

State Capacity and Conflict: Evidence from Afghanistan

Armando Geller^[1], Seyed M. Mussavi Rizi^[1], Maciej M. Latek^[1] and
Cameron Thies^{[2]*}

¹ George Mason University
{ageller1, smussavi, mlatek}@gmu.edu

² The University of Iowa
cameron-thies@uiowa.edu

Abstract. Government corruption represents pathological interactions between the central state and local power structures that can cause internal armed conflict and shape its course. To investigate the interplay of corruption and conflict, we build a multiagent model of corruption mechanisms and processes in the Afghan drug industry that sheds light on whether corruption causes conflict or results from conflict. If the latter is true, combating corruption may prove futile if it simply results from conflict. We then investigate how corruption shapes the course of the conflict and show that the initial capacity of the Afghan state produces different trajectories of conflict.

Keywords: Afghanistan, alternative governance, empirical models, multiagent simulation, state capacity

1 Introduction

The theory of the modern state is grounded in the historical experience of early, modern European polities. The form that the European state took after centuries of subsequent development became the ideal type that was exported around the world, most notably in the post-World War II era. Few contemporary developing states fully realize the ideal in practice, but can our received body of theory still help us to understand their processes of state building? We argue that they can, but that the abstract theorizing focused mainly on ruler incentives must have firmer microfoundations in the interactions of the ruler and the ruled. Many of the purported differences between developed and developing states, such as the form of government, the level of corruption, and the existence of militias or other privately organized security forces alongside state military and police institutions can be explained by embedding state building processes in the actual practices of individuals and households in a given territorial domain. Outcomes in the developing world that seem like perversions of the European state building

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process are more understandable and reconcilable with theory when viewed from the bottom-up rather than the top-down tradition that pervades the literature.

Contrary to the prevailing discourse, Afghanistan enjoys a relatively long history of statehood. After long periods of fighting with the Moghuls and Safavids, Ahmad Shah Durrani consolidated the Durrani rule in an area later called Afghanistan. During 1950-1970, urban areas of Afghanistan acquired fledgling characteristics of a modern state with a reasonably functioning central government and bureaucracy. The nascent modernization of the Afghan state had already widened ideological, religious, and ethnic cleavages in the country by 1978 when the Soviets invaded Afghanistan. State policies like land reform and institutions like codified law faced stiff resistance from the conservative, fiercely independent countryside that considered them foreign and incompetent. The Soviet invasion simply ignited informal mechanisms for creating, maintaining and expanding population political support. The fight against the Soviets and the Kabul government during 1979-1989 further transformed these mechanisms into the dominant *modus operandi* of the Mujahedin commanders as the new elite who mastered innovative resource extraction schemes and fused them into financing daily skirmishes with the central government forces and the Red Army, and developing patronage networks and popular support on the other. By the end of the 1992-1994 civil war, formal state institutions had degenerated into access points for competing Mujahedin patronage and protection networks.

Informal processes of garnering popular support give rise to statehood by establishing and maintaining elite power in anarchic contexts ([1-3] and simultaneously foil it by undermining the institutions and capacity of the incumbent state, measured as the ability of the state to efficiently counter threats to its existence. This measure of state capacity captures the likelihood of the emergence of alternative governance bodies by the efficiency of an incumbent state in meeting citizens' needs, if it is compelled to do so, for example by the prospect of a successful revolt by the population. Yet, assuming service provision as the *raison d'être* of the incumbent state can be misleading. In narco states like Afghanistan and Mafia states such as Macedonia and Nigeria, the state acts as an armed private enterprise whose leaders use state institutions for personal gain. In this case, even if a large fraction of the population enjoys public services provided by the state, state capacity should be measured against the mechanisms through which the elite acquire and maintain popular support, not merely the governance efficiency. A large-scale multiagent simulation of rural Afghanistan makes it possible to investigate the dynamics of competing "government" with respect to private actors to pursue maximum personal gain. In particular, we wish to answer the following question: How do individuals or households on the one hand and power brokers on the other hand mutually interact in the process of war and state-making? The purpose of the modeling effort presented in the article at hand is to provide a baseline for scenario based analysis and decision support in future work.

In Section 2, we outline the problem of governance and state capacity in Afghanistan. In Section 3, we describe our model and present the results in Section 4.

2 Governments, Local Rulers, and Governance in Afghanistan

Theory postulates that rulers create and put in place institutional structures and procedures that increase their bargaining power, reduce their transaction costs, and lower their discount rate. However, in many cases reported in recent history, potential rulers are confronted with a more or less rudimentary state structure. A ruler would then not only have to deal with his populace, but also with representatives of the state. Official state structures become overlaid by personal relationships and vice versa. Take for example the case of China during the warlord period of 1916-1928. While the power of the central government was in decline, warlords rose to power and consolidated regional power centers [4, 5]. They were lords of an area they effectively controlled by virtue of their capacity to wage war [6]. In doing so, they built alliances on the basis of patronage, mutual biographies, marriage, kinship, and local relationships [5]. But the central government never ceased to exist [7] describes similar cases for Sub-Saharan Africa; [8] for Colombia. In our research we focus on Afghanistan.

Whereas the central state in Afghanistan maintains a strong presence in the cities, its influence continuously declines towards the peripheries. Since it came into existence as a state, rural Afghanistan was characterized by the presence of a weak central state. Local strongmen were in charge of running the rural areas, often in competition with the government. Traditionally these strongmen led local communities as *khan*, *khān* and *maulawi*. Since 1978, *qomandans*, the military commanders of Mujahedin factions fighting the Soviets and the central state, gradually replaced traditional leaders in most parts of the country. These commanders competed with some form of central government for control over all periods of post-1978 armed conflict: During the fight against the Soviets and the government (1978-1991), the civil war (1992-1994), the war with the Taliban government (1995-2001), and the post-2001 Karzai government, Kabul has remained the seat of central state in Afghanistan. Yet, ruling over Kabul is not tantamount to ruling the country. Central government control lies on a continuum running from the unlikely end of full government control to an equally unlikely end of full strongmen control. What means and processes have local strongmen put in place to compete with the central government?

To develop an appropriate understanding of this matter we need to appreciate the fact that local strongmen are not disjointed from the central government. Numerous points of contact remain connect local leaders and the central government through district and province executive offices and justices, the Afghan National Police and Afghan National Army units. Local strongmen have embedded themselves into the government hierarchy—and vice versa. Depending on the status of the strongman and the status of the government official, arrangements

can be made to accommodate both parties, from the symbolic acts of showing mutual respect to practical maneuvers of establishing personal relationships and expanding patronage networks, to institutionalized arrangements for exchanging funds for protection. Depending on how local strongmen share their zone of influence with the government, they position themselves such that their bargaining power increases relative to the central government.

Local strongmen also have to establish, maintain and increase their bargaining power against other local strongmen. War-making in the sense employed by [9] comes in many colors. Relying on arrangements with the central government to keep other local strongmen in check is a primary candidate. Amplifying the virtues of rural leadership techniques to mobilize popular support and build a local power base is another. [10] has identified tribal and ethnic leaders called *khān*, *mālek*, *ārbab* or *ākhund* depending on the prevalent language in a region, members of the ulema, and saints as ideal type elites in Afghanistan who can build bridges across tribal and ethnic cleavages at times of crisis and organize the populous for a common purpose. They do so by redistributing resources as devout Muslims, avid speakers, and brave and credible warriors [11–14]. In more recent years Mujahedin commanders have often successfully played combinations thereof in conjunction with a distinct criminal energy to foster local power and support. Some local leaders like Ahmad Shah Massud, Rashid Dostum and Ismael Khan have risen to powerful regional positions.

The advent of the Taliban from 1994 further complicates the picture. Until the fall of Kabul in 1996, Afghanistan had two central governments, one in Kabul, the other in Kandahar, both of which were dealing with unruly local leaders in the periphery of the country. Between 1996 and 2001 the Taliban never fully extended their power into the more remote areas of Afghanistan. They too had to make arrangements with tribal leaders in the Southeast and South of the country. Since the Taliban started to reorganize in 2003 and 2004 they gradually built alternative government institutions such as shadow governors and police chiefs, and Sharia courts in importance districts. However, the Taliban are plagued with a dilemma: On the one hand, they have a stake as “legitimate government”, on the other; they need to project the image of an opposition movement locally grown to counter the central government.

Afghanistan currently faces a power struggle between three, virtually concurrent governments: Karzai and the Durrani Pashtun elite, the Burhanuddin Rabbani government elite, and the Taliban. Each of these governments struggles with the unruly local leaders in the countryside, leaving them with ample options to consolidate their power base and the “governments” with plenty of uncertainties. Local leaders can increase their bargaining power against rival local leaders and the central government by organizing their tailor-made *qawm* or solidarity network [11]. They can also lower their transaction costs in the revenue extraction process, avoiding costly armed conflict by establishing viable arrangements with their rivals and the central government prevents; and costly uprisings by serving some of the population needs, because the Afghan countryside has accepted resource extraction if it entails both accumulation and redistribution

of resources [13]. Hence, alternative governance in rural Afghanistan does not mean accepting the government or a “warlord”, peace or war. It simply signifies a “critical impasse” [8]; an arrangement in which everyone profits by adopting a high discount rate because no one can reasonably estimate what the future brings. Individual welfare foregoes public welfare and, eventually, the population bears the brunt.

3 Modeling the Emergence of Following in Afghanistan

[15, 16] describe a country-scale multiagent simulation of rural Afghanistan with farmers, traders, and power brokers as basic agent classes, operating across multiple contexts and making a variety of decisions. Farmers allocate land and decide when to harvest. They also rent and offer labor, react to eradication, and corrupt power brokers. Traders negotiate prices, and determine place and size of economic exchanges. They also route shipments, react to interdiction and banditry, and corrupt power brokers. Finally, traders need to adjust the size of target stock. Power brokers determine protection rates, respect or renege on mutual agreements, and allocate forces to interdiction and eradication. Power brokers therefore wear a double hat: They can create the problem to which they also have the solution. The decision making architecture of the agents ranges from simple if-then-else rules to sophisticated expectation formation mechanisms inspired by computational implementations of bounded rationality [17]. Figure 1 outlines the static structure of the model.

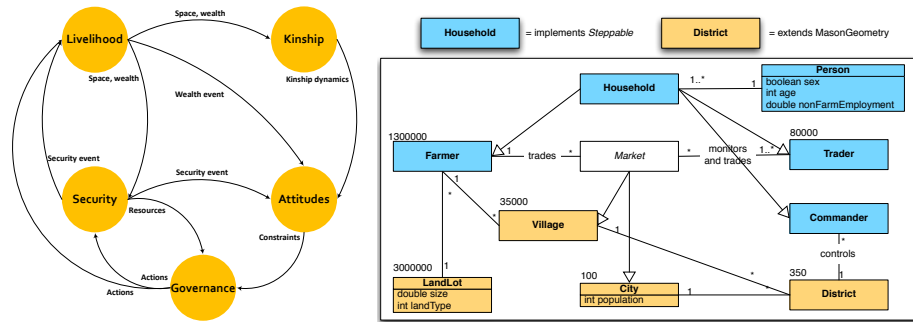


Fig. 1. Modular model structure (top) and simplified UML diagram representation of the static structure of the livelihood module (bottom).

Model initialization and structure, including georeferenced weather and soil data, and demographic data on the household level, and agent behaviors all are empirically informed [16]. The model has been validated across geographic, temporal, and societal scales against real-world, out-of-sample data [15, 16].

In order to address the questions posed at the beginning of this paper we have to extend the model as follows: (a) Power brokers should be susceptible to the needs of the people and respond to them; (b) they should act as intermediaries between the people and the government and vice versa. In a later step we anticipate endogenizing the emergence of power brokers. Figure 2 depicts this process.

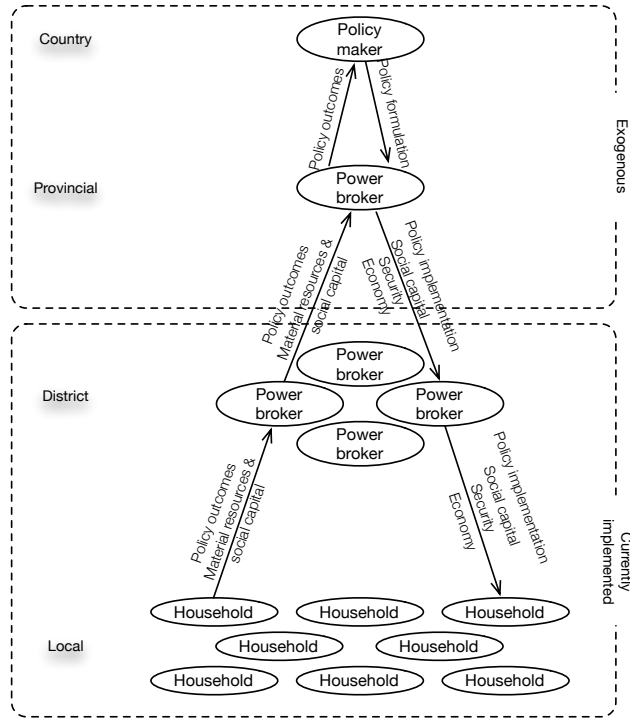


Fig. 2. Upward and downward exchange of material and social resources, and policy formulation and implementation in a model of rural Afghanistan.

At the bottom of the social segmentation are ordinary farmer and trader households. There are two essential input variables for their daily decision making process: livelihood and security. Livelihood is proxied by realized and expected gains and losses of economic activity. Security is proxied by encountered and expected interdiction and eradication. Based on this information and deliberations about future gains and losses, farmers and traders decide whether to corrupt power brokers. The price is negotiated between the two parties based on fictitious learning. Power brokers compete for traders and traffic since traders are able to “vote with their feet.” Farmers are discouraged from buying protection if the

price is too high. The interaction segment between local farmers and traders on the one hand and power brokers on the other, is only the lowest level of an elementary hierarchy of district, provincial and country authorities. The total budget for policy enforcement policy allocated to each segment is a dynamic input to the model that depends on historically allocated force levels.

The local population—represented as farmer and trader households—lends support to power brokers as “corruption”. The local power broker himself then transfers the money onto higher echelons of the hierarchy. The expectations of each party are clear: Farmers and traders expect security, thus improvement in economic conditions; power brokers expect to enrich themselves and enhance their position in the hierarchy. What the populace gets back in return is protection and more favorable economic conditions. Hence, resources are accumulated and redistributed, military power is established and essential local government services such as security and economic development are provided. In other words, the ruling classes create institutional structures and procedures that increase their bargaining power through security and economic levers; reduce their transaction costs by executing mutually agreed procedures and longstanding relationships, and lower their discount rate by reducing uncertainty through establishing norms and institutions.

4 Simulation Results

With this simulation in place we can address a variety of questions, pertinent to state capacity and conflict in Karzai-era Afghanistan, such as:

- What income percentage do farmers and traders allocate to corruption and what does this mean for their profits?
- How much income do power brokers generate from corruption?
- What hierarchical social networks emerge as a result of broker-to-broker transfers?
- How does a changing security environment influence the power brokers’ revenue stream?

From our simulation results we find that the trafficker protection market in Afghanistan is worth at least USD 200M a year. That is, traffickers are paying about USD 200M per year to power broker protection rackets: They enforce the interdiction policy that creates the insecurity for traffickers—and eradication for farmers—and are in a position to mitigate the risk of being interdicted—eradicated. Broken down to the individual level this means that 75% of traders and traffickers out of 50,000 pay a yearly average fee of USD 5400. The model also indicates that 1% of a trader’s revenue allocated to protection reduces trader’s profits between 5 and 10%.

Figure 3 shows the dynamics of the protection market during times with and without intervention. It can be seen that in the period without intervention—the first 50 months—a stable situation emerges where traders pay a constant stream of protection money to power brokers. Once enforcement starts the percentage of

protection money from their total stream of income traders allocate to paying power brokers decreases (solid blue line). Resulting from a deteriorated security situation, competition over providing protection increases amongst power brokers. In other words, who provides protection to whom at what price need to be renegotiated between traders and power brokers. Once the enforcement period ends, protection rates as percentage of trader revenue increases again.

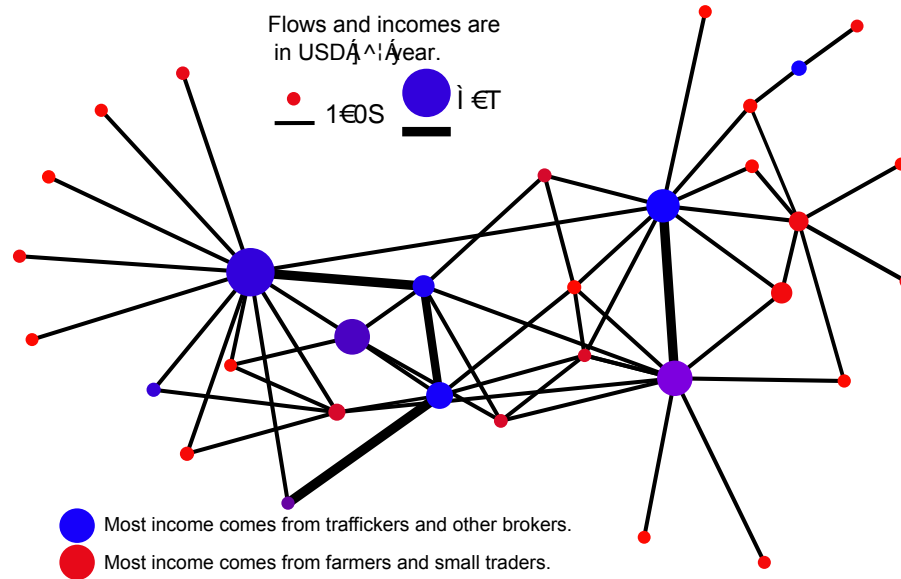


Fig. 3. Simulated network of transfers among top 40 power brokers in Regional Command South.

Figure 4 also adds a more structural view to these results. It shows a simulated, emergent network of transfers among 40 power brokers in Regional Command (RC) South. Small red dots signify power brokers making about USD 100K per year; large, solid blue circles signify power brokers making about USD 80M per year. The network shows that red dots tend to have a higher number of outdegrees than blue circles. This indicates—and that is what our simulation data tells us—that most income for larger power brokers stems from other traffickers and brokers, whereas the income sources for smaller power brokers are largely from farmers and small traders.

A variety other questions can be addressed using our simulation framework, such as “How much money can power brokers extract over time, from whom and in which areas?” and “What is the relationship between economic boom, corruption, and population support for the government?”

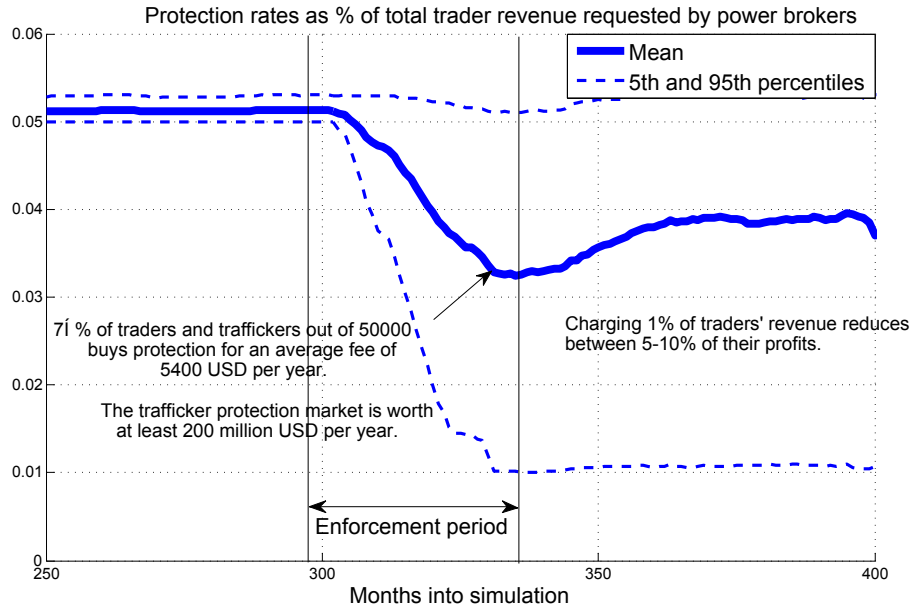


Fig. 4. Trader protection rates, enforcement and competition amongst power brokers.

5 Conclusions

We have built a socio-cultural model of rural Afghanistan in which: locals serve as a source of labor; can engage in banditry and in smuggling on behalf of traffickers; traffickers and legitimate traders organizations and individuals are interested in moving licit and illicit goods; power brokers work out protection arrangements between traffickers, traders and security forces and resort to banditry strategically; bandits roam the landscape and roads targeting unprotected traders and smugglers, and evade security force.

At this stage the model produces two results: Emergent broker-to-broker networks and competition for protection due to enforcement. We would like to highlight two preliminary insights from this work: state capacity in Afghanistan is not only about what the state can deliver and what not and therefore must be delivered by private actors. It is also about how competing “states” and “governments” arrange themselves with private actors for the pursuit of maximizing personal profit. In contrast to [2], due to competition agents cannot extract whatever they like from the population, even when able to rove around in a geographically nonstationary system.

Despite the fact that our model produces a credible account of the emergence of a rentier system in Afghanistan, plenty of work remains to be done. For example, we intend to endogenizes class, location and hierarchies. Also, in the

current implementation enforcement is not costly. The ultimate goal, of course, is to use the model for running scenarios for decision support.

References

1. North, D.C.: Structure and Change in Economic History. W. W. Norton (1981)
2. Olson, M.: Dictatorship, democracy, and development. *American Political Science Review* **87**(3) (1992) 567–576
3. Tilly, C.: Coercion, Capital, and European States. Blackwell, Cambridge (1992)
4. Gungwu, W.: Comments by Wang Gungwu. Volume 1. The University of Chicago Press, Chicago (1968)
5. Roberts, J.A.G.: Warlordism in china. *Review of African Political Economy* **16**(45/46) (1989) 26–33
6. Sheridan, J.E.: Chinese Warlord. The Career of Feng Yü-hsiang. Stanford University Press, Stanford (1966)
7. Reno, W.: Warlord Politics and African States. Lynne Rienner Publishers, Boulder (1998)
8. Richani, N.: Systems of Violence. The Political Economy of War and Peace in Colombia. State University of New York Press, Albany (2002)
9. Tilly, C. In: War Making and State Making as Organized Crime. Cambridge University Press, New York (1985) 169–191
10. Misdaq, N.: Traditional leadership in afghan society and the issues of national unity. *Central Asian Survey* **9**(4) (1990) 109–112
11. Azoy, G.W.: Buzkashi, Game and Power in Afghanistan: Game and Power in Afghanistan. Waveland Press, Long Grove (2003)
12. Janata, A., Hassas, R.: Ghairatman—Der gute Paschtune, Exkurs über die Grundlagen des Paschtunwali. *Afghanistan Journal* **2**(3) (1975) 83–97
13. Roy, O.: The new political elite of afghanistan. In Weiner, M., Banuazizi, A., eds.: The Politics of Social Transformation in Afghanistan, Iran and Pakistan. Syracuse University Press, Syracuse (1994) 72–100
14. Roy, O.: Afghanistan: from holy war to civil war. Darwin Press, Princeton (1995)
15. Armando Geller, M.M.L.a., Rizi, S.M.M.: How corruption blunts counternarcotic policies in afghanistan: A multiagent investigation. In J. Salerno, S. J. Yang, D.N., Chai, S.K., eds.: Social Computing, Behavioral-Cultural Modeling and Prediction 2011 Conference. Volume 6589 of Lecture Notes in Computer Science. (2011) 121–128
16. Maciej M. Latek, S.M.M.R., Geller, A.: Persistence in the political economy of conflict: The case of the afghan drug industry, Association for the Advancement of Artificial Intelligence Fall Symposium Series (2010) 86–92
17. Latek, M.M., Axtell, R., Kaminski, B.: Bounded rationality via recursion. In: Proceedings of The 8th International Conference on Autonomous Agents and Multiagent Systems, International Foundation for Autonomous Agents and Multiagent Systems (2009) 457–464