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Title: Who Governs Here? Natural Resources, the State, and Conflict in Rural Ghana.

McKenzie F. Johnson

ABSTRACT

Over the past two decades, numerous Sub-Saharan African states have engaged in governance reforms that heed neoliberal calls to securitize – or, establish and consolidate state control over – natural resources. In Ghana, securitization has contributed to the expansion of the informal natural resource economy as domestic producers, marginalized in the process of reform, have utilized non-state institutions to maintain access rights. While the Ghanaian state has branded "illegal" extraction – mining specifically – a national security threat, it has responded to this threat unevenly; that is, it has violently enforced its authority in some contexts but remained relatively indifferent in others. This article explores the phenomenon of selective enforcement to explain patterns of violence that have emerged between state and society in response to both securitization and informality. Drawing on a multimethod approach, I find that natural resource governance authority remains fragmented across resource contexts, and that the configuration of authority and interests on the ground shapes the extent of state intervention. I propose a natural resource typology that identifies when the state is most likely to enforce its authority, and the

degree of violent conflict likely to result. Ultimately, I contend that Ghana is unwilling to

broadly enforce its authority over natural resources for fear that disrupting competing networks

of authority could contribute to more substantial conflict risk.

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INTRODUCTION

Over the course of the 1990s, environmental governance emerged as a critical issue within the development-security nexus as the international community increasingly came to perceive natural resources as a significant driver of violent conflict. In response to a growing literature on "conflict resources" and the "resource curse" (Le Billon, 2012), and in an effort to foster peace within (post-)conflict countries across the Global South (Jensen et al., 2012), scholars and practitioners advocated for governance initiatives that sought to *securitize* or establish and "consolidate state authority over" natural resources and the environment (Beevers, 2019: 7-8). This strategy reflected the idea that a strong (but neutral) state – characterized by robust institutions and good governance – could unleash the potential of extractive resources that drive growth while simultaneously mitigating conflict risk and fostering opportunities for peace (Beevers, 2019; Matthew et al., 2010). Reform efforts ultimately produced a slew of regulatory, legislative, and organizational changes across the Global South that enhanced state social control – defined by Migdal (1988: 261) as "the actual ability to make the operative rules of the game for people in society" – over natural resource governance.

In Ghana, a growing body of scholarly work contends that natural resource securitization has paradoxically served to *undermine* social stability as it has reoriented social and political relations around neoliberal standards of extractive governance that channel access rights and distributional benefits to multinational companies at the expense of domestic (typically small-scale and artisanal) non-elite producers (Banchirigah, 2008; Hilson, 2013; Johnson, 2017b; Tschakert, 2010). Scholars point, in particular, to the idea that "green" reform has institutionalized regulatory practices, processes, and technologies that generate barriers to formal entry for non-elite producers in that compliance requires substantial financial, technical, and

social resources (Putzel et al., 2015; Sepulveda et al., 2007). In the face of an exclusive green state apparatus, non-elite producers have turned to informal networks, operating in parallel to the state, to maintain access and exploitation rights (Johnson, 2017b). Following Denney (2013: 7), "informal" here is used to refer to "those providers that fall outside the formal accountability structures of the state." This, in turn, has contributed to the proliferation of informal natural resource extraction and environmental degradation, as well as increasing levels of violent conflict over issues of access and distribution (Johnson, 2017b). The most recent Ghana Shared Growth and Development agenda, for example, remarks that "the menace of [informal] small-scale mining...has become the single most important source of environmental and natural resource degradation, and constitutes a major economic, social, and national security concern that requires swift policy action" (GoG, 2014: 66).

The central question that this article addresses is: how has the Ghanaian state responded to both the diffusion of natural resource authority and the expansion of informal activity within the framework of securitization? This question is especially important in light of an emerging rhetoric which defines informal resource extraction as a threat to national security (Multiple Interviews GoG October-November 2014). In light of this threat, the international community – multinational companies (MNCs), especially – has advocated for the state to consistently consolidate and enforce its authority over natural resources as a means to protect private investment, foster good governance, and mitigate "criminal" activity (Multiple Interviews Spring 2015). Instead, the Ghanaian state has engaged in a strategy that can only be called "selective enforcement;" that is, it appears to enforce its authority swiftly and brutally in some contexts but remains relatively indifferent to informal extraction in others. The seemingly random use of state

violence and intimidation to combat informal extraction has introduced a significant source of anxiety into communities already stressed by extreme poverty and livelihood insecurity (Hilson et al., 2005). In this article, I seek to explain the pattern of state enforcement in Ghana by drawing on fieldwork conducted in 2015 with mining and forest communities in the Western and Brong-Ahafo Regions (Figure 1). I argue that the state's inconsistency in addressing informal mineral (primary focus) and timber (secondary focus) extraction can be understood as a strategic response to the "political topography" that has emerged through the process of securitization (Boone, 2003).

Building from state-society theory, I contend that the state's varied enforcement interests and capabilities on the ground have been shaped primarily by two factors: 1) competition with local power holders for natural resource access and utilization and 2) global conservation and extraction priorities. In the first pathway, I utilize household surveys to demonstrate that the state, despite efforts to securitize natural resources, continues to face significant competition from a diverse set of "alternative governance suppliers" (e.g. traditional authorities, political patrons, local entrepreneurs, private land owners) that draw on long-standing sociocultural sources of power and legitimacy to control informal natural resource spaces. I contend that the state faces strong incentives to tolerate the coexistence of these networks because 1) these groups constitute significant sources of domestic power and 2) informal accommodations help sustain political support among networks marginalized in the process of governance reform (Weinthal, 2002). In terms of the second pathway, I employ household surveys and interviews to show that the state tends to enforce its authority in order to protect areas of strategic importance to the international community – and by extension, the state itself. Typically, these consist of large-

scale mineral concessions occupied by MNCs that generate substantial revenue for the state or forest reserves critical to global conservation efforts. In short, global and national interests converge to shape center-periphery patterns of interaction.

I draw on these lines of inquiry to construct a conflict typology that assesses where and to what extent we expect the state to engage in violent conflict to assert authority over natural resource extraction in Ghana. Specifically, I combine household level responses on conflict expectations with field interviews and observations to determine those communities and social groups most likely to experience violent conflict. I find that communities expect more violent conflict in areas where competition between governance suppliers for extractive resources is high and where the state has (global) strategic interests it feels compelled to protect.

This research speaks to a critical question in international development and environmental governance: to what extent does natural resource securitization contribute to social stability and environmental sustainability? In responding to it, I engage with several debates across a number of disciplines. In political science, I contribute to state-society theory to show how global – in addition to domestic – interests and power structures shape center-periphery interactions in ways that lead to uneven patterns of violence. In the environmental security and peacebuilding literature, I qualify the assumption that natural resource securitization serves as a mechanism to enhance the state's social control of natural resources and thereby mitigate conflict (Beevers, 2019). Rather, I find that in the wake of securitization efforts, the state has been forced to become more – rather than less – accommodating of competing governance networks. Finally, in the extractives literature this analysis serves to disrupt scholarship which views the state's

informal accommodations solely in terms of rent-seeking (Banchirigah, 2008; Tschakert, 2016). Instead, I highlight the extent to which the state's enforcement strategy appears to strategically 1) protect global sources of natural resource revenue (taxes, conservation finance) that support state activities and 2) accommodate informal power holders that, if challenged, might otherwise withdraw political support critical to maintaining wider social stability. As Mesquita et al. (2003: 26) note, "political survival is put at risk whenever leaders lack the resources to maintain the support of essential backers."

In order to examine Ghana's political topography as it relates to environmental governance, the next section reviews the literature on securitization-conflict linkages with an explicit focus on Ghana. The second section describes the methods used to collect and analyze data for this study, and describes the context in which the study took place. The third section presents and evaluates the data. The final section relates this case to broader themes in literature on environmental governance.

NATURAL RESOURCE SECURITIZATION IN GHANA

Governance, Conflict, and Informality in the Global South

In the post-Cold War era, environmental governance became a central concern for the international development community in light of empirical scholarship which increasingly pointed to linkages between natural resources, (under)development, and civil conflict (Humphreys, 2005; Le Billon, 2012). This line of research highlighted securitization as a critical response to environmental insecurity given that scholars and practitioners recognized nearly all aspects of resource-conflict linkages – institutional weakening, grievances, and greed – as a function of the state's overall governance (in)capacity (Le Billon, 2012). Collectively, the wider

literature reasoned that constructing strong institutions that increased state social control over natural resources could ultimately foster stability by: 1) limiting the ability of non-state actors to control high-value natural resources in ways that could contribute to violence (Le Billon, 2008); 2) establishing a stable and predictable investment environment to drive economic growth (WB, 1989, 1992); 3) supervising competition for resource access and exploitation in ways that minimize conflict and environmental degradation; 4) managing the influx of extractive revenues, as well as the process of redistribution, to generate opportunities for development; and 5) "strengthening the linkages between the state and civil society that enhance mechanisms of transparency, accountability, and due representation of citizenry" (Nem Singh et al., 2013: 31). Simply put, the securitization approach assumes that states vulnerable to natural-resource conflict can "limit violence through institutions" (North et al., 2009: 17).

In Ghana, ongoing governance reforms aimed at securitizing natural resources have contributed to the emergence of a relatively robust (green) administrative state that employs global regulatory standards, as well as an extensive array of modern laws and policies, to assign resource rights, manage extractive revenue, mitigate environmental impacts, and protect community/social rights (Johnson, 2017b; NRGI, 2017). Given its success in building "strong institutions" that (theoretically) consolidate state social control over the environment, Ghana should constitute a compelling case for the benefits of securitization. However, green governance initiatives, in combination with the impact from Structural Adjustment policies implemented in the 1980s, have in reality served to deepen structural inequities by reorienting natural resource management around standards and practices that channel formal access rights and distributive benefits to private/elite/global interests at the expense of domestic artisanal and small-scale

(ASM) producers (Hilson, 2013; Hilson & Gatsinzi, 2014). In the face of socially exclusive institutional reforms, many ASM producers rely on alternative governance suppliers – traditional authorities in particular – to maintain extractive access and use rights (Hirons, 2014; Van Bockstael, 2014). Taken together, the process of securitization has thus served to entrench the informal sector as a means to maintain livelihood security (Hilson, 2013). Research estimates that informal ASM, referred to within the Ghanaian context as "galamsey," expanded from around 30,000 miners in 1995 to over one million in 2006 (Banchirigah, 2008; WB, 1995). The Government of Ghana continues to use the benchmark of one million "illegal" miners to characterize the extent of the informal economy (GoG, 2016), although recent work has called for this estimate to be updated by more robust empirical research (Hilson & McQuilken, 2014).

The massive scale of the informal economy, as well as its substantial social and environmental impacts, has focused international and state attention on ways to mitigate or eliminate informal extraction (SBS-NREG, 2013). Despite an extensive scholarship which demonstrates that informality is driven primarily by lack of access and capabilities (Fisher, 2007; Hilson, 2012; Van Bockstael, 2014), policymakers have continued to focus on *formalizing* the informal sector to address the problem; that is, mandating broad-based compliance with existing "laws governing small scale mining in Ghana" (MC, 2015: 19). This approach, which does little to recognize the barriers faced by ASM producers, has served to reinforce perceptions of informal extraction as an issue of willful noncompliance (Sepulveda & Syrett, 2007); and, as such,

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¹ "Artisanal and small-scale mining" or ASM is defined as mining an area of <25 acres. In Ghana, the Minerals and Mining Act of 2006 reserves small-scale (and artisanal) mining for Ghanaians. Any person partaking in ASM without a permit from the state is considered to be engaged in "illegal" activity; however, I prefer the term "informal" given substantial disagreement about the boundaries of state authority.

² While much of this work explicitly revolves around informal *mining*, I also include informal *timber* extraction to a lesser extent.

"illegal" (i.e. non-compliant) actors have been increasingly characterized as criminal elements that constitute a national security threat (EPA October 2014 and Minerals Commission November 2014). The growing perception that informal producers pose a threat to state regulators prompted regulatory agencies to effectively abandon efforts to enforce compliance. Except for the Forestry Commission, which utilizes armed Rapid Response Units to patrol forest reserves, the executive branch (i.e. political state) in Ghana has assumed primary responsibility for eliminating informal extraction.

Selective Enforcement in Ghana

Within this context, the Ghanaian state has employed a number of tactics to "enforce" its authority over natural resources broadly and mineral resources specifically. In May 2013, then-President Mahama inaugurated an "Inter-Ministerial Taskforce on Informal Mining" (Ghana Chamber of Mines, May 2015). The taskforce, chaired by the Minister for Lands and Natural Resources and supervised by the National Security Sub-Committee on Lands and Natural Resources, consists of a joint team of security operatives responsible for eliminating "illegal" mining across Ghana (Ghana Chamber of Mines, May 2015). In addition to the national taskforce, the Ministry of Lands and Natural Resources reconstituted membership of five regional taskforces – based in the Eastern, Greater Accra, Ashanti, Western, and Central Regions – to "complement efforts" to address illegal mining (MoLNR, 2016). The Ministry also established 14 Rapid Response Units (RRUs) in 2012 to further "augment operations of the Military and Police Task Forces" and "deal with the menace of illegal logging, mining, farming and chainsawing in our forest reserves and wildlife protected areas in the country" (MoLNR, 2016). RRUs, which consist of armed forest guards, mobilize in response to calls about informal activities in forest or wildlife reserves (Forestry Commission, October 2014). The state also

employs military-style patrols around large-scale mining concessions. Such patrols are part of an ongoing partnership between international mining companies and the state, which signed an MOU around 2009, to protect large-scale concessions from informal mining activities (Ghana Chamber of Mines, May 2015). Under the MoU, mining companies partner with the Ghanaian military to deploy teams that complement the Ghanaian Police Service, and which act in tandem to "protect the assets of the beneficiary mining companies" (Ghana Chamber of Mines, May 2015).

Despite these efforts, MNCs, civil society members, and the international community have largely characterized enforcement measures by the Ghanaian State as inadequate. A Newmont Official remarked, "[there is] no regulatory action to manage galamsey. Even if we take [the issue] to the police or the District Assembly they are a bit shy...so we have to push and push, and they might do a raid" (March 2015). Another Newmont official commented, "in terms of the government task force, we've heard the fanfare but we have not seen an impact" (March 2015). An official with Adamus Resources similarly complained that the state's commitment to eliminating informal mining is "superficial" at best (February 2015). Interviews conducted with informal producers across multiple communities confirm that the frequency and intensity of military-style raids can be highly variable (January-May 2015). Some communities frequently encounter security forces that destroy machinery, make arrests, or forcibly remove miners – sometimes causing bodily injury or even death (CHRAJ, 2008) – while others remain relatively insulated from these activities and their consequences. I experienced the potential devastation wrought by enforcement measures firsthand when an RRU team swept through an informal mining camp operating in a forest reserve where I had been working in 2015. The "soldiers," as

they are called by miners, burned personal items, including money, destroyed machinery, arrested at least one miner and two chainsaw operators, and confiscated costly items like water pumps necessary to the excavation process. Yet, I also worked in communities where both the extent of the raid and its consequences were negotiable. In one community, the District Assembly used state enforcement as a strategy to generate revenue: the Village Chief and a number of individuals claimed that the District Assembly had forged an agreement in which producers paid a local tax in exchange for protection from the taskforce (March 2015). These data support other research that has found anti-galamsey enforcement is often influenced by local politics or revenue needs (Hirons, 2014).

Selective Enforcement within the Framework of State-Society Theory

Such variable enforcement by the state – or *selective enforcement* – has been explained in the literature in multiple ways. Banchirigah (2008) posits, for example, that enforcement is patchy because the state benefits financially from a robust informal economy. Similarly, Tschakert (2016: 129) argues that "vested interests of powerful actors in the ASM sector...nourish an environment in which informality can flourish, not subside, because such a landscape provides precisely the messy and ambiguous grounds upon which to reap maximal profits." The World Bank (2014), on the other hand, contends that Ghana simply does not possess the financial or technical resources to effectively sustain long-term enforcement measures. While all of these explanations likely play a role in the perpetuation of the informal extractive economy in Ghana, I contend that they overemphasize issues of political will and corruption while simultaneously overlooking state capabilities and *strategic* interests. They also struggle to explain *patterns* of state intervention on the ground. In order to address some of these gaps in the literature, this

article draws primarily on state-society theory to explain the Ghanaian state's uneven engagement with informal extraction within the framework of securitization.

I start with the premise that the circulation of power within society is a critical determinant of state behavior: specifically, the state views its power and authority – and limits to it – in relation to the "political topography" that links the core to its peripheries (Boone, 2003). Much of the state-society literature to date has focused extensively on domestic power relations to explain patterns of state authority and engagement. That is, the state's capacity to achieve social control has been perceived primarily as a function of how power is distributed between subnational elites/notables/powerholders and the central state. Political accommodations are theorized to be more likely in the presence of subnational actors who, in the absence of such accommodations, could undermine wider political stability (Herbst, 2000). However, other work suggests that, within the framework of globalization, state interests have become integrally linked to global interests (Finnemore, 1996). Consequently, the state can no longer look solely at domestic capacities and interests to make decisions about when it will act to consolidate social control; rather, it also must account for global interests, as well as international governance norms, that ultimately generate resources and power (Johnson, 2017a). From this perspective, even a weak state, to protect its interests, will make greater efforts to consolidate its authority in areas of strategic global importance, even in the presence of competing governance networks.

Applying these ideas to the Ghanaian context, this article seeks to advance state-society theory by examining how subnational and global factors *interact* to shape state-society interactions. In particular, I employ a mixed-methods approach to examine 1) the extent to which the authority

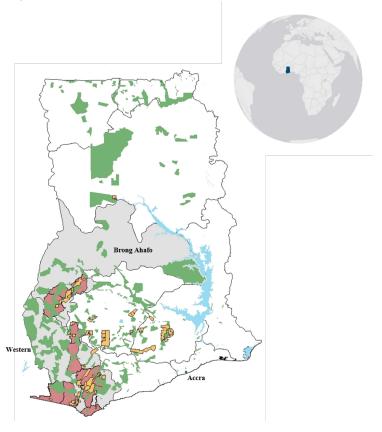
for natural resource governance in Ghana remains divided between local power holders and the state (i.e. the extent of the state's social control) and 2) how global interests and priorities impact the political calculus of state engagement. The assumption here is that the state faces an enforcement trade-off: stringent enforcement is resource intensive and potentially antagonizes competing networks of authority that could undermine political support whereas lax enforcement threatens global priorities that channel resources, support, and power to the state. Within this set of parameters, I expect that the state is more likely to (violently) assert its authority – and accept the domestic costs – to protect areas of strategic interest; that is, extractive resource zones (i.e. mineral and forest concessions) on which the state directly depends for revenue and areas of global conservation interest (i.e., protected areas that generate conservation revenue). Outside these areas, however, the state may be more willing to accommodate competing networks in an effort to generate domestic accommodations that maintain wider social stability.

METHODS AND MATERIALS

From January-April, 2015, a research team consisting of the PI, two research assistants, and a driver, implemented 310 household surveys across 12 villages in 10 districts in the Western and Brong-Ahafo Regions of Ghana (Figure 1). The survey was designed to elicit data on which social groups possess governance authority for natural resources – especially minerals and timber – at the community level, how well those actors enforce the rules, and expectations of natural resource conflict. We worked in the Western and Brong-Ahafo Regions for three reasons. First, mineral extraction has been a constant feature within this region since before the Colonial era (Hilson, 2002). As such, there is a substantial literature documenting the social and environmental impacts of mining on local communities as well as the effect of governance reforms on mining-related conflict (Akabzaa, 2000; Armah et al., 2014; Campbell, 2006; Hilson

& McQuilken, 2014). Most of the large-scale mining operations, including Newmont, Golden Star, Gold Fields, AngloGold Ashanti, and Endeavour, are based in the Western and Brong-Ahafo Regions, which has further focused scholarly attention within this geographical extent.

Figure 1. Map of study area in Ghana. Coral areas designate the 10 study districts, green areas indicate forest/protected reserves, and orange areas indicate active large-scale mining concessions (ESRI, 2017).



Second, the Western and Brong-Ahafo Regions are extremely resource-rich, and characterized by substantial overlaps in extractive resource potential. These regions have witnessed extensive extraction of mineral, timber, and (offshore) oil resources, often within areas that overlap or occur within close proximity, and, as such, government officials, scholars, and development practitioners recognize a higher probability of natural resource conflict within them (Armah et al., 2014; Cuba et al., 2014). Rural Ghanaians also rely extensively on land, forest, and mining resources in these regions for their livelihoods. Akabzaa (2000) estimates that approximately

70% of Ghanaians derive their livelihoods directly from the use or exploitation of such natural resources, suggesting that resource competition is a significant concern in Western and Central Ghana. Third, the Western and Brong-Ahafo region remain a focal point for the informal extractive economy.

Initially, about 24 possible study communities were randomly selected based on their proximity to specific natural resource features – but especially forest reserves and mineral resources. The research team made an initial visit to these villages in November 2014 in order to speak with local leadership. Ultimately, researchers obtained permission to work in 12 villages representing a subset of resource-rich communities. Three villages, two in the Western Region and one in the Brong-Ahafo Region, were situated in proximity to forest reserves and defined as "non-mining communities" (Villages F1, F2, and F3). Five villages, all in the Western Region, were defined primarily as "galamsey communities" (Villages G1, G2, G3, G4, and G5).³ Two of these villages were situated near an active large-scale mining concession (G3 and G4), while four also sat adjacent to forest reserves (G1, G2, G4, and G5). Researchers defined a village as a "galamsey community" if mining operations occurred within or in direct proximity to the village, and if both the traditional authorities and village residents were aware of and at least partially participated in informal activities. Finally, four villages, two in the Western Region and two in the Brong-Ahafo Region, were defined as "mining adjacent" communities as they were situated in direct proximity to large-scale formal concessions (M1, M2, M3, and M4). One of the villages in the sample, M1, had been relocated by Adamus Resources (a subsidiary of Endeavour

³ Villages varied in both the type and extent of informal mining occurring. In G1, activities consisted of "dredging" in which miners work in streams or rivers to obtain ore. In G2, miners engaged in surface mining in the forest reserve. In G3 and G4, miners engaged in both surface and underground mining. In G5, miners focused on surface mining, with some underground mining in the adjacent forest reserve.

Mining). While the sample was small, we were able to capture a subset of communities that significantly varied in terms of 1) available resources (i.e. non-renewable versus renewable); 2) community use (i.e. solely farming versus solely extraction); and 3) extent of resource overlap (Table 1).

Table 1. Sample of communities.

Natural Resource Feature	Community Code	Designation
Forest Reserve	F1, F2, F3	Non-Mining
Galamsey & Forest Reserve	G1, G2, G5	Informal Mining
Galamsey & Forest Reserve & Large-Scale Mining	G4	Informal Mining
Galamsey & Large-Scale Mining	G3	Informal Mining
Formal ASM & Large-Scale Mining	M2	Mining Adjacent
Large-Scale Mining	M1, M3, M4	Mining Adjacent

The research team spent a total of five nights and four days in each community. Three of the days in the village were spent conducting surveys, and the fourth day was used to engage in participant observation and interviews. All household surveys were conducted in Twi or Ewe. The PI took turns accompanying one of the research assistants while the other conducted surveys independently. The size of each village was determined by speaking with local leaders and consulting 2010 census data from the Ghana Statistical Service. The two research assistants began from a recognizable central point in the village – such as a community center or the chief's palace – with one research assistant pursing a clockwise spiral pattern towards the perimeter of the village and the other pursing a counterclockwise spiral pattern toward the opposite perimeter. We used this strategy to ensure that we captured both Akan and non-Akan households, as "strangers" or village non-natives tend to aggregate at the village perimeters (MacLean, 2010). The research assistants skipped a specific number of houses depending on the size of the village to ensure that we included households in all areas of the community. Generally, we spoke to any adult (either male or female over 18 years of age) at home and who lived within the household for at least six months of the year. If no one was home, we returned to the house to find the resident at another time. If an individual was busy but willing to participate, we made an appointment to come back at a more convenient time. Where we could not find the resident or an individual refused to participate in the survey, we proceeded to the house directly next-door. Overall, 12 households refused to participate (a 96% response rate).

To recruit participants, the research assistant explained the purpose of the survey and asked the individual if s/he was willing to participate. We emphasized that participants would not be given any material benefits or future development assistance, but rather all participation was strictly voluntary. The [Omitted] University Institutional Review Board approved the human subjects protocol (#C0300). On the fourth day in the village, we visited field sites, engaged in activities with households, or conducted in-depth interviews with village chiefs, village elders, royal family members, local political leaders, youth leaders, and informal miners. The ethnographic and interview data ultimately supplemented and increased the validity of the survey data.

NATURAL RESOURCE GOVERNANCE IN GHANA

The household surveys consisted of 74 questions in 7 sections: demographics (1), natural resource use (2), governance (3), perceptions of resource extraction (4), extraction and livelihoods (5), politics (6), and conflict and conflict resolution (7). On average, respondents took about 95 minutes to complete the survey. We surveyed 156 men and 154 women; the proportion of males in the sample did not significantly differ from 50% (p=0.95). About 77% (n=239) of the sample population had a junior high school education or lower, while the remaining 23% (n=71) had at least a high school level education or higher (Table 2). Surveyed households were predominately Christian (91%), but about 6% of households self-identified as Muslim. Ethnic Akans dominated the sample: 15.21% of respondents self-reported as Asante,

22.97% as Nzema, and 22.01% as Wassa. Our sampling approach varied in its ability to capture different ethnic groups. For example, in F1 (133 households) we surveyed 75% of all ethnic groups living in the village, whereas in G3 (1274 households) we sampled 23%, and in M2 (966 households) we only captured 8% (based on 2010 census data). This may have been a result of spatial clustering in villages. The Wassa ethnic group was overrepresented in the galamsey communities (72%), which may ultimately have influenced survey results. The demographic data is presented in Table 2.

Table 2. Respondent Demographics.

				Education			
Village Type	Respondent: Household Head	Male	None- Primary	Jr High	High School or Greater	Average Age	Average Acreage
Non-Mining (n=76)	66%	63%	41%	32%	28%	42.8	11.71
Galamsey (n=127)	56%	46%	28%	54%	18%	41.3	6.60
Mining Adjacent (n=107)	42%	46%	34%	41%	25%	39.7	8.78

We did not ask about household income directly given difficulties associated with obtaining reliable figures (MacLean, 2010). Rather, we focused on sources of income. Many respondents reported engaging in multiple occupations. For example, 47% of individuals primarily identified as farmers but it was not unusual for respondents to report that they participated in secondary and tertiary professions. Indeed, many farmers supplemented their income with informal mining work, which provided a more regular and reliable cash flow. A total of 14 individuals (4.52%) described their *primary* profession as informal mining. This percentage corresponds with sources that estimate about 3.9% of Ghana's population participates in the informal mineral economy (GoG, 2016). In total, 91 people (29%) said they engaged in the informal mineral economy *at some point* in their lives, and 84% of these people lived primarily in informal mining

communities. This suggests that rather than serving as a static profession, the informal mining economy is highly dynamic with individuals periodically entering and exiting the sector based on specific needs or to supplement household incomes (Hilson & McQuilken, 2014).

Who Governs? Natural Resource Governance on the Ground

One of the primary goals of the household surveys was to understand the extent to which the state has been able to consolidate social control over natural resources in general and mineral resources in particular. We asked respondents to indicate 1) which actor has primary control over minerals; 2) whether this actor has total or shared control; 3) how well the actor enforces the rules governing minerals (scaled from 1-5); and 4) the ease with which the respondent felt they could *legally* access mineral resources for their livelihood (again scaled from 1-5). In this context, "legal" access is understood to mean access granted by the state via permits and licenses. Across all villages, about 28% of respondents assigned total authority for minerals governance to the state, 30% assigned total authority to traditional authorities (chiefs and elders), and 22% assigned total authority to other sources (individual landowners, political patrons, entrepreneurs, or private companies). About 20%, however, believed that responsibility for minerals governance was shared between the state and traditional authorities (Table 3). These results indicate that, despite efforts to securitize natural resources, community perceptions of who maintains legitimate governance authority over natural resources remain divided.

Table 3. Perceptions of mineral governance in Ghana by village type. TAs indicate "traditional authorities."

		Minerals Authority					
_	TAs	State	TAs & State	Other	Shared Authority	Good Enforcement	Access Difficult
Non-Mining (n=76)	20%	33%	26%	21%	34%	32%	57%
Galamsey (n=127)	34%	24%	13%	28%	27%	26%	44%

Mining-Adjacent (n=107)	33%	29%	24%	14%	41%	37%	55%
Total (n=310)	30%	28%	20%	22%	34%	31%	51%

Based on these summary statistics, I ran a logistic regression to further analyze factors influencing how people assigned governance authority for natural resources (Table 4). I created a binary dependent variable, **State Authority**, by coding all responses indicating that the "state" possessed governance authority for minerals as 1 and remaining responses as 0. This means that responses indicating that governance authority for minerals was shared between traditional authorities and the state were coded as 1 because respondents at least partially recognized state authority vis-à-vis minerals governance.

Table 4. Logistic regression of state authority for minerals on key characteristics.

_	Odds Ratio	Marginal Effects
VARIABLES		
Galamsey Village	0.290**	-0.203**
	(0.128)	(0.069)
Mining-Adjacent Village	0.946	-0.009
	(0.357)	(0.062)
Access Minerals: Difficult	3.245***	0.193***
	(0.998)	(0.046)
Mineral Enforcement	0.372**	-0.162**
	(0.128)	(0.054)
Engaged in Informal Mining?	2.141	0.125
	(0.867)	(0.065)
Age	1.035***	0.006***
C	(0.011)	(0.002)
Male	2.422**	0.145**
	(0.739)	(0.047)
Primary Education	0.142***	-0.321***
•	(0.065)	(0.067)
Secondary Education	0.562	-0.094
•	(0.219)	(0.063)
Shared Authority: Minerals	3.345***	0.198***
·	(1.077)	(0.048)
State Authority: Forests	2.893*	0.174*
•	(1.317)	(0.072)
Constant	0.092***	,

(0.063)

Observations	303	
\mathbb{R}^2	0.283	

Standard errors in parentheses
Omitted Category: Non-Mining communities
*** p<0.001, ** p<0.01, * p<0.05

The logistic regression supports the idea that governance authority for minerals in Ghana remains highly fractured on the ground (Table 4). In particular, the results raise three important points. First, the **type of community** in which an individual resides is important in predicting who that individual assigns governance power to vis-à-vis minerals specifically and natural resources broadly. Respondents living in galamsey villages were more likely to assign governance authority for minerals to traditional authorities, individual land owners or family heads, or to no one relative to those living in non-mining communities. These respondents also reported finding it less difficult to obtain legal access to mineral resources than individuals in mining-adjacent or non-mining communities (χ^2 =4.067 p<0.05).⁴ This suggests that individuals living in communities where informal mining is prevalent are more likely to see alternative governance suppliers as legitimate pathways to mineral access. In contrast, households in mining-adjacent villages were more likely to say that governance authority for minerals is shared between the government and traditional authorities as compared to informal mining and nonmining communities (χ^2 =6.535, p<0.01). This suggests a recognition that the state plays a key role in permitting the operations of large-scale mining companies, and that the power of the traditional authorities may be infringed upon within this context. Indeed, evidence from the qualitative data indicates that while chiefs are perceived as critical for communities in

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⁴ Coded as a binary variable: responses were coded as 0 if respondents assigned a number greater than or equal to 3 (access easy). Responses were coded as 1 if respondents assigned a number less than 3 to ease of access (access difficult).

negotiating development benefits with MNCs, their authority may simultaneously be eroded by their inability to deliver expected benefits, solve problems of mineral access, or mitigate extractive impacts – a phenomena which Hirons (2015: 496) refers to as "lumpy legitimacy."

Second, perceptions of robust mineral enforcement are significantly and negatively correlated with assigning authority for minerals to the state. This is because respondents across all communities ascribed greater enforcement capacity to traditional authorities, in terms of enforcing the operative rules of minerals governance, rather than to the state ($\chi^2=11.382$, p<0.001). Such sentiments are perhaps unsurprising in light of research that suggests traditional authorities retain substantial social and cultural legitimacy for natural resource governance across Sub-Saharan Africa despite the recent focus on securitization (Denney, 2013). In Ghana, for example, traditional leaders maintain important roles as land custodians (Ubink et al., 2008); about 80% of Ghana's land is still held under customary tenure and is vested in chiefs, earth priests, or other customary authorities (Kasanga et al., 2001). As such, these results suggest that the legal division between surface rights (theoretically owned by landowners or chieftaincies) and sub-surface rights (theoretically owned by the state as per the Mines and Minerals Act of 2006) remains ambiguous to local communities, and that despite the state's encroachment on traditional powers, these institutions remain a significant source of local authority and enforcement. Under the legitimacy of traditional structures, then, informal producers likely view themselves as operating within the bounds of legitimate governance structures. Indeed, Van Bockstael (2014) argues that in Liberia, small-scale miners operate at various "stages" of legality through payment of informal taxes and informal arrangements with local government officials.

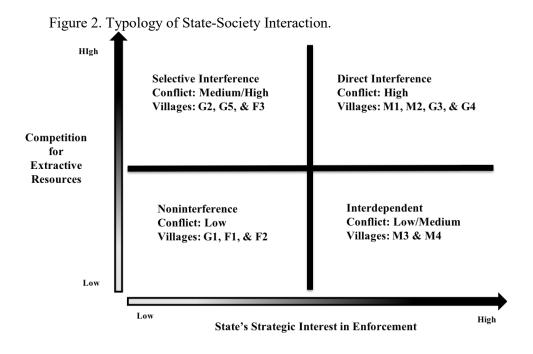
Finally, there are important differences in local perceptions of governance authority around **different resource types** – especially forests. Forests – forest reserves in particular – were more likely to be perceived by respondents as a "state" resource, and thus "formally" off limits to local communities. About 85% of respondents noted that the state possesses primary control of forest resources, although about 12% of these respondents indicated that its authority is shared with traditional authorities. One Forest Guard in G1, for example, argued, "the government does not mess around with issues of forest protection. Anyone in the forest would be arrested – it is very serious. [The State] frowns on any kind of entry or access...even to pick a leaf [we] have to get a permit from the forest office" (January 2015). These results support the idea that, increasingly, forests and forest health have come to serve as an indicator of overall environmental performance for resource-rich states like Ghana. As a result, there is tremendous international pressure for forest conservation and sustainable extraction, and states have invested relatively greater effort into their protection (Armah et al., 2014; EU, 2003; Hansen et al., 2018). Additionally, forests serve as another critical source of extractive income, meaning that informal activity in forest reserves is viewed as a direct threat to state interests. Ultimately, these results indicate that authority for natural resource governance is fragmented not only by the extent to which different actors can solve problems of access and enforcement, but also by governance norms around particular resources themselves.

State Intervention: A Conflict Typology

Results from the first logistic regression suggest that the state's social control over natural resources remains limited, and it faces substantial competition across different resource contexts. Within this fragmented terrain, I next aimed to understand *when* the state would be more likely to enforce its authority over competing governance networks, and how this impacts local

perceptions of conflict risk. To facilitate this analysis, I constructed a "conflict typology" of natural resource governance in Ghana (Figure 2). The typology consists of two variables: 1) competition for access to extractive resources (envisioned as the number of governance suppliers on the ground) and 2) state strategic interest in enforcement (envisioned as the presence/absence of strategic areas or resources that the state is motivated to protect). On the X-axis, I expect that the state would be more interested in enforcing its authority in specific areas and over specific resources – forest reserves and large-scale formal mineral concessions – as a mechanism to limit conflict with domestic groups while protecting state-global priorities and partners. On the Y-axis, competition for extractive access may or may not stimulate a challenge from the state depending on the number and type of governance suppliers active in a particular area. Importantly, I assume that perceptions of conflict risk are derived from local interactions with state enforcement units. The qualitative data suggest this assumption is well founded given that state enforcement officers are 1) collectively referred to as "soldiers" within the communities and 2) state enforcement units constituted the sole source of conflict in most of the communities in which I worked. However, there are times when violent conflict occurs between non-state governance suppliers, and the quantitative analysis would not necessarily make this distinction. I contend that communities will perceive the risk of violent conflict to be highest where both competition and state interest in social control are highest.

Based on these parameters, I recoded the sample communities into four categories: noninterference, interdependent, selective interference, and direct interference (Figure 2). Coding decisions were made by analyzing the qualitative field data and the quantitative survey data, the details of which I provide below.



Noninterference: competition for extractive access is low and informal extractive activity is neither a strategic threat nor benefit to the state. Three communities, G1, F1, and F2, were coded within the quadrant "noninterference" primarily because competition for extractive resource access was minimal. All three communities were located in proximity to a forest reserve in which the state maintained a fairly robust presence. However, communities F1 and F2 were farming communities, and the activities occurring in G1 were limited to hyperlocal artisanal extraction (which did not take place in the forest reserve). As such, informal extractive activity constituted neither a threat nor a benefit to the state. The expectation, therefore, is that conflict risk is likely to be low.

Interdependent: competition for extractive access is low and the presence of global actors, usually in the form of MNCs, is a strategic benefit to the state. Communities M3 and M4, located within the Newmont Concession in Brong-Ahafo, were coded as "interdependent" because they were situated around a large-scale mining concession where informal competition for mineral

resources remains lower than in other regions. The state is highly dependent on Newmont for revenue generation; thus, creating an enabling environment in which the company can easily operate is a strategic priority. Communities, for their part, may also view an MNC like Newmont as a strategic benefit where competition for extractive access is low. Corporate social responsibility programs tend to supply much-needed public goods and services to communities adjacent to mining concessions in lieu of the state. In this context, conflict is expected to range from low to medium depending on the extent to which the state is required to protect Newmont interests, and the ongoing relationship between Newmont and local communities.

Selective Interference: competition for extractive access is high but the state may or may not view informal extractive activity as a threat to its strategic interests depending on context.

Communities G2, G5, and F3⁵ were coded as "selective interference" because they experienced high competition for natural resources (both forest and mineral resources); however, this competition only overlapped with state interests where it occurred in or near forest reserves. In G2 and F3, informal extraction occurred primarily in forest reserves, whereas extractive activities in G5 only intermittently touched the nearby forest reserve. Community G5, however, was unique in the fact that it was the only site that was situated within a prospective MNC concession (owned by AngloGold Ashanti), and in which Chinese operators, artisanal producers, and another handful of small-scale operators directly competed for mineral access. As such, G5 was visited frequently by the anti-galamsey taskforce; however, most of the violence within the community appeared to be perpetrated by non-state actors (especially the Chinese). Indeed, G5 was the only site in the sample where mineral producers indicated that state "soldiers" could be

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⁵ Village F3 is a non-mining, forest-edge community. It was included in this quadrant because it experienced intensive informal chainsaw activity, which in many aspects can be characterized as similar to informal mining.

"persuaded" to be more lenient as long as informal activity remained outside the boundaries of the forest reserve. Consequently, within the selective interference quadrant, conflict is expected to range from medium to high across all communities because of the intense resource competition between both state and non-state governance suppliers. However, **state-perpetrated** violence is more likely to emerge as a function of inter-resource competition (i.e. access to minerals threatens forests) in state-controlled spaces.

Direct Interference: competition for extractive access is high and the state views informal extractive activity as a direct threat to its strategic interests. M1, M2, G3, and G4, situated within the Adamus (Endeavour) and Golden Star concessions, were coded as "direct interference" because there was high competition for mineral resources and significant state interest in protecting formal concessions. In the direct interference quadrant, direct competition between informal and formal producers predominates, and the state is required to take more explicit action against competing governance networks. Specifically, the Ghanaian state has a vested interest in working with global actors to minimize informal competition in order to protect private interests, maintain international credibility, and continue to attract foreign direct investment. In short, the presence of a global actor induces the state to engage at the local level where, under different circumstances, it might have otherwise avoided such confrontation.

Conflict in this quadrant is expected to be high as the state and MNCs confront informal actors on the ground.

To measure local perceptions of conflict risk within this analytical framework, I asked respondents in the household surveys the extent to which they agreed with the statement: "it is

unthinkable that my community will experience violent conflict over natural resources." Responses were divided into three categories: 0 – agree, 1 – unsure, 2 – disagree. 6 I chose to measure local perceptions of conflict, rather than attempting to obtain observable records of conflict, for two reasons. First, it was difficult to track state enforcement-related conflict incidents because 1) communities did not distinguish between enforcement units, instead referring to all enforcement personnel as "soldiers," and 2) it was difficult to gain access to enforcement personnel. Using the qualitative data, I therefore made the informed assumption that community perceptions of instability and violence were likely to correlate closely with overall enforcement pressure in an area. As noted earlier, however, survey responses cannot differentiate between state versus non-state perpetrated violence. Second, by asking specifically about how households perceived the risk of violent conflict, we allowed respondents to define this concept in their own terms, which may ultimately be more useful for understanding conflict risk in particular locations. While this approach sacrifices specificity in defining the overall concept of "conflict," it enhances the ability to conceptualize conflict in locally relevant terms. Using this data, I ran an ordered logistic regression to understand perceptions of conflict risk among communities according to the typology (Table 5).

Table 5. Logistic regression of natural resource conflict on key characteristics. The test of proportionality was not significant (χ^2 =10.57, p=0.159), suggesting that the parallel regression assumption was not violated.

	Odds Ratio	Marginal Effects
VARIABLES		
Community Type: Interdependent	0.867	-0.027
	(0.347)	(0.075)
Community Type: Selective Interference	1.964*	0.126*
	(0.667)	(0.062)
Community Type: Direct Interference	2.446**	0.167**

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⁶ Respondents were able to select from five possible responses in the survey; however, for ease of analysis I collapsed responses into three discrete categories. I ran an ordered logit model using both models but there was no significant difference between the two.

	(0.777)	(0.057)
Mineral Access	1.453	0.070
	(0.367)	(0.047)
Mineral Enforcement	0.584*	-0.100*
	(0.161)	(0.051)
Age	0.975**	-0.005***
	(0.008)	(0.001)
Male	1.389	0.061
	(0.357)	(0.047)
Primary Education	0.828	-0.035
	(0.291)	(0.066)
Secondary Education	0.869	-0.026
	(0.278)	(0.060)
Constant cut1	-0.321	
	(0.452)	
Constant cut2	0.504	
	(0.452)	
Observations	302	
\mathbb{R}^2	0.0540	
C4 1 1	'	

Standard errors in parentheses
Community Type: Non-Extractive is reference Community category.

*** p<0.001, ** p<0.05

Results from the ordered logistic regression provide support for the conflict typology, and suggest that local context matters significantly in terms of how communities perceive the risk of violent conflict. Selective interference communities, for instance, expected significantly more conflict than noninterference communities (Table 5). In these communities, the odds of perceiving conflict risk versus the combined unsure and no conflict categories were 1.964 times higher than for noninterference communities (given the other variables are held constant). The odds of perceiving conflict risk significantly increase again for direct interference communities. Here, the odds of perceiving conflict risk versus the combined unsure and no conflict categories were 2.446 times higher than for noninterference communities (given the other variables are held constant). This analysis supports the conclusion that communities perceive their conflict risk to

be higher where competition for resource access is high and where the state has a greater interest in consolidating its authority on the ground.

I ran several robustness checks on both logistic regressions. To address issues of whether households in a particular village were more alike, I ran the regressions as panel data. There was no significant difference between the initial regression output and the panel regression output. I also aggregated village-level data to compare the communities as 12 data points. Although I lost power because of the limited number of observations, the direction and value of the coefficients for non-socioeconomic variables were not significantly different. However, individual characteristics, especially education, did significantly differ between the two analyses. This suggests that either the analysis requires a greater number of observations or that intracommunity variation in socioeconomic characteristics is an important factor in understanding governance authority and conflict risk. More fieldwork would be required to test this outcome.

Patterns of Enforcement and Conflict in Ghana

The above analyses support the idea that the Ghanaian state is selective in its enforcement efforts, and that such selectivity produces uneven expectations of violent conflict across different community contexts. The existing literature has explained patchy enforcement as a function of insufficient resources and rent-seeking, which has led to a characterization of Ghana's extractive terrain as chaotic and unruly (Tschakert, 2016). However, these results suggest a discernable pattern in when, how, and where the state will attempt to exert social control. In particular, I posit that the interaction of global and local interests creates a political topography in which selective enforcement by the state constitutes a relatively advantageous strategy. On the one hand, the state is expected to adhere to global governance norms that protect international

interests, drive growth, and foster "development" opportunities (Beevers, 2019). It has consequently focused enforcement efforts on areas of global strategic interest: forests and largescale extractive sites. On the other, the state remains constrained by powerful domestic constituencies, in the form of alternative governance suppliers and informal producer groups, which constitute important sources of political support and legitimacy. One long-time galamseyer near G3, for example, noted that the "MP promised to support galamsey during the election time if they voted for [the party]. The MP calls grass roots supporters to warn them when the task force is coming...they heard last week that the taskforce will soon come" (February 2015). In other interviews, respondents attributed the New Patriotic Party's loss of power in 2008, as well as numerous incidences of violence around that time, to policies which attempted to constrain informal mining. The state is therefore incentivized to enforce less stringently in areas where competition is present but informal activities do not directly threaten its interests. In short: enforcing its governance mandate too weakly puts the state's global interests at risk while enforcing too robustly risks aggravating social networks that could ultimately withdraw political support and/or contribute to greater social instability.

While the state's Goldilocks approach to natural resource governance has produced a number of negative consequences, three deserve explicit mention. First, selective enforcement has increased the risk – or at least the expectation – of violent conflict unevenly across society. The qualitative data reinforce this observation. In particular, households in "direct" and "selective" interference communities reported feeling relatively more insecure – both in a physical and livelihood sense – due to the potential for conflict over resource access and use. Further, the threat of strict(er) enforcement to protect global interests – MNCs in particular – has generated substantial

grievances against the state, which is seen to be contributing a problem it created through securitization (and privatization). This raises questions about the potential for broader forms of regional conflict and instability. Such sentiments were clearly conveyed in one interview with a galamsey operator working in a large-scale concession controlled by Golden Star Resources near a direct interference community, which I quote at length (emphasis mine):

Researcher: If the government decides to shut down your operation what would you do?

Galamsey: Ok, we will agree on its terms on the condition that the mining company will employ us. Only then will we decide to accept the law.

Researcher: Looking at the number of [miners], the mining companies cannot employ all of you. So what would you do?

Galamsey: If the company cannot employ all of us, we also cannot sit idle and starve to death, so we will come back here to our mining site and work.

Researcher: Is there any way you would embark on a demonstration or have conflicts with the government?

Galamsey: Oh with that, it can happen because the government has cheated us for long. When every government comes into power, they lie and manipulate us. They only develop the big cities and leave those of us in the villages to our fates. Meanwhile, we are also those who form the majority and we voted for it. So if this is what puts food on our tables and the government decides not to grant us the free will to do that, then we will not understand and we will be furious.

Researcher: So you will protest?

Galamsey: It can happen. Because a serpent bites with its eyes opened. As we are here, we gave the government its power. We voted for it to get money to finance development. So why should it neglect and throw dust into our eyes? So we are serious, we cannot steal because we are not armed robbers. So since this is our means to feeding [our families], we will do it. (November 2014)

Second, while some communities feel the presence of the state acutely, others argue that the relative absence of the state has also become a source of insecurity. Indeed, community leaders in "noninterference" communities have had to figure out how to manage problems that regularly accompany informal mining – especially environmental degradation – without help from the state. In G1, for example, the Village Chief argued that galamsey – despite its attendant difficulties – was necessary because the state had abdicated its responsibility to promote development in villages like G1, noting "we plant trees and suffer while the Parliamentarians do nothing but secure loans from the IMF to improve their lives...they sit at the radio stations and

they don't remember villages like Village G1" (November 2014). However, galamsey in the community – as well as in communities upstream of G1 – has contributed to the degradation of potable water sources. One individual noted that G1 regularly encounters "water problems [because] the big river is now polluted because of Galamsey" (January 2015). Yet, state enforcement units have disturbed local miners in G1 only once because, according to those miners currently operating, "we do not interfere with the forests or with the big companies" (January 2015).

Finally, Ghana's utilization of selective enforcement has left the overall impression that the state is too corrupt or lacks the capacity and resources to enforce its social control consistently and effectively. While corruption and lack of resources likely play an important role in the perpetuation of informality in Ghana, this dominant narrative discounts the extent to which state enforcement measures do regularly, and violently, occur within some communities. Indeed, the Commission on Human Rights and Administrative Justice found in its 2008 report that "there is evidence of widespread violation of human rights of individual members of communities and communities' collective rights in some mining areas in the country," and that mining companies, with the assistance of the state, sometimes use excessive force in their bid to uproot "illegal" mining activities (CHRAJ, 2008: 18). It also continues to focus international attention on issues of enforcement capacity, good governance, and political will as solutions to informal extraction. However, such concepts divert attention away from the potentially more important drivers of informality: access, equity, and inclusion.

CONCLUSION

This article engages multiple lines of evidence to argue that the Ghanaian State, in response to the political topography that has emerged from securitization, utilizes a strategy of selective enforcement to address both institutional pluralism and informal resource extraction. I demonstrate, in particular, how global and domestic interests shape center-periphery interactions in ways that allow the state to protect global interests, maintain critical sources of extractive revenue, and accommodate domestic groups; but, also unevenly distribute violence, insecurity, and environmental degradation across local resource contexts. This conclusion is important for three reasons.

First, it suggests that securitization may actually impede the state's ability to consolidate social control where reform generates inequitable social outcomes (Moore, 1973). In other words, as social groups have been effectively locked out of the formal extractive system, the state has benefited from being more, rather than less, accommodating of competing governance networks in society (Knight, 1992). This is because, in addition to insufficient enforcement resources and rent-seeking behavior, informal extraction serves as a form of compensation or "side payment" for domestic constituencies negatively impacted by neoliberal reform (Weinthal, 2002). That is, informal extractive spaces allow constituents to maintain access and distributional benefits even as the state embraces governance standards that primary benefit multinational companies. To fully enforce extractive "formalization" would therefore risk displacing large numbers of people, and potentially create conditions that could lead to larger-scale instability and conflict.

Second, this article suggests that the international community continues to focus on the wrong sorts of issues in relation to informality, insecurity, and natural resource governance in contexts

like Ghana. The persistent call for better governance and consistent enforcement portrays entrenched informality as issues of capacity and political will, which subsequently generates interventions aimed at enhancing capacity and political will within the state (Grindle, 2007). However, this article suggests that the state may not have the capabilities – the social control – or incentives to assert its authority over natural resources. As such, I suggest that the international community needs to intentionally focus on how to create conditions that would foster more *inclusive* natural resource governance – even where this requires experimenting with forms of governance that may not conform to "democratic" principles (Denney, 2014; Kelsall, 2008). Indeed, fostering inclusivity may mean supporting institutional configurations – chieftaincies for example – that do not include the state as a primary or even secondary governance supplier. In other words, addressing informality may require looking at how governance authority is assigned within local contexts in order to devise policies and solutions that are applicable to lived realities.

Finally, this article demonstrates that competition for natural resources is potentially an important indicator of state enforcement and violence; however, more work is required to understand if specific types of governance suppliers elicit different responses from the state. In particular, research that focuses explicitly on how political coalitions form around natural resource governance and access would be particularly useful in disentangling how governance suppliers maintain power – and offer protection – within the larger framework of securitization (Boone, 2003). In the field, it was apparent that some MPs, traditional authorities, land owners, and entrepreneurs were less likely to stimulate a challenge from the state; yet, it was difficult to trace political/patronage networks to fully understand why. More contextualized, long-term research could illuminate how neoliberal reforms have reshaped specific relations of power

between the	e center an	d periphery,	and how th	is produces	observed	social and	environm	ental
outcomes.								

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