of a secret army rarely give orders unless they are

cannot therefore be viewed as insubordination, since rural areas were given different guidance.

D. Discussion

The PIRA's 1976 centralization improved coordination through increased functional specialization, which tends to reduce coordination necessary for efficient task execution (Tullock 2005a p. 165). This allowed for centralization without lengthening the chain of message transmission, a negative for coordination.

Central control of violence was increased through restricting access to a critical resource. This minimized deviations due to preference divergence of operational elements and facilitated unity of effort across the organization.

The PIRA chose to utilize the increased control, in part, to implement compartmentalization in pursuit of an objective that is not typical in other bureaucracies: security. The security dimension—which is arguably separable and distinct from the degree of central control²⁶ and thus from the centralizing reorganization—led the PIRA to implement this reform, which significantly degraded communication flows within the organization.

going to be obeyed" (Bell 2000 p. 141) and would likely argue the PIRA made an exception for rural areas because they knew their edicts would not hold there.

²⁶ While the compartmentalization wasn't caused by the centralization (and thus is exogenous to the question at hand), compartmentalization was enabled by the centralizing reforms. As Blake Mobley points out: "Groups with a loose and decentralized command structure are more difficult to train systematically" (Mobley 2012 p. 4), whereas: "Increased control over the rank-and-file PIRA volunteers permitted the organization to reach a level of compartmentalization that produced numerous counterintelligence benefits" (Mobley 2012 p. 54) and "With increased control, the PIRA leadership was able to standardize and oversee counterintelligence training for its recruits" (ibid).

Subsection III.II: Al Qaeda

A. Background

The Salafi jihadist terrorist organization Al Qaeda was founded by Osama bin Laden in 1988. Al Qaeda pioneered the prioritization of the “far enemy” (Western powers) ahead of the “near enemy” (local governments) in violent *jihad* (Byman 2003, Gartenstein-Ross & Barr 2018, Gerges 2005, Sageman 2011) and has conducted terrorist attacks in over a dozen countries.

Early Al Qaeda was a “hierarchical, rules-based organization” (Gartenstein-Ross & Barr 2018 para. 21). After the 9/11 attacks, an American-led coalition invaded Afghanistan, toppling the Taliban government and destroying Al Qaeda’s training camps. Al Qaeda’s leaders became “the most hunted men in the world” (Brown 2007 p. 18), with most detained or killed in the succeeding years. Al Qaeda “could no longer exist as a hierarchy” (Felter *et al.* 2006 p. 9) and debates soon began in academic and policy circles over the exact form taken by the newly decentralized Al Qaeda.²⁷ As David Ronfeldt caricatured the orthodoxy: “Al Qaeda is now more important as an ideology than an organization, network than a hierarchy, and a movement than a group” (Ronfeldt 2005 p. 1).²⁸

B. Initial Period (1996 – 2001)²⁹

²⁷ The Hoffman-Sageman debate (Hoffman 2008a & 2008b, Sageman 2008) has proven the most widely covered (see e.g., Ouellet, Bouchard, & Hart 2017; Neumann, Evans, & Pantucci 2011).

²⁸ Ronfeldt offered this summary in the course of arguing Al Qaeda was more accurately understood as a tribe. Al Qaeda as a brand (e.g., Glasser 2005 para. 3, Zelinsky & Shubik 2009 p. 322) was another popular interpretation.

²⁹ In 1996, Al Qaeda returned to Afghanistan from Sudan (Cragin 2008, Sageman 2011) and Osama bin Laden declared war on the United States (Brown 2007, Kahler 2009, Sageman 2011) to announce Al

In response to the infighting experienced in Al Qaeda's predecessor, "Bin Laden and his colleagues sought to design an organization equipped to overcome the challenges that had plagued the Maktab al-Khidamat" (Gartenstein-Ross & Barr 2018 para. 20). Al Qaeda is led by an emir "who is the ultimate authority on strategic decisions and the appointment of leaders" (Gartenstein-Ross & Barr 2018 para. 22) and his deputy, whose "duties depend on what the leader entrusts to him" (Gunaratna & Oreg 2010 p. 1055). The emir is advised by a Shura Council, comprised of the leaders of the administrative, media, military, political, religious, and security committees (Al Qaeda n.d., Eilstrup-Sangiovanni & Jones 2008, Gunaratna & Oreg 2010, Lahoud 2012). Individual Al Qaeda members are managed by the relevant staff section based on their function within the organization.

Coordination within Al Qaeda was governed by the management philosophy "centralization of decision and decentralization of execution" (Gartenstein-Ross & Barr 2018 para. 7, Mobley 2012 p. 118, Moghadam 2013 p. 484), meaning the emir "decided on the targets, selected the leaders, and provided at least some of the funding," but "the planning of the operation and the method of attack were left to the men who would have the responsibility of carrying it out" (Wright 2006 p. 348). In spite of Al Qaeda's bureaucratic rigidity, the organization maintained a flat organization structure to enable bottom-up innovation, specifically proposals for terrorist attacks (Gartenstein-Ross & Barr 2018, Mobley 2012, Moghadam 2013).

Qaeda's shift in focus to targeting Americans. 1996 is thus a logical break point for within-case comparison (e.g., Brown 2007, Kahler 2009, Mobley 2012).

While the organization structure was relatively information efficient—with decentralized execution under a flat, functionally-specialized staff—Al Qaeda emphasized communications security, leading them to compartmentalize operations and discourage use of the phone and internet in favor of less efficient, but more secure methods of communication, specifically couriers and face-to-face meetings (Cullison 2004, Mobley 2012). This reliance on human interaction was enabled by Al Qaeda’s management of training camps and access to controlled territory (Goolsby 2006, Hoffman 2004, Mobley 2012).

Control by the emir includes the selection of members for term appointments on the Shura Council, which is only advisory in nature (Gartenstein-Ross & Barr 2018, Gunaratna & Oreg 2010, Lahoud 2012). Bin Laden personally controlled the “golden chain” of financial resources (National Commission 2004 p. 66, Sageman 2011 p. 43), earning him the sobriquet “quartermaster for jihad” (Benjamin & Simon 2002 p. 113). The Al Qaeda membership oath included a requirement to “obey the superiors” within the organization (Cragin 2008 p. 1059). Between his control over the *shura* and resources, it is clear that the first half of Al Qaeda’s management philosophy means the “decisions were centralized in the hands of Bin Ladin” (Lahoud 2012 p. 70).

One might not anticipate much preference divergence within Al Qaeda, as membership was limited in number and based on multiple rounds of self-selection—opting to remain in Afghanistan after the end of the Soviet war, selecting to follow Bin Laden to Sudan, and then undertaking the return trip to Afghanistan with him (Sageman

2011). Yet fundamental disagreement on foundational issues was common within Al Qaeda (Brown 2007).

Two strategic decisions from this period illustrate Bin Laden's complete control over Al Qaeda, despite significant preference divergence. Many in Al Qaeda had significant angst over relations with Taliban, specifically Bin Laden's continually seeking media attention, against Mullah Mohammed Omar's wishes (Brown 2007, Cullison 2004, Mobley 2012). Two members of Al Qaeda went so far as write Bin Laden a letter stating that they feared he "has caught the disease of screens, flashes, fans, and applause" (Cullison 2004 para. 19), but Bin Laden continued unphased. Perhaps more extraordinary was the Shura Council's opposition to the "planes operation," as Bin Laden called the September 11 attacks (Scott-Clark & Levy 2017 p. 46). Bin Laden approved and funded the attacks, allowing the "secret off-the-books operation in meetings from which the Al Qaeda *shura* were excluded" (Scott-Clark & Levy 2017 p. 14) to be managed by Khalid Sheik Mohammad, who was not a member of Al Qaeda (Scott-Clark & Levy 2017). Sensing opposition, Bin Laden replaced six of the nine *shura* members³⁰, but even then, the Shura Council opposed the plan (Brown 2007, Gerges 2005, Scott-Clark & Levy 2017). Bin Laden was again unmoved and his wishes were carried out.

C. Decentralized Period (2002 – 2007)³¹

³⁰ This was done under the auspices of a merger of Al Qaeda with Egyptian Islamic Jihad (Scott-Clark & Levy 2017).

³¹ This period was chosen to be comparable in duration to the earlier period and to avoid Al Qaeda's competition with the so-called "Islamic State of Iraq and the Levant (ISIL)," which subsequently grew out of Al Qaeda in Iraq.

In the years after 2001, multiple regional terrorist organizations adopted the Al Qaeda brand, calling themselves Al Qaeda in the Arabian Peninsula, Al Qaeda in Iraq, and Al Qaeda in the Islamic Maghreb (Gunaratna & Oreg 2010, Lahoud 2012). Each of these affiliates pledged allegiance to Al Qaeda, but remained a distinct organization, leading many to conclude that Al Qaeda had become a loosely-coupled social movement (Gartenstein-Ross & Barr 2018, Sageman 2011). While Al Qaeda was in the vanguard of a global jihad movement,³² Al Qaeda also remained a distinct terrorist organization (Gartenstein-Ross & Barr 2018, Lahoud 2012) and is herein analyzed as such.³³

After the fall of Afghanistan and the loss of numerous Al Qaeda key leaders, the Shura Council members who had found refuge in Iran were told that Al Qaeda could no longer maintain a centralized hierarchical structure (Felter *et al.* 2006, Shapiro 2013, Windrem 2005).³⁴ While Al Qaeda largely tried to maintain centralized control, decisions were made “in the absence of a real Al Qaeda *shura*, which was now scattered across several time zones” (Scott-Clark & Levy 2017 p. 132). While there was no intentional change in Al Qaeda’s formal organizational structure, these environmental changes had

³² The movement under consideration here is interchangeably called the “global jihad movement” (Gunaratna & Oreg 2010 p. 1044, Hoffman 2004 p. 553, Moghadam 2013 p. 475), “global jihadist movement” (Gartenstein-Ross & Barr 2018 para. 6, Jordan 2014 p. 7), “jihadi - Salafi movement” (Brachman & McCants 2006 p. 15), and “global Islamist terrorism” movement (Sageman 2011 p. 31).

³³ That is to say that this paper defines Al Qaeda so as to exclude these affiliates, focusing instead on what is called Al Qaeda Core (Gartenstein-Ross & Barr 2018, Mobley 2012), Core Al Qaeda (Bergen 2013 para. 11, Gunaratna & Oreg 2010), Al Qaeda Central (Brown 2007, Lahoud *et al.* 2012, Sageman 2011, Scott-Clark & Levy 2017, Windrem 2005), Al Qaeda Organization (Gunaratna & Oreg 2010), and Original Al Qaeda (Lahoud 2012).

³⁴ Al Suri later published *The Call for Global Islamic Resistance*, where he calls for Al Qaeda to adopt a form of leadless resistance (see *supra* note 7). Some pundits seem to have misinterpreted his work of advocacy as indicative of Al Qaeda’s actual organizational form (see e.g., Sageman 2011).

the effect of increasing the autonomy of individual decisionmakers as key leaders were often effectively inaccessible.

Coordination efficiency was not changed by anything structural in nature, as there was officially no change to the formal hierarchy. Coalition governments had “broken up the physical links between them, intercepted or monitored their communications and generally disrupted their financial links” (Sageman 2011 p. 133), which deprived them of the sanctuary they had previously enjoyed in Afghanistan, leaving Al Qaeda’s leaders “moving between safe houses and hideouts” (Scott-Clark & Levy 2017 p. 147) in Afghanistan, Pakistan, and Iran. While Al Qaeda still “eschewed cell phones in favor of human couriers,” the increased distances meant that preference “came at a cost to information flow within the organization, making it more difficult to coordinate strategy internally” (Gartenstein-Ross & Barr 2018 para 70). One terrorism scholar claimed “communications had degraded to the point that there was no meaningful command and control between the al Qaeda leadership and its followers” (Sageman 2011 p. 126), although other scholars made more modest assessments: “significantly degraded its formal command structure” (Felter *et al.* 2006 p. 54). At times communications were so strained that new attacks were planned and executed without any leadership consultation (e.g., Scott-Clark & Levy 2017 p. 132), which is to say the severity of communication difficulties negated Al Qaeda’s intention to centralize decisions.

Control was impacted by the loss of Afghanistan as a sanctuary—and by extension, the loss of co-location and freedom of movement—which significantly degraded the cohesiveness of Al Qaeda’s *shura*. The split within the Shura Council over

the September 11th attacks was exacerbated by the different camps retreating in different directions (Brown 2007, Scott-Clark & Levy 2017). Among the factions that opposed the attacks, this dispute festered, with one leader writing that Bin Laden had driven Al Qaeda “from misfortune to disaster” (Brown 2007 p. 19).

The issue that caused the greatest consternation within the *shura* was the relationship between Al Qaeda and its affiliates.³⁵ When affiliates—primarily Abu Musab al-Zarqawi’s Al Qaeda in Iraq—violated Islamic jurisprudence in bringing about “unnecessary deaths of Muslim civilians” (Lahoud *et al.* 2012 p. 13), there was significant disagreement within the *shura* as to how best to respond. Bin Laden elected to simply (and unsuccessfully) urge restraint on the part of the affiliates, while *shura* members were strongly advocating disassociation (Lahoud *et al.* 2012 p. 21).

In the absence of guidance or oversight, individual participants took action on their own initiative. An illustrative example is provided by Khalid Sheik Mohammad (referenced by his *nom de guerre* Mokhtar), who:

rushed purposefully about the city as if he, not Osama, was the emir, authorizing compensation payments for Al Qaeda widows, rehousing Arab families arriving from Afghanistan, paying off medical bills for injured fighters, as well as distributing stipends to brothers heading out on new projects abroad. [...] With Al Qaeda’s *shura* split, Mokhtar had formed a new one of his own. A man who had rejected Al Qaeda, and who the outfit had sidelined for being too pathological, was now running the show. [...] Thanks to 9/11, money was flowing into Al Qaeda from supporters based all over the Gulf and beyond, and Mokhtar now controlled the cash. (Scott-Clark & Levy 2017 p. 99)

³⁵ We are only analyzing problems of control within Al Qaeda, not between Al Qaeda and its affiliates, which is ably addressed elsewhere (e.g., Brown 2007, Lahoud 2012).

He was acting in Al Qaeda's name and spending Al Qaeda resources, yet accountable to no one, as the *shura*—including the emir—was in hiding.

D. Discussion

In spite of there having been no formal change in the organizational structure or operating practices, increased counterterrorist pressure applied to Al Qaeda in 2001 brought about a *de facto* decentralization, as the loss of safe haven and omnipresent security threat significantly raised the cost of communications. Al Qaeda's reliance on trusted couriers for sensitive communiques likely equates more closely to Tullock's "bureaucrats as postmen" model (Tullock 2005a p. 150) than the addition of thinking bureaucrats, who introduce noise into the communication by distilling and repackaging the message at each stage. As the operating environment changed, Al Qaeda personnel looked for updated guidance, but it was infrequently available and slow in arriving, forcing junior personnel to make decisions on matters usually reserved for central leadership. This deprived the organization of the unity of effort it had enjoyed as a more centralized organization.

Section IV: Conclusion

Over the years, each counterterrorist force and their terrorist rivals underwent numerous changes that impacted the terrorist organization's information processing and control, which complicates analysis. In both cases evaluated, the changes in organizational structure were necessitated by increases in counterterrorist capabilities, which represents a confounding factor in itself. In a strange way, that difficulty in assessment illustrates the importance of answering the underlying question evaluated

herein. As it is rarely possible to observe organizational operational capacity in real time, counterterrorist forces must rely on observable proxies—such as decentralization—to evaluate the impact of specific interventions or overall campaign progress.

Based on these initial cases, one might reasonably conclude that decentralization is associated with declines in both communication efficiency and coordination effectiveness, but there is more nuance to these cases than such a summarization would imply. Different mechanisms for achieving centralization or decentralization may vary in their impact on organizational efficiency and effectiveness. Similarly, the details of the operating environment or internal dynamics within the organization may affect the evaluations. Research into additional cases of terrorist group centralization/decentralization is necessary to identify more robust patterns across cases. Ideal cases would involve the restructuring of well-documented terrorist organizations that are not associated with changes in counterterrorist capability. Such cases are extremely rare, but the 2008 decentralization of the Revolutionary Armed Forces of Colombia (FARC) may provide such a case and merits further study (Eccarius-Kelly 2012).

Much as VPE de-romanticized government and central planning, this same intellectual lens holds the potential to disabuse the TKE literature of its omniscience and benevolence assumptions, as relates to terrorist organizations. VPE has a proud history of explaining bureaucracies (e.g., Mises 1944, Niskanen 1975 & 1994, Tullock 2005a), which this work expands to an additional type of bureaucratic organization: terrorists.

This paper has illuminated a case where centralization improved coordination and control and a case where decentralization was associated with a decrease in coordination and control. These cases alone are not sufficient to disabuse the TKE literature of its affinity for decentralization, but this paper raises the possibility that the inclusion of decentralization in the TKE calculus would seem to move assessments toward increased effectiveness of targeted killings, *ceteris paribus*.

CHAPTER THREE: CALCULATION, PLANNING, AND THE FOG OF WAR

Section I: Introduction

The economic development dimension of counterinsurgency involves a foreign force engaging in economic planning as a means of winning the hearts and minds of the local population, while an indigenous force uses violence and other means to stymie the planner's every move. Early counterinsurgency theory treated access to essential services as a logical extension of requirements for good governance and population security. Modern American counterinsurgency doctrine, however, extends far beyond the technical challenges of generating electricity and ensuring access to clean drinking water. It calls on reconstruction programs such as the Commander's Emergency Response Program (CERP)—a United States Department of Defense (DOD) reconstruction program utilized in both Afghanistan and Iraq—to eradicate poverty, unemployment, and general economic stagnation. Alternately phrased, counterinsurgents are expected to generate economic growth in conflict zones. The counterinsurgency manual exemplifies this thinking in explaining the economic development line of effort as consisting of short-term concerns such as “large-scale unemployment and reestablishing an economy at all

levels” and long-term aspects such as “stimulating indigenous, robust, and broad economic activity” (US Army 2006 p. 5-16).³⁶

While economic development can be described as a process—“resources are continually (re)allocated to the uses that people most value” (Coyne 2013 p. 71)—or a state—“efficiency in the link between production and consumption” (Bauer 2000 p. 3)—and defined by what it adds—“contributing to self-sustaining growth in the standard of life of the [...] masses” (Friedman 1958 p. 505)—or what it removes—“the removal of various types of unfreedoms that leave people with little choice and little opportunity of exercising their reasoned agency” (Sen 1999 p. xii), this paper will adopt the military’s depiction: “stimulating indigenous, robust, and broad economic activity” (US Army 2006 p. 5-16).

This paper applies the analytic framework provided by the Austrian School of economics to evaluate a single counterinsurgency development program—CERP, as applied in Operation ENDURING FREEDOM (OEF)—relative to the knowledge requirements necessary to bring about economic development. While other works have examined aid or development programs through an Austrian market process lens (e.g., Boettke, Coyne, Leeson, & Sautet 2005; Buchanan 1975; Coyne 2013; Coyne & Boettke 2006; Coyne & Leeson 2011), few have applied that lens to reconstruction after war

³⁶ Economic aspirations were significantly reduced by the 2018 Counterinsurgency Field Manual, which states that economic and infrastructure development efforts “aim at undercutting the insurgency narrative and addressing core grievances. They are not synonymous with long-term development efforts that may be carried out by other USG departments and agencies, international organizations, and NGOs. However, counterinsurgents should aim to ensure short-term stabilization measures do not undercut long-term development goals.” (Joint Chiefs 2018 p. III-35)

(notable exceptions include: Coyne 2005 & 2008) and fewer still have applied it to reconstruction during war (one notable exception is Coyne & Pellillo 2010).

The rest of the paper is organized as follows: Section II assesses economic planning through the lens of Austrian economics, focusing on the availability of information. Section III examines CERP before and after significant reforms to the program. Section IV concludes.

Section II: Economic Calculation and Economic Planning

Scholars in the Austrian School of economics have identified the institutional requirements for efficient allocation (and thus economic growth) to occur. Ludwig von Mises demonstrated that economic calculation—defined as “the decision-making ability to allocate scarce capital resources among competing uses”³⁷—was not possible outside the institution of private property (Mises 1920). Friedrich Hayek extended Mises’ economic calculation scholarship through particular attention to the knowledge requirements, concluding that without the ability to incorporate local information or account for the economy’s dynamic nature, central planners would be unable to organize an economy to use an economy as effectively under competition (Hayek 1945, 1948). Israel Kirzner built on Mises’ conception of the market as a dynamic process and Hayek’s notion of competition as a discovery procedure to put the entrepreneur at the center of the theory of the market process (Kirzner 1973 & 1997). Through the introduction of persistent and recurring market inefficiencies, Kirzner endogenizes entrepreneurial discovery and makes clear the identity of the equilibrating force that

³⁷ Quote is not from Mises, but rather a much more succinct paraphrase thereof (Boettke 2001 p. 31).

characterizes free markets. Mises' economic calculation, Hayek's knowledge problem, and Kirzner's entrepreneurial discovery are all facets of the same "integrated theoretical framework" (Kirzner 1997 p. 67) that reveals the institutional foundations of rational economic calculation, which is required for sustained economic development.

By their very nature, governments operate outside the market and therefore must make economic decisions without economic calculation (Mises 1920). This leaves governmental actors unable to bring about economic development—as defined herein—because of the planner's problem, "whereby decision makers must allocate scarce resources without the advantage of market prices and profit-and-loss accounting to compare the expected value-added of alternative uses" (Coyne 2013 p. 70). Planners are capable of increasing the provision of specific goods or services, given sufficient resources, but "[t]here is a fundamental difference between knowing how best to obtain or produce a predetermined output and ensuring that the output produced represents the welfare-maximizing use of scarce resources." (ibid p. 83). Planning to output targets is incredibly wasteful, however, as disconnects between production and consumption are standard in such endeavors (Bauer 2000, Coyne 2013, Mises 1920). All of that is to say that—as the Austrian theory of the market process reminds us—in the absence of the price mechanism to carry the information necessary required by market participants, one should expect to see systematic inefficiencies. The scale of inefficiencies is influenced, in part, by how well the program utilizes the information that is available.

Section III: Commander's Emergency Response Program

During the 2003 invasion of Iraq, DOD concluded that the prohibitive security environment and the bureaucratic hurdles required for the expenditure of funds prevented existing development and reconstruction programs from acting at the speed of war (Patterson & Robinson 2011). To fill the gap, the United States military took the lead, albeit reluctantly, in reconstruction and development. This represented a significant paradigm shift within counterinsurgency doctrine.

CERP was created in 2003 in Iraq and 2004 in Afghanistan and aimed to build on the success of a program in Iraq where confiscated illicit funds were used to provide reconstruction assistance (Egel *et al.* 2016, Martins 2005). At the time, commanders concluded that strategic impacts were being generated by small amounts of money, specifically crediting the program's flexibility and ease of expense for its effectiveness. DOD's active involvement in aid and development was soon institutionalized in acronyms—initially Money as a Weapon System (MAAWS), then Integrated Financial Operations (IFO)—and doctrine (e.g., CALL 2009, Joint Forces Command 2010). The hype continued to grow, as it was claimed that: “Warfighters, with timely access to the right types of money and in the appropriate amount, can influence the outcome of operations” (CALL 2009 p. 3).

While the initial scope of CERP was quite narrow—it was designed exclusively to “enable commanders to respond to urgent humanitarian relief and reconstruction requirements within their areas of responsibility” (Martins 2005 p. 47)—the program soon broadened its focus, as “the use of CERP funds expanded from meeting emergency

and security needs to infrastructure (including roads), agriculture, and incentivizing entrepreneurship and growth of small and medium enterprises” (SIGAR 2018a p. 48).

Subsection III.I: Evaluation of CERP

Armed with Austrian-inspired predictions of misguided investment and elusive growth, an evaluation of CERP’s effect on the Afghan economy is in order. For any hope of pure causal inference in analyzing the efficiency implications of CERP’s non-market-oriented nature, one must identify the relevant comparison case. With the possible exception of Iraq (which was subjected to the same “treatment” as discussed above), the combination of widespread violence, profound political instability, and extensive foreign intervention give Afghanistan a reasonable claim to being *sui generis*. Additionally, project-level data on development projects undergone under CERP is not publicly available and macroeconomic statistics on Afghanistan are infrequent and unreliable. As a result, projects about which information is available (primarily from reporting in the media and government audits) will be analyzed in order to assess the degree to which they appear to represent effective responses to the needs of the Afghan population.

Prior to the establishment of the Special Inspector General for Afghanistan Reconstruction (SIGAR) in 2008, audits of CERP projects in Afghanistan were rare. The reports that were produced expressed an inability to analyze the program’s effectiveness due to poor record keeping by CERP administrators (SIGAR 2018a). Commanders identified the modernization of the road network as a top development priority, for example, but attempts to assess the quality of the constructed road network were unsuccessful because CERP officials “cannot identify the location of some CERP-funded

roads” (GAO 2008 p. 13). Assessments by other government officials and the media were not promising. In southern Afghanistan, “construction projects supported by foreign aid, such as schools and medical clinics, stand as empty shells” (Robson 2009 para. 8).

These are not isolated examples, but projects selected to illustrate the overwhelming ineffectual nature of the CERP program. A Government Accountability Office (GAO) audit of development projects concluded, “agencies know little about the impact of road projects, since they have not conducted sound evaluations to determine the degree to which the projects have achieved the goals of economic development” (GAO 2008 p. 3). Moreover, after conducting hundreds of interviews in Afghanistan, researchers from Tufts University concluded that they had “found little evidence that aid projects are ‘winning hearts and minds,’ reducing conflict and violence, or having other significant counterinsurgency benefits” (Wilder 2009 para. 3). In fact, the researchers found the perceptions of the aid projects to be “overwhelmingly negative” and heard allegations that the Taliban is extorting money from reconstruction projects through protection schemes. A Defense Department handbook acknowledges that many studies “find using financial resources to reconstruct and stabilize an area may not have the intended effects of increasing stability and legitimizing the host government in the eyes of the local populace” (Joint Forces Command 2010 p. III-3).

Before offering a verdict on the performance of this program designed to bring economic development amidst conflict, however it is important to consider a reform implemented in both Iraq and Afghanistan that was reported to show promise for overcoming the information challenges addressed above. Addressing reconstruction

efforts in Iraq and Afghanistan, Coyne and Pellillo diagnose shortcomings as indicative of a “knowledge trap,” defined as the difficulty associated with “acquiring, processing, and understanding this informal and indigenous knowledge” (2010 pp. 632-3). Drawing on the calculation problem and knowledge problem, the authors acknowledge that overcoming the knowledge trap is “quite difficult, if not impossible” (ibid p. 633). The authors propose two concrete strategies for combating the knowledge trap in reconstruction initiatives, both of which have been implemented in Afghanistan. First, the knowledge problem is “less binding” on reforms that are small in scale and decentralized in decision-making (ibid p. 635). Second, planners should work to include the local population in the process.

As was discussed earlier in this section, small-scale projects based on decentralized decision-making are CERP’s *raison d’être*. From 2007 to 2009, additional changes took place, which reinforced these advantages. In 2007, the Army’s new counterinsurgency doctrine began to influence operations in Afghanistan, resulting in a strategy that placed greater emphasis on interaction with the local population. In 2008, a new requirement was added to the CERP approval process requiring commanders to consider the “sustainability of the project,” specifically the consultation of local nationals in project planning and taking steps to ensure that local government officials are prepared to sustain projects upon completion (DOD 2008 p. 27.9, Egel *et al.* 2016 p. 33, SIGAR 2015 p. 4).

Statistical analysis of CERP project data in Iraq concluded the projects were “particularly effective” after similar changes in doctrine and manning were carried out in

that country (Coyne & Pellillo 2010 p. 635). This finding seems to indicate that the knowledge problem can be significantly mitigated by straightforward policy reforms toward consultation and decentralization.³⁸ Had the United States military somehow overcome the core challenges of development economics? Evidence on post-surge CERP effectiveness in Afghanistan does not support such an optimistic interpretation. It is vital to remember that while the United States military defines counterinsurgency success as economic growth, the cited analysis (Berman, Shapiro, & Felter 2011) was conducted with significantly limited objectives: a local reduction in violence.³⁹ While the policy reforms allowed the program to achieve some modicum of success against a watered-down interpretation of the desired end state, that does not equate to achieving economic growth.

In light of the 2007-2009 program reforms, it makes sense to revisit the evaluations of the program to ascertain if performance had significantly improved.

Subsection III.II: Re-evaluation of CERP

In late 2009, Afghans listed the economy and unemployment behind only security in their list of concerns (International Republican Institute 2010). In spite of these unmet basic needs, CERP continued to fund projects that are never utilized by the Afghans and fell into disrepair shortly after completion. A cold storage facility was found empty months after completion (SIGAR 2011 p. 48). Asphalt roads built where the local public

³⁸ Just to be clear, no mechanism aside from the market is able to solve the knowledge problem, but different approaches to planning are negatively impacted to varying degrees.

³⁹ Of note, the authors attempted to replicate their analysis in Afghanistan, but were unable to do so due to the poor state of CERP recordkeeping in that country (Boak 2011).

works bureau lacks any capacity to maintain asphalt roads (ibid p. 7). New educational facilities that are unsanitary because the government has not provided the fuel necessary to run the waste system (ibid p. 34). Lest these examples seem too anecdotal, all three examples were drawn from a single audit of CERP projects, which found “92 percent of the projects we selected [...] are at risk or have resulted in questionable outcomes” (ibid p. ii).

Despite the emphasis on coordination after 2008, the CERP program continued to produce projects that failed upon transfer to the local government. CERP projects languished for many reasons, including Afghan counterparts who hadn’t planned for the necessary resources (SIGAR 2010) or otherwise didn’t fulfill their commitments (Tillotson 2010). A civilian official summarized the problem in saying: “Sustainment is one of the biggest issues with our whole strategy” (Boak 2011 para. 6).

The inefficiencies continue because American military units were pressured to spend CERP funds (Egel *et al.* 2016, Gatlin 2014, Plumb 2011, SIGAR 2018c), as if the amount of funds (Plumb 2011, SIGAR 2018c) or number of projects (Gatlin 2014) were themselves measures of success. But no better outcome should have been expected, considering the development efforts had varied competing objectives (Egel *et al.* 2016, SIGAR 2018a), were led by personnel without development experience (Egel *et al.* 2016, SIGAR 2018c), and available guidance focused primarily on financial execution or other procedural matters (SIGAR 2018c).

While the CERP program has reformed, as described above, it is unlikely to improve further, as it lacks a meaningful feedback loop, which would require both a

“supply of information” and “demand for lessons learnt” (Gordillo & Anderrson 2004 p. 305).⁴⁰ Project-level data is insufficient to enable program management (DODIG 2011, Egel et al. 2016) due to a combination of poor monitoring (Egel et al. 2016, GAO 2009, Joint Forces Command 2010) and record-keeping (Egel et al. 2016, SIGAR 2015, SIGAR 2018c). Furthermore, the program lacks results-oriented approach (SIGAR 2011) and has consistently struggled to develop meaningful measures of effectiveness (Egel et al. 2016, SIGAR 2018a & 2018c), especially the type of population-centric metrics that modern counterinsurgency doctrine would seem to require (Gatlin 2014). This is further complicated by an inability to distinguish all of the varied interventions underway in a given location (Egel et al. 2016), resulting in widely varying analytic findings on aid effectiveness.⁴¹

Subsection III.III: Discussion

Despite the implementation of reforms, decentralization is not demand revelation, consultation is not market forces, and post hoc statistical assessments discipline no one. Continuing under the current centrally-planned construct is a recipe for continued waste.

Government planners will never be able to achieve economic calculation, resulting in the planner’s problem, which is readily observable in “projects that are either partially completed or completed but sit idle because of a lack of complementary goods” because “planners lack the knowledge, due to the absence of economic calculation, to anticipate and coordinate the necessary complementary goods to complete the projects or

⁴⁰ The same conclusion is drawn by Coyne (2013), who cites Harford (2011).

⁴¹ See, for example, the surveys of quantitative research in Egel *et al.* (2016) and SIGAR (2018c).

repair idle equipment.” (Coyne 2013 p. 79). The planners will continue to lack the requisite local knowledge. While CERP has actively sought local nationals’ input, it is not unreasonable to expect projects every bit as wasteful would have been approved if the decision-makers themselves were Afghans.⁴²

The planner’s problem is not based on any notion of foreign or domestic planners, but rather the inability of any individual or institution to make rational decisions about project prioritizations without the demand signals that come from prices. This is clearly demonstrated in the parallels between the development planners of today (Coyne 2013) and the Soviet planners that came before (Boettke 2001). In both cases, the planners must collect information about demand for each potential good or service, prioritize needs, and select projects for funding without the benefit of property rights, market prices, and a system of profit and loss. In market economies, a profit opportunity signals excess demand, as the very existence of opportunities for profit indicates that the consumer’s willingness to pay for the finished product exceeds the cost of all inputs. In the absence of unadulterated price signals, planners tend to rely on nomination of projects by potential consumers and on shortages observed by the planners themselves.

It is not to impugn the motives of the commanders and administrators to point out that “political actors at all levels are not guided by some higher, unconstrained ideal of humanitarian benevolence but by incentives created by the political institutions within which they operate” (Coyne 2013 p. 21). CERP’s preoccupation with expenditure is

⁴² It is worth noting that SIGAR concluded: “the inclusion of Afghan government officials in the selection process didn’t ensure the appropriate use of funds, but instead created an opportunity for corrupt officials to demand payment in return for their approval” (SIGAR 2018a p. 149).

typical development thinking, where “economists and policymakers rely on aggregate output measures while completely neglecting the importance of the composition of that output in terms of value-added production versus waste.” (ibid p. 76).

CERP’s most crucial flaw, however, is in its “ability to promote discovery” (Kirzner 1988 p. 13), or lack thereof. As Coyne writes:

Good intentions do not remove human imperfections, and although humanitarians seek to help others, like everyone else, they operate with imperfect knowledge and therefore constantly make mistakes. The key question is whether or not humanitarians are able to recognize those mistakes and adapt their plans of action in order to maximize the effects of humanitarian efforts. (Coyne 2013 p. 62)

Resources invested in CERP currently do little to advance system efficiency or growth, as no meaningful feedback system is in place to do so. While free markets discipline entrepreneurs’ “wishful conjectures” in numerous ways (Boettke & Coyne 2007 p. 176), bureaucratic planners who operate within budgetary constraints are generally left to discipline themselves. Once again, this is as the planner’s problem foretold: “State bureaus involved in humanitarian action are relatively inadaptable due to weak feedback and incentives” (Coyne 2013 p. 21).

Section IV: Conclusion

SIGAR issued lessons learned reports to enable policy makers and practitioners to learn from the Afghanistan war. On CERP, SIGAR concluded:

senior policymakers devoted money to a program with no overarching strategy, and without effective systems for collecting, analyzing, and interpreting data. The result was a program that spent \$2.3 billion in a profoundly underdeveloped economy with unknown effects. (SIGAR 2018c p. 95)

But the implications of this evaluation extend even further, as “it is likely that the U.S. Department of Defense (DoD) will request CERP or some CERP-like capability in future stability operations” (Egel et al. 2016 p. 3).

Future CERP practitioners would be wise to scope the program narrowly—focusing on short-term humanitarian relief, instead of attempting long-term economic development—and remain humble about what the program is capable of accomplishing. When sufficiently scoped and resourced, such a program should be capable of increase output of certain goods and services predetermined by planners. Understanding the lessons of economic calculation and the planner’s problem allows for the development of less wasteful and more adaptive processes.

CHAPTER FOUR: COMPETITIVE PROVISION OF JUSTICE

Section I: Introduction

The influence of institutions on economic growth has been the subject of significant empirical research, with the conclusion—after much gnashing of teeth and instrumenting of variables—that “the quality of institutions trumps everything else” (Rodrik, Subramanian, & Trebbi 2004 p. 135). It is likely that no cultural, economic, or political institution has been studied more than the rule of law. No less than John Locke⁴³ and Adam Smith⁴⁴ have waxed eloquently about its importance, and those sentiments are amply supported by modern scholarship stressing the importance of the rule of law for economic growth (e.g., Acemoglu *et al.* 2001 & 2002, Djankov *et al.* 2003), securing of freedoms (e.g., Djankov *et al.* 2003, La Porta *et al.* 2004), and popular legitimacy of the government (e.g., Weber 1958, Nachbar 2012). A recent book on the topic explained the emphasis placed on the rule of law in saying it “is perceived as a necessary foundation for the success of all other elements [...] political, social, economic, and humanitarian” (Kleinfeld 2012, ix).

⁴³ John Locke saw “setting up a known authority to which every one of that society may appeal upon any injury received, or controversy that may arise, and which every one of the society ought to obey” as civil society’s very *raison d’être* (1690 p. 126).

⁴⁴ Adam Smith is reported to have said: “Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things” (Stewart 1793 p. 68).

While it is clear that the rule of law and other institutions matter, “economic theory offers us little guidance on how strong institutions are created and nurtured” (Rajan 2004 p. 56) and “questions remain about how to operationalize these answers to economic growth” (Boettke, Coyne, & Leeson 2008 p. 336). These gaps in Institutional Economics are readily visible in the sorry state of development programs and other institution-building efforts (see e.g., Easterly 2001 & 2006, Coyne 2008), where governmental and non-governmental actors alike have a poor track record of introducing new institutions or manipulating existing ones (Boettke, Coyne, & Leeson 2008). Even when resources and foreign support are available, the innovations tend not to last. More specifically, expert opinion has long been incredibly critical⁴⁵ of rule of law programs and has not improved of late⁴⁶.

Virginia School economist Peter Boettke has turned this deficiency in institutional understanding from a general lament into a more specific challenge. Drawing on the writings of Austrian economist Israel Kirzner, Boettke proposes what he calls “Kirzner’s challenge”: “identifying the underlying mechanisms in operation in a vast diversity of institutional arrangements that enable us to turn social dilemmas from situations of social conflict into opportunities for social cooperation” (Boettke 2014 p. 245). More concretely, Boettke seeks “mechanisms that are functionally equivalent to the roles played by property, prices and profit/loss within the market economy” to inform

⁴⁵ E.g., “What stands out about U.S. rule-of-law assistance since the mid-1980s is how difficult and often disappointing such work is” (Carothers 1999 p. 170).

⁴⁶ E.g., “The United States, along with most others working in the field, is not very good at promoting the rule of law abroad. After decades of work and billions of dollars, the track record of successful rule of law promotion efforts is paltry” (Kleinfeld 2012 p. 5).

“understanding of the self-regulating social order in realms outside of the market context” (*ibid*).

This paper responds to (Boettke’s) Kirzner’s Challenge by applying an important analytic framework developed for analysis of markets—specifically Northian adaptive efficiency—to non-market institutions—specifically judicial institutions, a subset of rule of law institutions—in the interest of better understanding the determinants of institutional success and developing guidance for institution building. More concretely, the central question this paper explores is whether there is a discernible relationship between adaptive efficiency and (relative) institutional performance. Section II explores the theory and practice of adaptive efficiency. Within the judicial domain, I have focused my case selection on modern cases experiencing institutional competition, in order to best exploit competition’s potential as a knowledge-creating discovery procedure (e.g., observation of relative performance in a common environment). Sections III and IV introduce institutional competition and apply that concept to the selection of cases that maximize competition. Three modern cases of competing legal institutions are examined in detail: competition between the government and informal courts in 1980s Peru, the government and the Taliban in 2000s Afghanistan, and the government and sassywood courts in modern Liberia. Section V concludes with an assessment of the relationship between adaptability and ultimate institutional performance.

Section II: Adaptive Efficiency

Leaving behind the neoclassical allocation-focused mindset and drawing instead on the ideas of Joseph Schumpeter (1942), Friedrich Hayek (1960), and Pavel Pelikan

(1986), Douglass North (1990, 1994, 2005) proposed adaptive efficiency as a more relevant measure of institutional health. “Adaptive efficiency,” North has written, “entails a set of institutions that readily adapt to the shocks, disturbances, and ubiquitous uncertainty that characterize every society over time” (North 2005 p. 78). In the long-run, institutional adaptability is always tested, as:

All societies face the problem of how to survive in the face of uncertainty, the never-ending set of new challenges, dilemmas, and crises. The sources of these challenges are varied: changes in relative prices, demographic change, macroeconomic crises, ethnic conflict, civil wars, technological change, and security conflicts with other states. (North, Wallis, & Weingast 2009 p. 133)

And it is the adaptive efficiency of institutions that determines whether they “respond effectively to changes in the human environment” or are characterized by stagnation and increasingly dysfunctional attitudes and policies” (North 2005 pp. 101-102).

Adaptive efficiency’s importance is possibly best conveyed through an analogy: much in the same way that long-term economic success is driven more by economic dynamism—a combination of rate of growth and ability to respond to exogenous shocks—than by current levels of economic prosperity, long-term institutional viability is more reliant on adaptive efficiency than traditional allocative efficiency. North said as much in his Nobel Prize speech: “It is adaptive rather than allocative efficiency which is the key to long run growth. Successful political/economic systems have evolved flexible institutional structures that can survive the shocks and changes that are a part of successful evolution” (North 1994 p. 367). Pelikan similarly called adaptive efficiency “important in the medium run and decisive in the long run” (Pelikan 1986 p. 5).

Unfortunately, recognizing the importance of adaptive efficiency is not the same as being able to bring it about in other economies. In the words of North: “We are far from understanding how to achieve adaptively efficient economies” (North 1990 pp. 81-2). Even common identification of exemplars like the nineteenth-century United States only go but so far, as scholars disagree as to the specific components within the larger institutional matrix that deserve credit (see e.g., North 1990 p. 136). More generally, however, we are able to identify “incentives resulting from the overall institutional structure that guide learning processes and the emergence of tacit knowledge” (Ahrens & Jünemann 2011 p. 8).

For all the challenges achieving adaptive efficiency, the indicators of its presence or absence are clear. Channeling Armen Alchian, North (1990) writes:

In a world of uncertainty, no one knows the correct answer to the problems we confront and no one therefore can, in effect, maximize profits. The society that permits the maximum generation of trials will be most likely to solve problems through time (a familiar argument of Hayek, 1960). (p. 81)

But maximizing trials isn't enough, because “Adaptive efficiency entails the creation of institutions and organizations that encourage experimentation, reward successful innovation, and, equally important, eliminate failures” (North, Wallis, & Weingast 2009 pp. 252-253). This “trial-and-error model,” Pelikan has written, lends itself to measurement through its failures, specifically “surviving errors” and “absent successes” (Pelikan 1986 p. 19).

In addition to the aforementioned direct measures, there are also components of the institutional framework whose presence is conducive to adaptive efficiency. Certain “incentives embedded in the institutional framework direct the process of learning by

doing” (North 1990 p. 81), for example, so their presence or absence can serve as an indirect indicator of adaptive efficiency. The primary mechanisms referenced in the literature are “entrepreneurship (for the initiation of trials) and competition (for the elimination of errors)” (Ahrens & Jünemann 2011 p. 8), but decentralized decision-making, well-defined property rights and bankruptcy laws were repeatedly identified as key supporting factors (see e.g., Pelikan 1986 p. 18, North 1990 p. 81, Ahrens & Jünemann 2011 p. 8).

The identification of direct and indirect indicators of adaptive efficiency allows us to evaluate its institutional presence or absence. Assessing its relationship with other institutional performance, however, will require the availability of similar objective indicators for performance, which will necessitate some degree of institutional competition.

Section III: Institutional Competition

The institutional competition literature primarily addresses contests between jurisdictions within a hierarchy or other overarching framework, revolving around what has been called the “economic theory of federalism”⁴⁷ (Frey 2009 p. 6), but institutional competition is not limited to structured rivalries.⁴⁸ Any contest between two or more sets of rules is institutional competition (Bergh & Höijer 2008).

⁴⁷ Frey uses this term in reference to the work of Charles Tiebout, James Buchanan, Mancur Olson, Albert Hirschman, Wallace Oates, and others who have written on levels of government and inter-jurisdictional competition among providers of public goods.

⁴⁸ Scholars who have made notable contributions to the field but were absent from Frey’s list include Vernon Smith, Vincent and Elinor Ostrom, and Douglass North.

Whether the competition is within national boundaries (as under a system of federalism) or across them, institutional competition tends to face serious impediments. Under federalism, competition between jurisdictions is often limited to specific domains or entirely preempted by central authorities. Competition across national boundaries, on the other hand, is typically inhibited by all of the legal and logistical factors that inhibit the free movement of people, capital, and other resources and the tendency for government services to be bundled with other government services and geographic terrain (e.g., attempts to mix-and-match economic, political, and social institutions across national boundaries are unlikely to be respected by any of the countries involved). As a result, institutional competition—just like market competition—is best viewed as a matter of degree (vice a binary presence or absence).

Building on James Buchanan's (1965) clubs, Bruno Frey (2001) has advocated for moving institutions from government protection to open competition. Frey defines specific conditions with significant potential to enable institutional competition, advocating for the creation of "functional, overlapping, competing jurisdictions" (FOCJ) (2001 p. 165). Brian Tamanaha writes of legal pluralism, which is characterized by "diverse, competing, and overlapping legal orders" (DCOLO) (2008 p. 396) and can reasonably be viewed as the legal instantiation of Frey's FOCJ.

While Buchanan, Frey, and Tamanaha have focused on other potential benefits (specifically improvements in efficiency and welfare), increased competitiveness among institutions also offers the potential for increased visibility into institutional dynamics. Given its importance to market economics, competition as a Hayekian/Kirznerian

knowledge-creating discovery procedure merits addition to Boettke’s “Kirzner’s Challenge” list of market concepts with the potential to inform—either directly or through analogy—Institutional Economics. Gaining the insight into institutional performance offered by competition requires examination of cases on the more intense and direct end of the competition spectrum, which drives the selection of cases herein.

Section IV: Historical Cases

Each case will be evaluated according to how well they fit the adaptive efficiency mold and their competitive fitness (i.e., how well they do in direct competition). In order for the measure of competitive fitness to be feasible, we must draw on institutional competition as a knowledge-creating discovery procedure.

While the listing is by no means exhaustive, Table 1 lists cases of institutional overlap that were evaluated for their degree of competition.⁴⁹ Each row of the table presents a case of judicial institutions that overlap in whole or in part with another provider. The first three columns identify the where (column A), when (B), and who (C) of each case. Columns D through G present the dimensions on which the degree of institutional competition is assessed.

- Relationship (D): Cases where both parties to the overlap viewed the relationship as rivalrous and actively sought to compete were favored over cases where a hierarchy governed the relationship between the parties (e.g., federalism) or one party generally ignored the existence of the other.

⁴⁹ As in markets, competition between judicial institutions is always imperfect and thus best evaluated as a matter of degree.

- Choice (E): Cases where the choice of institutions/providers resides with the individual or at lower (e.g., local) levels were favored over cases where decisions occurred at higher (e.g., state/national) levels. Additionally, the focus on attracting adherents would seem to make identity conflicts (Kaufmann, 1996) like “The Troubles” in Northern Ireland less than optimal case studies, as the ethno-sectarian divide limited individual choice in allegiances.
- Bundling (F): Cases where the he choice between institutions/providers is loosely bundled with a limited number of other services are favored over bundling with physical territory or tighter bundling with the provision of additional services. In some cases, one side bundled judicial institutions with more services than the other, complicating classification along this dimension.
- Enforcement (G): Cases where service providers are able to enforce agreements and raise funds to sustain themselves are favored over cases where the opposite is true.

Additionally, the focus is on the modern era (column B) and efforts have been made to achieve sociopolitical and geographic diversity (column H).

Table 1 Cases Under Consideration

A. Country	B. Period	C. Legal Systems	D. Selection	E. Diverse	F. Competing	G. Overlapping	H. Modern
Afghanistan	2001-present	GIRoA, Taliban	Yes	Yes	Yes	Yes	Yes
Peru	1980s	GoRoP, informal courts	Yes	Yes	Yes	Yes	Yes
Iraq	2003-2007	GoI, AQI		Yes	Yes	Yes	Yes
Guatemala	1996-	GoRoG, customary courts	No	Yes	No, just neglect	Yes (among Mayans)	Yes
East Timor	1999-	UNTAET, informal courts	No	Yes	No, just neglect	Yes	Yes
Sudan	2005-2011	GoRoS, customary courts	No	Yes	Yes	No, Group-based	Yes
Somalia	2004-2012	TFG, ICU	No	Yes	No, primarily violence	No, geographically disparate	Yes
Colombia	1964-2017	GoRoC, FARC	No	Yes	Yes	No, geographically disparate	Yes
United States	1776-Present	Federal, States	No	Yes	No, clear divisions	Yes	Yes
England	1500-Present	English governments, law merchant	No	Yes	Yes	Yes	No
England	Middle Ages	English government, Piepowder	No	Yes	No, clear divisions	Yes	No
Northern Ireland	1966-1998	GoUK, IRA	No	Yes	Yes	No, Group-based	Yes
Global	modern era	International Governmental Organizations	No	Yes	No, voluntary	Yes	Yes
England	pre-17th century	common law courts, the cannon law courts, the royal maritime courts, and the merchant courts	No	Yes	Yes	Yes	No

The cases addressed in this section—Peru, Afghanistan, and Liberia—remained after down-selection based on the aforementioned dimensions and were therefore identified as being the most competitive.⁵⁰ Each selected case saw a) active competition between judicial institutions with the ability to enforce their verdicts and acquire resources to sustain the provision of services, b) choice that resides with the individual or at least was very localized (e.g., village-level), c) choice between arbiters that did not effectively preclude consumption of other services. None of the excluded cases met all of those criteria.

Subsection IV.I: Peru

A. Background

In post-colonial Peru, excessive regulation left large segments of the Peruvian population effectively “barred from legally established social and economic activity” (de Soto 2002 p. 11). The government attempted to legislate into creation an impossible order, where even the minutest of details was decided centrally. The ability to dictate outcomes led to picking winners and losers, which soon gave rise to “redistributive combines” where the allocation of privileges drove much legal decision-making (de Soto 2002 p. 190). Due to the overreach and abuse, legislation soon lost its moral authority and the populace grew accustomed to violations of the law.

In the 1980s, Sendero Luminoso fought a guerrilla war against the Peruvian government and attempted to incite a popular revolution. While the group’s communist

⁵⁰ As modern governments have generally proven unwilling to compete in the way described by the aforementioned economists, these instances of institutional competition have tended to occur in weak or failed states, where the government lacks the ability to quell competition.

message initially found a receptive audience among the disaffected, who felt the government and economy were not serving their needs, Sendero Luminoso did not attempt to outgovern the established government, electing to focus instead on a campaign of violence it labeled “propaganda by the deed” (McCormick 1990 p. 6). In the legal realm, for example, Sendero Luminoso used “people’s trials” only as part of a larger assassination campaign intended to remove government agents from a “zone of liberation,” not in an attempt to attract willing converts (ibid p. 16).

Even though the Peruvian government did not face direct competition from Sendero Luminoso in the provision of the rule of law, competition did arise from informal courts. As regulation of economic activity expanded, an increasing number of Peruvians found themselves unable to prosper within the government’s parameters. As increasing amounts of activity occurred outside the strictures of the formal economy, alternate means of assuring property rights and arbitrating disputes became necessary.

B. Government Courts

In the 1980s⁵¹, the Peruvian court system had lengthy case backlogs⁵², was effectively inaccessible to Peruvians participating in the informal economy⁵³, and had lost

⁵¹ This description covers the period of constitutional rule before President Fujimori’s many legal reforms, equating to the administrations of Presidents Belaúnde and García (1980-1990, when taken together).

⁵² A system-wide backlog of “250,000 to 500,000 civil and criminal cases” (Brandt 1995 p. 93) was reported in 1995, even after a raft of judicial reforms (see e.g., Santa Gadea 1995) alleviated some of the earlier caseload.

⁵³ “The empirical work done by ILD’s researchers demonstrated clearly that it would be difficult for a court to enforce the contracts used by informals, either for lack of evidence-these contracts are generally oral-or because the parties are inhibited by the relative illegality of their activities” (de Soto 2002 p. 163).

the confidence of the population it was supposed to serve.⁵⁴ These, and other, structural deficiencies of the Peruvian justice system are well known.

Turning to adaptive efficiency, it is fair to say the formal legal system in 1980s Peru was exceptionally agile. More than 110 regulatory innovations were introduced daily (de Soto 2002 pp. 198-9). The innovations came at a cost, however, as the government “can change the rules of the game at any moment without prior consultation or debate” (de Soto 2002 p. 199). The net effect was: “An avalanche of laws and decrees, disorganized and often incoherent legislation, and the lack of systematic, up-to-date information about current legal procedures have produced chaos in the legal system” (Brant 1995 p. 92).

While innovations were routinely introduced, they lacked direction. Hernando de Soto may be seen as maligning of the motives of the decisionmakers in this discussion of Institute for Liberty and Democracy (ILD) research:

The ILD's research into lawmaking revealed that the authorities rarely consider the positive or negative consequences of their decisions. Their emphasis is on reconciling different special interests, favoring those which are considered appropriate and redirecting resources to them through legal channels. (de Soto 2002 pp. 189-90)

But bad intentions are not necessary to find fault with the regulations. The regulatory process itself was not designed to enable the identification and elimination of failures or the reinforcement of successful innovations, because it lacked transparency and

⁵⁴ “Our survey reveals that only a minority of the public has much confidence in the legal system” (Brandt 1995 p. 92). While the author does not provide the dates the survey was conducted, he clarifies elsewhere in the paper that the referenced surveys were published in 1987 and 1990. The findings are therefore reflective of the period under investigation herein.

opportunities for those affected to inform decisions. On this point, ILD research found the executive branch to be the source of orders of magnitude more legislation/resolutions/regulation than Peru's Parliament and "As a result, most decisions are made without democratic consultation and, what is worse, the vast majority of them are specific resolutions which are almost never published" (de Soto 2002 p. 196). The very centralization that makes possible the aforementioned agility also brings a hefty dose of volatility and caprice (Almeida and Ferreira 2002). Furthermore, "the ILD found that resolutions and decrees arriving for signature by the minister or the president are not accompanied by a file containing technical reports and other opinions, but simply the text of the law in question" (de Soto 2002 p. 198). So it would seem that any inputs offered on the matters at hand are rarely conveyed to the ultimate decider.

The lack of an effective feedback loop effectively negates any potential value from agility in the generation of innovations. The generation of innovations coming largely from within the more insular and centralized executive branch further undermines any claims of adaptive efficiency.

C. Informal Courts

In *The Other Path*, Hernando de Soto revealed to the world the *de facto* legal system created by those inhabiting the Peruvian informal economy, a system he called "extralegal law" (2002 p. xviii). "Informals have managed to generate a new set of norms to regulate their activities," he writes, "while these ingenious substitutes arouse the enthusiasm of some social scientists, they do not function as well as an efficient legal system" (ibid p. 165). Such non-state courts are often discounted on the grounds that "the

lack of coercive authority reduces the effectiveness of this system of justice” (ibid p. 29).⁵⁵ As debated as non-state courts have been in law and economics, there has been significantly less written on their adaptive efficiency.

The systems of extralegal law that de Soto describes consist primarily of voluntary associations that join together for the provision of some community services, to include arbitration.⁵⁶ The informal organizations, as he terms them, come into existence with a contract and, as a result, the “informal organizations are responsible for administering justice on their own account” (ibid p. 28). “The leadership and the general assembly of the informal organization function as courts of the first and second instances, respectively,” reports de Soto, they “resolve disputes over competing rights, breaches of sales contracts or tenancy agreements, boundary lines, and even family disputes about who owns the land” (ibid p. 29).

While de Soto’s writing effectively disabused the academic and policy communities of the notion that Peru’s informal economy equated to “surrender to anarchy” (ibid p. 13), neither his books nor other identified English-language resources provide a detailed enough picture of the inner-workings of informal courts to support further analysis such as the degree to which experimentation is encouraged and what

⁵⁵ Bruce Benson cites Jeremy Bentham as a luminary among those holding this position and comments: “Most economists have taken this argument to heart” (Benson 1989 p. 644). For the opposing view, see Benson (1989), Greif (1993), and Leeson (2007).

Without implying any equivalence to the coercive authority of state-run courts, it should be noted that Peruvian informal courts in this period wielded community-enforced penalties such as “beating, forced nudity, or expulsion” (de Soto 2002 p. 29).

⁵⁶ While de Soto does not use the term, one can reasonably conclude that the voluntary associations have formed to provide “club goods” (Buchanan 1965).

form it takes. It is unclear, for example, whether legal innovations tend to come from the principles outlined in the contracts or the case law of the judicial bodies.

While the literature does not address direct indicators of adaptive efficiency within Peru's informal courts, indirect measures derived from the known structure are available. We can infer, for example, that change is slower in Peru's informal court system, because "The process of change is overwhelmingly an incremental one" in such emergent systems (North 1990 p. 83). Theory also tells us that it is the systems that best decentralize the ability to "veto the survival" of misguided policies to the citizenry that are best able to "minimize surviving error" (Pelikan 1986 p. 18). The informal system's basis in contracts willingly entered into would seem well aligned with that decentralized veto.

D. Discussion

An assessment of the relative fitness of the competing legal systems calls for a measure of each system's performance in attracting adherents (à la Benson 1989). With hard statistics unavailable, we can infer relative performance from de Soto's identification of the extralegal system as the one that is "socially relevant" (de Soto 2002 p. 28) and that "most of the population accepts" (ibid p. 245).⁵⁷ While de Soto attributes this outcome to it being "relatively more efficient than the formal system" (ibid), the

⁵⁷ Another indicator can be derived from the combination of de Soto estimate that "extralegal entrepreneurs" and their families make up "around 60-80 percent of the nation's population" (de Soto 2002 p. xvii) and reports that "ILD's researchers demonstrated clearly that it would be difficult for a [formal] court to enforce the contracts used by informals" (ibid p. 163).

information examined herein supports adaptive efficiency as another plausible determinant.

Changes occurring in the 1990s would seem to lend additional credence to the importance of the informal systems' advantage in adaptive efficiency—primarily routed in its decentralized nature and relatively stronger feedback mechanisms. The significant deviation between *de jure* and *de facto* in Peru opened a door for the likes of Sendero Luminoso to enter and it was only through massive reforms championed by the ILD in the 1990s that the Peruvian government was eventually able to fend off its communist challenger.⁵⁸ Under President Fujimori, a raft of constitutional and legal reforms were introduced to increase transparency and “help the government listen to its own people” (ibid p. xxiii). These reforms effectively raised the adaptive efficiency of the formal legal system and in the 2002 update to *The Other Path*, de Soto offers numerous indications that popular engagement and support raised as well (ibid pp. xi-xxxix).

Subsection IV.II: Afghanistan

A. Background

In 2001, an American-led coalition overthrew the Taliban regime in Afghanistan and installed a new constitutional government headed by Hamid Karzai. Throughout the early 2000s, the Government of the Islamic Republic of Afghanistan (GIROA)—with

⁵⁸ The economic impact of the legal reforms is subject to debate. De Soto argues in the introduction to *The Other Path* that the reforms brought economic growth. Robert Neuwirth (2012) counters that the informals' “dead capital remained dead” after the reforms (p. 206). The impact of the reforms on the perceived legitimacy of the government, and by extension of Sendero Luminoso, are clearer.

assistance from the coalition and others in the international community—waged counterinsurgency against the Taliban and other armed movements.

After being overthrown, the Taliban fought a wide-ranging insurgency, to include attempting to out-govern GIRoA in the eyes of the populace. As part of that challenge, the Taliban operated a shadow judiciary, competing directly with the Afghan government in arbitration and the provision of the rule of law. While GIRoA and the international community extended some degree of recognition to tribal courts, GIRoA and the Taliban did not recognize the authority of each other's courts and prohibited their use for dispute arbitration.

B. Government Courts

The national government and the international community made significant efforts to reform Afghan judicial institutions, investing heavily in everything from the training of personnel to the construction of facilities in hopes of building a more efficient and effective justice system marked by accountability and transparency. By way of example, “U.S. funding supports training and mentoring for Afghan justice officials, direct assistance to the Afghan government to expand efforts on judicial security, legal aid and public defense, gender justice and awareness, and expansion of justice in the provinces” (Katzman 2014 p. 12). In spite of such efforts, honest jurisprudence was not readily available from the Afghan government. As one scholar noted: “The court system was notorious for its inability to resolve cases in a timely fashion, the need to pay bribes, and the public attention that such cases brought to problems that individuals wished to keep private” (Barfield 2010 p. 223). Additionally, the Afghan government was in the

unfortunate position of trying to balance the demands of the populace it was formed to represent and the international coalition that installed it in power. One legal scholar wrote of a “clear contradiction in the founding principles of the justice system” (Tondini 2007 p. 349). Among the Afghan customs that violate international law are “honor killings, forced or underage marriages, and payment of blood money in lieu of other punishment” (Barfield, Nojumi, & Thier 2011 p. 174). Also illustrative of such contradictions is the 2004 Interim Criminal Procedure Code, which effectively imposed Italian criminal procedure on Afghanistan, including procedures that deviated significantly from the customs of Islamic jurisprudence (Tondini 2007 p. 343-4).

The focus on adaptive efficiency leads us to examine other factors. Like the other branches of the Afghan government, the 2004 Constitution centralized judicial authority in the nation’s capital despite Afghan culture, history, and geography all militating against centralization. But the Afghan populace experienced the government as it truly was, not as it was described in official proclamations, and there was quite a difference. While *de jure*, the Constitution strengthened an already powerful Supreme Court with additional oversight and administrative powers, “the country remains split into *de facto* local clan administrative authorities as a consequence of the lack of an effective central government” (Tondini 2007 p. 345). A lack of trained personnel and the constant threat of violence combined to prevent the national government from staffing courthouses in many rural areas or effectively controlling those that it staffed.

While Kabul’s inability to centrally control the judicial system opens the door to entrepreneurship and other potentially positive aspects of adaptive efficiency, such

autonomy necessitates an investigation of the feedback mechanisms driving individual and institutional learning processes. In the words of anti-corruption campaigner Sarah Chayes, Afghan courts “were applying no rules at all – except the rule of the highest bidder and obedience to an increasingly criminalized elite” (Chayes 2015). So while the lack of central control opened the door to increased entrepreneurship, the judges and administrators seem to have utilized the autonomy for personal benefit, rather than channeling it to positive social ends.

Any feedback loop that might otherwise exist is likely convoluted by the involvement of numerous international players. While the international community has publicly committed to a “light footprint” and “local ownership” of justice reforms, “The public administration that does exist has been dependent upon and accountable to the international authorities engaged in the restoration of the country” (Tondini 2007 p. 334). Control of the requisite technical expertise and financial resources the Afghan government lacks gives international donors countless mechanisms for influencing policy outcomes, directly and indirectly (Tondini 2010). Therefore the government that is supposed to be forming a social compact with the populace is instead distracted by the requirement to coordinate their actions with countless international actor, who are effectively “additional factional players” (Sedra 2006 p. 100).⁵⁹

⁵⁹ Understanding the complexity added by the inclusion of the international donors in decision-making requires an understanding of their number. As of 2008, there were “30 national embassies and bilateral development agencies, several United Nations agencies, four development banks and international financial institutions, and about 2,000 nongovernmental organizations and contractors are involved in rebuilding in Afghanistan” (Khalilzad 2008).

C. Taliban Courts

Despite their well-earned reputation as religious zealots, Taliban laws were often pragmatic and in keeping with local customs. In fact, the Taliban's "religious interpretations were often idiosyncratic and tended to dress local custom in the guise of religion" (Barfield 2010 p. 261)⁶⁰ and the Taliban's "'law-and-order' platform initially overshadowed the movement's radical Islamist ideology" (ibid p. 257). Taliban leaders did, however, use their religious credentials to lend their movement an appearance of incorruptibility, giving Taliban courts "a reputation for impartiality even among those who do not sympathize with the Taliban" (Giustozzi 2012 p. 75).

The adaptive efficiency of the Taliban courts can be assessed through its decentralization and potential for judicial independence and localized heterogeneity. The Taliban organized their courts under provincial judicial *shura* with limited control by provincial leaders and oversight only by the central judicial *shura* in Pakistan (ibid p. 74). This decentralized system is augmented by the rotation of nonlocal judges through the districts and creation of parallel channels of oversight (Giustozzi 2012 pp. 74-75). While this structure was intended to institutionalize the judiciary and minimize bias or preferential treatment, it also had the effect of aiding the learning process, through minimizing the influence of extraneous factors and encouraging cross-pollination of

⁶⁰ The true origins of some of the Taliban's more notorious "Islamic" practices—public executions and the payment of blood money, for example—are subject to debate (Rashid 2000, 4), but like most Afghans, "Taliban religious ideology was a crude mixture of Salafi Islam and Pashtunwali, the cultural code of the Pashtuns" (Barfield 2010 p. 261).

innovations. Finally, the Taliban judiciary “leave[s] enforcement of the judges’ decisions to the villagers” (ibid p. 75), which potentially offers a local check on the Taliban’s decisions, with the effect of further decentralizing decision-making.⁶¹

D. Discussion

The Taliban’s judicial institutions seem to have had the advantage in adaptive efficiency. While GIROA lacks a feedback mechanism as it tries to balance the demands of competing constituencies, the Taliban’s court system was decentralized and responsive—at least relatively speaking—to the local population. And the Taliban courts are widely reported to have won the competition for adherents. The *New York Times* reported that a Gallup poll that found “just 25% of Afghans expressed confidence in the nation’s judicial system” and “a growing number of Afghans... turned to the Taliban” for adjudication (Ahmed 2015 para. 3). A schoolteacher in that same report was quoted as saying “There are no people who think that government justice is better than the Taliban’s” (Ahmed 2015 para. 14). Sarah Chayes reported that even associates of hers in Kandahar “submitted their disputes to the Taliban for adjudication” (2015 para 3).

While it would be premature to identify an ultimate victor in the battle for Afghanistan, the Taliban’s advantage in arbitration has proven significant. Out-governing GIROA in the judicial domain affected the popular perception of both sides, but also offered less-direct knock-on effects: “a shadow governance structure brought them some

⁶¹ The referenced source does not infer an opportunity for villagers to deviate from the dictates of the Taliban from the delegation of enforcement, referencing instead the villagers’ fear of challenging the Taliban’s authority. But the potential for deviation remains, nonetheless, especially given the peripatetic nature of the judges.

practical benefits, such as a greater ability to interact with the population” (Guistoizzi 2012 p. 71). Indeed, one scholar argued: “The main shortcoming of the Taliban governors was their inability to provide much in terms of services aside from dispute settlement” (ibid p. 74).

While this case provides some tentative degree of support for the importance of adaptive efficiency in competition between judicial institutions, perhaps the strongest lesson from the study of Afghanistan is the need to focus on institutions as they exist, as opposed to their intended or theoretical structure. The Afghan court system is national in name only, with centralization not extending far beyond the outskirts of Kabul.

Section IV.III: Liberia

A. Background

Liberia’s Constitution and “Hinterland Regulations” codify a role for customary courts within the state legal system, with a geographic and identity-based delineation between court systems (Divon & Bøås 2017; Lubkemann, Isser, & Chapman 2011; Rawls 2011). Legal pluralism of this type is hierarchical (i.e., one system is subordinated to the other) and thus not a good case for our evaluation.

Trial-by-ordeal (TBO) is the ingestion of poison or other potentially harmful action as the arbiter of guilt or innocence of an individual accused a serious crime. In Liberia, the practice is often called “sassywood” after the name of a poison commonly used in ordeals (Leeson & Coyne 2012, Tonkin 2000). Such trials rely on “*iudicia Dei*—judgments of God” (Leeson 2017 p. 11) and have been rejected by the Liberian government as inconsistent with international human rights law. The government’s

illegalization of TBO within customary courts effectively delivers the rivalrous competition between systems sought for analysis herein.

B. Government Courts

The Liberian civil wars of the 1990s left the legal system in shambles (International Community of Jurists 1998; Lubkemann, Isser, & Chapman 2011). One legal scholar illustrated the breadth of legal challenges as follows:

There are no cars to transport suspects, no courtrooms in which to conduct trials. There is no paper to document cases. There is a dearth of trained lawyers, and furthermore, not enough money to pay them. The local law reports and books have been looted. Even if a conviction is secured, prisons are overcrowded and prison facilities are inadequate to house the convicted. Quite a number of judges do not even have access to the applicable criminal laws that they are to apply, some resorting to the bible as the source of their authority. Now add the fact that the criminal law applicable in Liberia is outdated and unresponsive to the current social realities that confound it. (O'Connor 2005 p. 231-2)

In spite of significant investment by the international community in their rehabilitation (Lubkemann, Isser, & Chapman 2011), the government courts are widely perceived as corrupt (Isser, Lubkemann, & N'Tow 2009; Lubkemann, Isser, & Chapman 2011; Rawls 2011) and otherwise deficient, as described in the above passage from Vivienne O'Connor.

Evaluating the adaptive efficiency of the sanctioned court system is complicated by their dual nature, containing both the government-run court system and the customary court system. That duality imbues the system with some degree of inherent diversity as the systems are differently organized and draw on different source of codified and case law. This arrangement also allows for some degree of competition between providers within the sanctioned court system, even though that competition is constrained by both

systems ultimately falling under the purview of the same government. Additionally, the practices of the customary courts are heterogeneous and typically reflect local customs (Divon & Bøås 2017).

While diversity of practice and internal competition are indicative of increased adaptive efficiency, the system's ability to reward successful innovation or eliminate failures is greatly limited by severe staffing shortages: "Liberian judicial administrators are largely free to wield their authority for the purpose of promoting private gain instead of public justice" (Leeson & Coyne 2012 p. 611). It is therefore likely that the system's adaption (efficient though it may be) is in a direction other than social benefit. Some of this potential for corruption may be ameliorated by the hierarchical appeals system in place (Lubkemann, Isser, & Chapman 2011), but available evidence does not confirm or deny this possibility.

C. Sassywood Courts

In spite of the practice having been outlawed, TBO is still practiced in Liberia (Isser, Lubkemann, & N'Tow 2009; Rawls 2011). And TBO seems to enjoy widespread support:

The vast majority of Liberians we interviewed believe strongly that at least some forms of trial by ordeal (TBO) should be allowed, and raised very serious concerns that the ban on its use is causing significant societal problems—most particularly the inability to control crime and a rise in witchcraft. (Isser, Lubkemann, & N'Tow 2009 p. 5)

Witchcraft is central to TBO's continued practice, as "there is no other equally reliable method of determining guilt or innocence, particularly in cases of witchcraft" (Rawls 2011 p. 104) and the inability of the sanctioned court system to handle the

supernatural is seen as leaving “serious problems and insecurity unaddressed” (Isser, Lubkemann, & N’Tow 2009 p. 4).

That TBO is practiced illegally by tribal chiefs informs its adaptive efficiency. As the practice is forbidden by the Liberian government, those who continue to practice TBO are not constrained by regulations or oversight. This heterogeneity is further reinforced by its practice by tribal chiefs only within their narrow jurisdiction, typically a single town or clan (Lubkemann, Isser, & Chapman 2011 pp. 76-7), which should facilitate a strong feedback mechanism, with TBO only practiced where the chief retains the support and endorsement of the local population.

D. Discussion

The relative adaptive efficiency of the two systems is nearly impossible to ascertain, given the similarity of the two systems. Both systems involve decentralized, heterogeneous customary justice systems primarily governed by local chiefs. Government-sanctioned customary courts have an appellate process that is unavailable to customary courts employing TBO, but the illicit nature of the TBO courts would seem to make them more reliant on the local population for their mandate. Available evidence on adaptive efficiency is inconclusive.

Similarly, while customary courts are widely preferred over state-run courts (Lubkemann, Isser, & Banks 2011; Lubkemann, Isser, & Chapman 2011; Leeson & Coyne 2012), the split of customary courts between the two camps precludes definitive assessments of the relative success of the two systems. That TBO continues to be practiced speaks to a need unmet by the state-sanctioned system, but any inference of

superiority is undermined by TBO's primary usage being to adjudicate cases involving the supernatural.

Section V: Conclusion

In response to Kirzner's Challenge, this paper has examined how non-market institutional arrangements operate. Specifically, the application of Northian adaptive efficiency to the judicial domain has offered a new perspective into the determinants of institutional success. The application of adaptive efficiency in non-market contexts represents a new lens available to institutional scholars for evaluation, in concert with existing approaches.

A relationship between a judicial system's adaptive efficiency and (relative) institutional performance has been hypothesized. While subsequent research may prove able to separate and/or quantify the factors under consideration and thus enable more detailed empirical analysis, this paper has relied on analytical narratives to demonstrate the plausibility of such a relationship through the evaluation of three diverse cases. The identification of such a relationship, if borne out by subsequent analysis, holds the potential to inform institutional design, shifting focus away from the specifics of the institutions in place at any given time and toward the ability of those institutions to evolve through trial-and-error discovery processes.

More detailed study and the evaluation of additional cases are necessary to strengthen (or refute) claims of the proposed relationship and rule out confounding variables or reverse causality. Where more information is available, the examination of adaptive efficiency one facet at a time (e.g., direct comparisons of degree of

experimentation, rewarding of successes, elimination of failures or perhaps even more focused factors such as competition, decentralization, entrepreneurship, etc.) could serve to add structure to subsequent case studies. Additionally, engaging the organizational learning literature (see, e.g., Simon 1947, Cyert & March 1963, Deutsch 1966, Jervis 1976) could enable a more refined understanding of how adaptive organizations learn and/or identify conditions associated with improved performance of feedback loops or other learning processes.

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