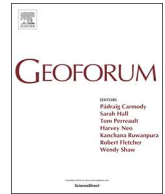




ELSEVIER

Contents lists available at ScienceDirect

Geoforum

journal homepage: www.elsevier.com/locate/geoforum

Making space legible across three normative frames: The (non-)registration of inherited land in Ghana

Zaid Abubakari*, Christine Richter, Jaap Zevenbergen

Faculty of Geo-information Science and Earth Observation, University of Twente, P.O. Box 217, 7500 AE Enschede, the Netherlands

ARTICLE INFO

Keywords:

Land registration
Inheritance
Legibility making
Social norms
Official norms
Practical norms
Cadastre

ABSTRACT

Land registration as a state legibility making endeavor has received little success in the global south where large incidence of non-registration has been reported. However, in seeking explanations for the lack of official land rights registration, researchers tend to focus on shortcomings in the bureaucratic processes based on expectations that are implicitly informed by a Weberian ideal bureaucracy. Little connection is made to other relevant factors that play different roles in the land registration processes such as the external socio-cultural norms which produces and regulate land relations. It is therefore important to study the actual practices of land rights registration and the underlying norms that govern such practices. In this study, we qualitatively analyze the actual practices of registration at the intersection of three normative frames, namely, social norms, practical norms and official norms. We used these normative frames as a theoretical prism to analyze how the choices made by successors of inherited property across rural and urban areas in Ghana are informed, given the plural normative influences. We found that beyond organisational inefficiencies, the eventual decision of a successor of property to report transfers for registration depends on the nature of property claims (competing or complimentary), the manner of property sharing and holding, and the existence of 'halfway-documents' that provide some sort of legitimacy. Therefore, there is not one set of obstacles to registration, which would call for one set of solutions, instead, we need to appreciate the diverse nature of the factors that play roles in land registration in order to provide fit-for-purpose solutions.

1. Introduction

The development of land registries and cadasters continues to be one of the most important and at the same time one of the most difficult tasks for governments around the world. These efforts count to some of the largest and most long-term projects in making society and territory legible and thus governable (Scott, 1998). In the processes of land tenure documentation and registration, the spatial epistemologies of modern state bureaucracy meet the spatial epistemologies of indigenous systems of administration. As such, cadastral development is also a process of state-making through the codification and homogenization of the multiplicity of people-space relationships that characterize many geographic regions, including Africa (Lund, 2016).

In Africa, land is often regarded as a corporate entity, held by unilineal descent groups and symbolized by group identifiers like tribal and family names (Kingwill, 2014). Land tenure is expressed in a continuum of diverse blends of group to individual rights, accessed on the basis of group membership and social status, and used through complex systems of multiple rights (Fogelman and Bassett, 2017; Cotula, 2007).

Land is viewed as an embodiment of identity that connects the past, present and future members of society (Elias, 1956). Therefore, in the African land context, it is impractical for the state to deal with land in isolation without encountering the tensions of existing non-state tenure relations and rationales. Land rights registration – both in its cartographic techniques and institutional dimensions – is one of the processes, where state and non-state tenure regimes shape each other and jointly coproduce agency.

Despite the intrinsically geopolitical nature of cadastral development, efforts to understand the drivers of registration/non-registration have been rather technocratic in nature. For example, in seeking explanations for the lack of official land rights registration, researchers tend to focus on shortcomings in the bureaucratic processes based on expectations that are implicitly informed by a Weberian ideal bureaucracy (Weber, 1947) such as the lack of efficiency, overly complex procedures, too high transaction costs and long transaction times (Biraro et al., 2015; Chimhamhiwa et al., 2009; FIG, 2014; Pedersen, 2016). Such arguments run the risk of single-sidedness since land rights are produced and reproduced outcomes of social processes that involve

* Corresponding author.

E-mail addresses: z.abubakari@utwente.nl (Z. Abubakari), c.richter@utwente.nl (C. Richter), j.a.zevenbergen@utwente.nl (J. Zevenbergen).

<https://doi.org/10.1016/j.geoforum.2019.11.002>

Received 9 April 2019; Received in revised form 9 September 2019; Accepted 5 November 2019

Available online 15 November 2019

0016-7185/ © 2019 Published by Elsevier Ltd.

different practices and norms, and that cut across the boundary between formal administrative and social worlds. To understand how legibility making of space and society take place in contexts of legal plurality, uneven geographies of the state's legitimacy and relatively weak implementation of statutory laws and policies that characterize many African countries, we argue that it is important to study the actual practices of land rights registration and the underlying norms.

Although recent developments in both research and practice of land registration such as the continuum of land rights have made important steps in this direction, few studies have applied these insights to the study of land registration practices in Africa (Plessis et al., 2016; Whittal, 2014; Hornby et al., 2017) and even less, on how the internal bureaucratic processes of land registration interact with external socio-cultural norms, and how these jointly influence the registration and non-registration of land. Our study is positioned at this intersection asking the research question: how does land rights registration as a form of legibility making take place in practice in the Ghanaian land governance context? Specifically, we ask what norms guide landholders, on one hand, and administrative actors on the other hand; and how are these potentially differing normative frames negotiated? To answer these questions, we zoom into the specific case of registering inherited land and associated rights, because inheritance is a major source of land ownership and holding in Africa, including Ghana (Gray & Kevane, 2001; Abubakari et al., 2016). Inheritance of land has also received increasing attention by practitioners and scholars, who look at the matter from an administrative perspective and are concerned about the lack of registration of inherited land leading to out-of-date official land records (Barnes and Griffith-Charles, 2007; Médard and Golaz, 2018; Zevenbergen, 2002; Tagoe et al., 2012).

The paper is structured as follows. In section two, we discuss the concept of legibility making by Scott (1998) and explain how and why we use Olivier de Sardan's (2015) framework of three norms: official, social, and practical as analytical lens for our study of legibility making. In the section three on methodology, we start with a brief description of the geographical context, and then describe the sources of data, methods of data collection and analysis. The following sections describe registration/non-registration in practice with reference to Olivier de Sardan's framework of norms. In the conclusion we discuss the relevance of our study to research and practice.

2. The conceptual lens: legibility making in the context of plural norms

As hinted in the introduction, we conceptualize land rights registration broadly as a form of legibility making with reference to Scott's (1998) work; and use Olivier de Sardan's tripartite normative framework to analyse the practices of legibility making in the case of registering inherited land and associated rights in Ghana. In the following two sub-sections, we elaborate this further and explain the choice for the analytical lens.

2.1. Legibility making along fuzzy state/society boundaries

To achieve the goals of the modern state, states deploy numerous strategies and schemes to structure society in ways that allow for easy administration. Scott (1998) refers to this schematic structuration as legibility making, the process that provides the state with a synoptic view of its people, territory and resources at a glance. Legibility making takes different forms and became an indispensable tool of modern statecraft. Through this, the state develops schemes that simplify and assimilate the complex realities of society into an administrative grid (Scott, 1998). With substantial knowledge over space, people and resources, the state becomes more empowered as it is able to use such knowledge in diverse ways that serve its interests, such as taxation and planning, but also less legitimate purposes like racial profiling (Scott, 1998; Kalir & Schendel, 2017). Therefore, legibility making does not

only empower the state, it also brings responsibility and accountability upon the state in dealing with what it has come to know through the legibility making process (Kalir & Schendel, 2017).

The practices of legibility making are characterized and constitutive of varying state-society encounters. Scott's empirical work (1998) on state schemes that were meant to improve human conditions, but ultimately failed, evokes the image of a relatively strong state-society dichotomy, where the state assumes the role of the surveyor and scheme implementor while society is being documented and mapped and stands more at the receiving end. However, Ferguson and Gupta (2002) argue, for instance, that the "vertical encompassment" of the state is more an imaginary than an empirical actuality. Building on Scott's work, other scholars blur the state/society distinction and highlight the overlapping roles of both state and societal actors in practices of mapping and recording of territories. For example, legibility making at the micro level of the community through local activities may feed into the broader legibility making of the state. Timmer (2010) discusses how local people in East Kalimantan mimic the paraphernalia of the Indonesian state's legal apparatus to reformulate tenurial arrangements among natives and settlers. Although this mimicry produces knowledge that make tenure more legible, it was entirely a non-state endeavor. At a macro level of spatial encompassment, where the state interacts with the international community (Kalir and Schendel, 2017), non-state bodies such as the World Bank also engage in legibility making at the crossroads of state and society (Li, 2005). Thus, although legibility making can involve an actual state superiority over society (Scott, 1998) or a perceived superiority of the state by local people (Timmer, 2010), it is important to also recognize it as a space of negotiation where a complex array of interactions ensue between the multi-level functionaries of the state on one hand, and the realities of society on the other (Kalir & Schendel, 2017). An example of such a complex dynamic is illustrated in the practices of slum listing by officials and slum dwellers in Indian cities as city authorities and central government pursue an agenda of slum redevelopment (Richter, 2014). Indian authorities tend to make slums more legible for redevelopment through slum listing with the aim of producing official knowledge of the ground realities. However, the practices of mapping slums was less based on a set of official criteria and more so on urban political dynamics and specific negotiations between politicians, micro level government functionaries and slum dwellers. In this sense, legibility making is a practice of mapping and official recording of space through a sort of coproduction between various state and societal actors.

While cadastral development and land rights registration more specifically may be conceived of as a form of legibility making at the scale of the nation-state, understanding the practices underpinning this large-scale and long-term endeavor therefore requires us to explore more closely the meeting grounds between state and society and the interactions that take place "in-between." At the same time, we cannot assume the endeavor to be driven mostly based on bureaucratic rationales or statutory norms alone. Instead, we need to take into account the different actors involved, who cannot be easily sorted into "state" or "society" categories, as well as the legally plural context that characterizes many regions of the global south. To do this, we analyze the legibility making practices according to different norms that influence the registration of inherited land and associated rights.

2.2. Analytical lens: Normative influences on legibility making

To analyse how the processes of legibility making in Ghana's land registration take place at the intersection of multiple normative frames, we adopt Olivier de Sardan's (2015) tripartite normative framework. Building on a large body of empirical studies across various public service domains in Africa, Olivier de Sardan draws on insights from neo-institutional economics and advances the idea of practical norms, which he situates between the norms of society and the norms of the bureaucracy as opposed to the sharp formal/informal dichotomy.

He conceptualizes norms into three categories namely, (1) the explicit formal rules of the bureaucratic arena as *official norms*, (2) the body of rules that evolve traditionally outside bureaucracies as *social norms* and (3) the de facto practices that fall outside formal regulations and cultural rules as *practical norms*. Official norms include *legal norms*, *professional norms* and *bureaucratic norms*. They express the rights, responsibilities and restrictions that are explicitly recognised by public and professional institutions (Olivier de Sardan, 2015). In other words, official norms provide the standards and rules that determine which actions are permissible, mandatory or prohibited (Mangla, 2015). Official norms can be likened to what neo-institutional economists call formal institutions or the “rules of the game” (North, 1990). Official norms are offshoots of Weber’s concept of an ideal bureaucracy (De Herdt and Olivier de Sardan, 2015). Social norms are standards and rules that regulate the private spheres within society outside of the bureaucratic arena (Olivier de Sardan, 2015). They include group expectations that are usually unwritten, but are created, communicated and enforced outside officially sanctioned channels (Helmke & Levitsky, 2004). Social norms are part of a community’s heritage and are often called the old ethos, the hand of the past, or the carriers of history (Pejovich, 1999).

The boundaries between social and bureaucratic norms are not always clear, and may be likened to a ‘semi-permeable membrane’ (Goffman, 1961). While some norms originate from within the official arena, others originate from outside (for example, social norms), but find their way into the official arena through channels that connect the outside to the inside of the bureaucracy. One of these channels is the bureaucrat, who works in the state’s administration. Bureaucrats are not only subject to the official norms of the bureaucracy, they also observe the norms of the social groups to which they belong. Thus, some behaviors of bureaucrats may reflect values of their social group at the expense of official norms and may lead to the partial or total violation of the latter (Van Meter and Van Horn, 1975). The second channel is one that is mediated by resource control. With the second channel, interactions take place at the point where a bureaucracy begins to exercise regulatory control over a resource that has embedded socio-cultural relations. By virtue of differences in the underlying rationales between the bureaucratic and the social spheres, their relationships are hardly complementary, but mostly competing (for legitimacy) (Dowling and Pfeffer, 1975).

Breaking with the formal/informal dichotomy, Olivier de Sardan introduces a third type of norms, practical norms. Practical norms are the various de facto, tacit or latent norms that underlie the practices of actors, which diverge from both official and social norms (Olivier de Sardan, 2015). They constitute an implicit background reference that modulates real practices. Galaty (2010) notes that, practical norms introduce strategies that make bureaucracies more approachable and that practical norms take place through the exploration and identification of personalized channels such as friendships and acquaintances. Practical norms do have a kinship with Scott’s notion of practical knowledge or “metis”, a form of knowledge that helps negotiate between the complex dynamics of society, on one hand, and the state’s formalized schemes and procedures of recording and acting. In the literature on bureaucracy and policy implementation, regular and routine divergences from official norms and coping mechanisms are also reminiscent of Olivier de Sardan’s practical norms (Lipsky, 1980). In such a way, practical norms interact with official and social norms in different ways, for example, officials may engage in practices that sought to negotiate bureaucratic challenges but which are neither sanctioned by official or social norms (Lund and Benjaminsen, 2002).

Olivier de Sardan’s tripartite conceptualization of norms debunks the primacy of the “formal”, and enables us to situate and analyse the happenings between the social and official norms as practical norms, which is difficult to do with the relatively sharp formal/informal

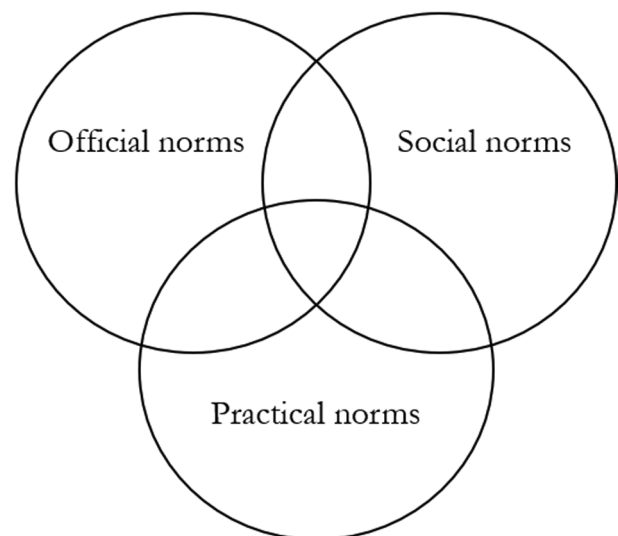


Fig. 1. Interaction of norms. Source: Olivier de Sardan (2015).

dichotomous lens of the neo-institutional economists (Pejovich, 1999; North, 1990). In sum, it is important to recognize that the interaction of the norms in the bureaucracy generates confrontations and compromises between different norms and that the services that are subsequently produced derive from these confrontations and compromises (Olivier de Sardan, 2014). Likewise, the response of users to these services in terms of their overall decision to call upon bureaucratic services is jointly generated by the interaction of these norms (see Fig. 1). In the following parts of the paper, we assess the influence and interactions of these norms in the practices of registering inherited property in Ghana. To set the scene for such analysis the next section gives an overview of the empirical context followed by methodological details of the study.

3. Methodology

3.1. Geographic context and study areas

Ghana’s customary tenure is characterized by two land governance structures namely; centralized and decentralized land governance structures (Abubakari et al., 2018). This is a generalized picture, of course, of the complexities of land governance in Ghana, but it serves as entry point for the selection of study areas here, because it is based on previous work on the implementation gap of land registration law in Ghana. Under the centralized land governance structure, land control is embedded in a chieftaincy hierarchy. Chiefs hold land in trust and on behalf of their subjects (community members). They exercise both political and ownership control over land. However, under the decentralized land governance structures, land control decentralizes from earth priests to clans, and families. Unlike centralized land governance structures, chiefs in communities with decentralized land governance structures exercise political control over land while the earth priests oversee land allocations, sanctify its use and endorse land transactions (Lund, 2013). Accordingly, emerging land inheritance norms and land registration are uneven as they are influenced by these land governance structures and as well as by urban/rural differences.

Another point of departure for the selection of study areas are plural legal sources that regulate inheritance practices in Ghana, albeit unevenly and to varying degrees. At the national statutory level, inheritance is regulated by the Wills Act of 1971 (Act 360) and the Intestate Succession Law (PNDC Law 111) for cases of inheritance with or without a written will respectively. These statutory laws are meant to

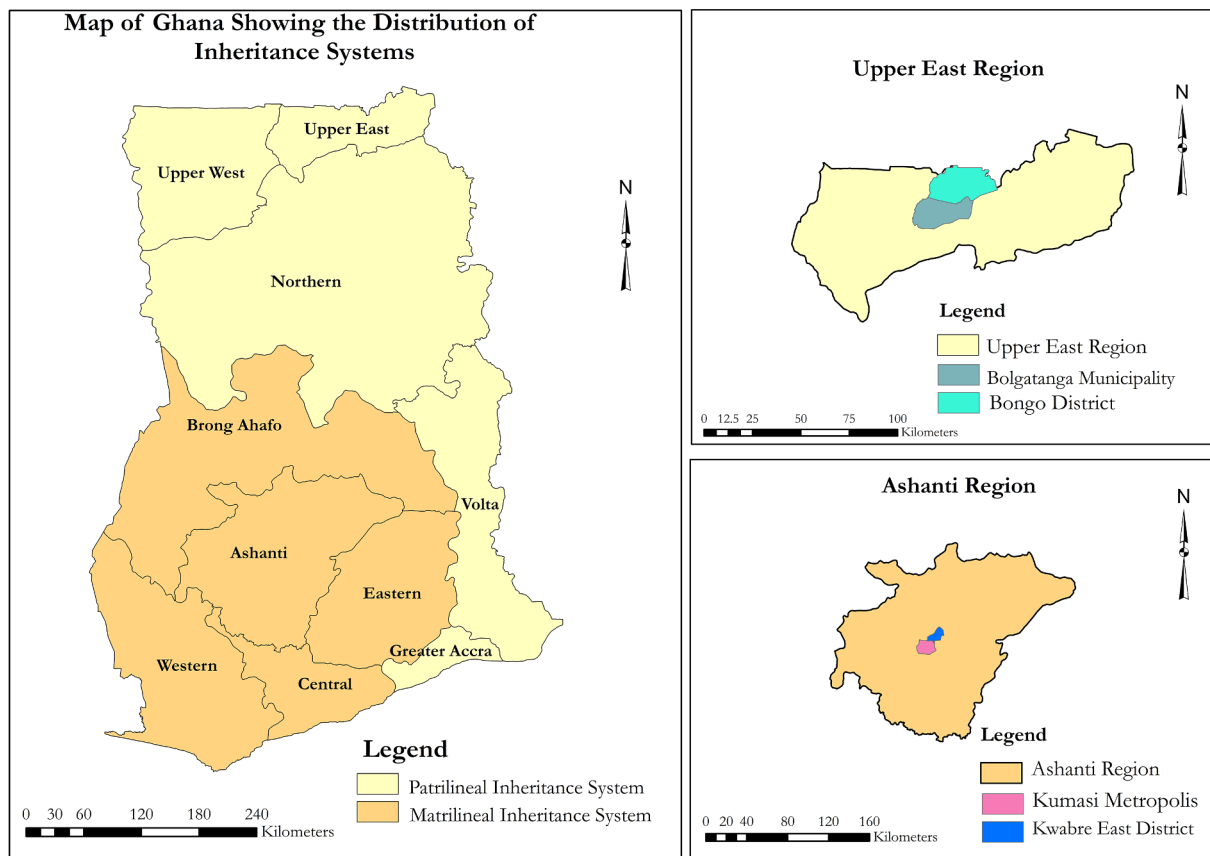


Fig. 2. Map of Study Areas. Source: Authors' creation.

apply uniformly across the country. In addition to the statutes, there are customary and religious regulations that differ across communities and tribes as well as religious faiths respectively (La Ferrara, 2007; Kutsoati and Morck, 2012). Customary inheritance in Ghana is patterned into patrilineal and matrilineal practices (Kutsoati and Morck, 2012; Kuusaana et al., 2013). Under patrilineal inheritance, property devolves through the lines of males (say from father to son or to brothers) and for matrilineal inheritance, property devolves only through the lines of females (Kuusaana et al., 2013). Unlike the customary regulations, religious regulations spread across communities without defined boundaries. Because the inheritance regulations are in different layers (state, community and individual's choice of religion), more than one inheritance regulation often applies to individuals and the context of inheritance determines how a particular type(s) of regulation influences practices. In essence, the plural regulations of inheritance are stratified at different levels of subordination in terms of where they apply (whether in a community or courtroom), and also overlapping in terms of who they apply to (Gedzi, 2014).

To take account of the above general patterns of differentiation, our study is situated in two regions of Ghana, namely the Upper East region (decentralized land governance), which is predominantly patrilineal and the Ashanti region (centralized land governance), which is typically matrilineal. Since inheritance practices are influenced by urban/rural differences, we selected an urban and a rural area in each region. In the Upper East region we collected data from Bolgatanga municipality (urban) and Bongo district (rural) and in the Ashanti region, Kumasi Metropolis (urban) and Kwabre East municipal (rural).

To understand legibility making practices in the case of registering inherited land, it was necessary at an empirical level to explore a) the technical and administrative processes and circumstances that surround the registration of inherited property, both official and tacit, and b) how inheritance systems play out in different socio-cultural landscapes

across rural and urban binaries. The study areas are shown in Fig. 2.

3.2. Data collection and analysis

In this study, we used primary data collected at two different times, April to August in 2017 and June to August in 2018. In 2017, the first author conducted focus group discussions (FGDs) in the four study areas to get a general understanding of how matrilineal and patrilineal inheritance norms play a role at the community level and what other norms and rationales might play a role. Four FGDs were conducted in the main towns across the four study areas, two in the Upper East region (Bolgatanga and Bongo) and two in the Ashanti region (Kumasi and Mamponteng). In addition, nine FGDs were organized in smaller communities surrounding the main ones. The smaller communities are, Sambolgo, Bogorogo, Vea, Yorogo and Namoo in the Upper East region and Bosore, Antua, Adesina and Adwumakase in the Ashanti region. The FGDs consisted of eight to ten participants including some family heads, earth priests, community elders and successors of inherited property (both male and female).

In 2018, we collected more primary data through in-depth interviews from institutions involved in land registration and individuals who have inherited different types of property¹. The processes of land registration cut across the Lands Commission (LC) and Customary Land Secretariats (CLSs). There is one regional Lands Commission in each region of Ghana, but the Customary Land Secretariats operate at the district level or according to customary institutions.

First, we conducted in-depth interviews with two officials of the LC and two officials of the CLSs across the two regions in order to

¹ Property here refers to both developed land (such as houses and buildings) and undeveloped land (such as bare lands and farmlands)

understand the official norms of registration – the officially sanctioned processes involved in the registration of inherited property (both testate and intestate). But it is important to acknowledge that, the actual land registration processes in practice transcend the official norms and thus include actors from within and outside the official arena of registration. Therefore, we also interviewed two land agents and two LC officials, the latter enabling registration in an unofficial capacity. The first author also made unstructured observations of the actual processes at the Client Service and Access Unit (CSAU) of the LC, where applicants are supposed to submit and receive documents as well as make related enquiries. Additionally, we interviewed one legal professional about the legal requirements in registering inherited property such as letters of administration, vesting assents and probates, that are associated with the process of registration. For this category of respondents, we interviewed 11 in total.

Secondly, to understand the social norms of inheritance as experienced by individuals, we interviewed people who have inherited different types of property namely; individual property with proprietary rights², individual property with only use rights, joint/municipal property and inherited sacred lands managed by earth priests and chiefs. In this second category, we interviewed 12 respondents in total.

The first author's three years of work at the LC in Ghana provide for substantial contextual knowledge, which aided in data collection and interpretation. For the analysis we used conventional content analysis (Hsieh and Shannon, 2005), during which we first segmented field notes and transcripts according to Olivier de Sardan's (2015) three norms. This resulted in a relatively coarse categorization, e.g. of matrilineal and patrilineal norms under "social norms" and information about official procedures for registration under "official norms." However, during this process of sorting, nuances became apparent; and we proceeded with a more fine-tuned recategorization based on the variations that exist within the sphere of social norms according to urban and rural differences, on one hand, and the variations in official norms, on the other. These variations are analytically speaking, the places where we identified practical norms as emerging; and to capture their characteristics we labeled them as "strategic registration" and "registration-on-demand". The third part of section 4, reflects a third element of this more fine-tuned analysis, where we identify specifically the space at the CSAU as a place where state/society encounter one another in practice and where practical norms dominate the scene of registration. The structure of the following section of the paper, where we present the results from analysis, reflects the interpretive steps.

4. Practices of registering inherited property at the intersection of three normative frames

This section consists of three parts. In the first, we take the perspective of landholders to discuss different factors that play into people's decisions to register inherited property within the context of existing land inheritance norms, especially in urban areas, changing social norms - where the decision to register inherited property depends on where the holder finds legitimacy (family or state). We refer to the practical norm that emerges from this perspective as "strategic registration". In the second part we take the perspective of the administrative actors, who are involved in the registration of land to identify how and where official norms play a role in these processes. We look at how the procedures of registering inherited property evolved practically through time, as cases of inheritance registration come up at the Lands Commission. We describe the evolution of these procedures as "registration-on-demand" as a sort of practical norm stretching across the practices of legibility making from the perspective of administration. The third part brings together the two perspectives and describes how "strategic registration" and "registration-on-demand" take place at

the micro-scale spaces of encounters between citizen and state.

4.1. Variations in social norms across rural/urban areas and "strategic registration" as practical norm

Looking at registration choices from the point of view of land holders, three main factors within the social arena and across both rural and urban contexts explain, whether inherited land becomes registered or not. These include (1) property devolution dynamics - the manner of property sharing (2) family disposition - the shared values of the deceased's family with respect to how they want to hold the heritage and (3) availability of 'halfway-documents'³ - previous registered deed documents, written wills and probates provide some sort of evidence of ownership which makes successors less enthused to register inherited property. However, the social norms of inheritance in both patrilineal (Upper East, decentralized) and matrilineal (Ashanti, centralized) contexts manifest differently across rural and urban areas for a number of reasons and the role of official norms also varies according to rural/urban contexts. These differences offer insights into the emergence of practical norms characterized by strategic choice making on part of landholders.

In Bongo and Kwabre East (rural areas), we found that both farmland and developed property (mostly family houses) form part of inheritance. In these rural areas, the focus of successors is more on the farmland because; (1) farming is the main source of livelihood (2) the family houses are mostly old mud houses and (3) it is relatively easy to build new mud houses or make extensions to the original family house. With these alternatives, there is little contestation among successors regarding the family house. To legitimize and secure property holdings in these rural areas, successors of inherited property rely on the existing body of shared local knowledge and social networks within the community, which are enforced through local authorities such as chiefs, family heads and earth priests. These local networks provide some sort of tenure security to holders of inherited property which makes them see little need for formal registration. Aside the tenure security afforded by existing local structures and networks, some rights related to land and buildings fall outside the scope of the current land registration system. For example, some categories of inheritance holdings such as the use rights of female successors (in Bongo), use rights of male successors (in Kwabre East) and trusteeship rights of traditional authorities are non-proprietary⁴ and cannot be translated into the current registration system which records only proprietary rights in the form of leaseholds. As such, official norms play a minor or no role in these areas with respect to governing inheritance; and attempts or decisions to register on part of the landholders are few.

The dynamics of property sharing among successors in urban areas manifested as more complex in our study compared to the rural areas of Bongo and Kwabre East. There are two main elements to this complexity. First, even when the urban area is dominated by particular tribes, the awareness and patronage of the official norms of the state is relatively higher. An example of this is how the enactment of the Intestate Succession Law (PNDCL 111) transforms the landscape of matrilineal inheritance in the Kumasi metropolis of the Ashanti region. Although the law is not implemented to the letter in practice, it has succeeded in limiting the hitherto overriding powers of the extended family. The effect of the law is felt more in urban areas especially in matrilineal communities as it sought to change the social structure of matrilineal inheritance (from parents to children instead of parents to nephews). The spirit of the law is paternal in nature which aligns with

³ A 'halfway-document' is defined as 'any paper or digital record prepared and agreed upon between parties, relating to a specific people-to-land relationship, that indicates some form of holding interest, but may not be legally binding in a conventional land administration system (Hendriks et al., 2019).

⁴ Land rights that do not provide ownership but mainly use rights

² Exclusive rights of property ownership

the social norms of patrilineality. The law allocates up to 75 percent of intestate estate to the conjugal family of the deceased, allowing up to 25 percent for customary disposition. We also found that religious norms on inheritance such as Islamic inheritance rules were more pronounced in the urban areas; and like the PNDCL 111, Islamic inheritance aligns more with patrilineality. Second, urban property is mostly developed property, and by virtue of the relatively higher property values in urban areas, tensions among successors are higher. Therefore, successors explore opportunities of registration to delineate property from the extended family network especially when their share of property is a whole house. The dynamics of property sharing become more complicated when a developed property is held by multiple successors. The indivisibility of developed property leads to complex schemes of sharing space among successors. In both Bolgatanga⁵ municipality and Kumasi⁶ metropolis, we found that successors share developed property in complex ways drawing on a mix of normative frames; official and social, including religious norms. This interplay of norms is carried out at the micro-scale of individual buildings in urban areas. For example, a successor might inherit a room from each side of a compound house, or from each floor of a multi-story building, or a room(s) from different properties belonging to the deceased.

These complex micro-schemes of sharing space among successors are difficult or impossible to represent in the current land registration system. In particular instances when the inherited property is already registered by the deceased, successors consider it as enough *de jure* security and they see little need to report such changes to the LC. But successors may also deem registration necessary if shared knowledge of neighbors is perceived to be insufficient to secure tenure in urban contexts (as compared to rural). In these instances, successors explore different connections to official norms to legitimize their property holdings such as previous registered deeds, written wills and probates.

In both urban and rural contexts, prevailing social norms meet official norms in different manners; and the factors that influence the possibility or the choice to register inheritance depends, on one hand, on the kinds of inheritance and associated land use rights that are afforded by official norms. On the other hand, it depends on the legitimacy of rights and related securities afforded through social norms. These securities do not only pertain to an individual's rights to property, specific land uses, or a building, but also to securities afforded by being a member of a social group. Insisting on one's individual right to inheritance, which may be legitimized by resorting to registration according to official norms and sanctioned by statutory administration, may at the same time mean a loss of security that arises from membership in a given social group (for example, the lineage's network). In addition, especially in urban areas, social norms are diverse and interlink with factors of urbanization, such as increasing land values and higher diversity and fragmentation of the population, different land uses and even building materials.

Choices to register land or built property are therefore influenced by environmental conditions, including surrounding land values and state of development, property characteristics (developed property, farmland, etc.), but also a counter-weighting between different sources of legitimacy in terms of how each source would provide for land and property tenure security and whether lineage or state backing are called upon. This latter is in turn dependent on the relative strength of social vis-à-vis official norms in a given context. Through "strategic registration", landholders therefore choose to register inherited property or not, provided they have the financial means to pay for the registration process (see following sections). As such "strategic registration" can be viewed as a form of practical norms guiding the practices of registration from the point of view of the landholders.

But practical norms also arise within the official arena. We describe

this in the following sections.

4.2. Variations and gaps in official norms and "registration-on-demand" as practical norm

At the national statutory level, land registration is regulated by the Land Registry Act, 1962 (Act 122) in most parts of Ghana except for Greater Accra region and selected areas of the Ashanti region, where the Land Title Registration Act, 1986 (PNDCL 152) applies. The agency with the official mandate to carry out land administration related tasks, including land rights registration, is the Lands Commission (LC). By "officially mandated" we mean here that the LC is endowed with the mandate through statutory law. However, two main characteristics of Ghana's land governance scene lead to highly differentiated implementation of legal statutes as well as the relative role played by the LC in matters of registration (see also Abubakari et al, 2018). First, the Customary Land Secretariats also play an important administrative function, albeit based on policy directive only and not sanctioned through statutory law. In practice, the process of registration in Ghana encompasses a wide range of other actors, including traditional authorities (chiefs, earth priests and family heads) and private land agents. Second, a lot of land, including inherited land, is not yet officially registered with the LC. The practices for so called first registration of inherited property versus subsequent registration differ in terms of actors and procedures involved. Registering inherited property for the first time involves two phases cutting across the LC and CLS as main administrative actors, whereas procedures to carry out registration through the LC for the second phase do exist. Subsequent registration (updating) of already registered property involves only one phase, for which no official procedure exists, and which cuts across the LC, the courts and legal professionals (see table 1). Here we already see that the sphere of "official norms" is rather diverse and the actor constellations involved in registration are of a hybrid nature in terms of their (non) administrative functions and mandates. In the following sections, we describe this hybrid sphere in more detail for both first and subsequent registrations with emphasis on the nature of official norms in each.

4.2.1. Variations in official norms: The two-phased process of first registration

The first phase of registering inherited property differs by land governance structure. Under the decentralized land governance structure of the Upper East region, where land is predominantly held by families under the custodianship of earth priests, successors of unregistered property have to prepare an affidavit to formally declare the root of property ownership, since the LC has no prior information of the property. After the declaration of root of ownership, a deed document is prepared either by the CLSs, legal professionals, informally by officials of the LC or land agents. Under the centralized land governance structure of the Ashanti region however, customary land is entirely held and controlled by chiefs according to a traditional hierarchy that ranges from caretaker chiefs through paramount chiefs to the Asantehene (the overall king). By virtue of the central role of chiefs, the land allocation papers they issue, serve as a legal root of ownership. Thus, a successor of unregistered property needs to request for new allocation papers from the grantor (chief) to reflect his status as the new holder. With the new allocation paper, a deed document is prepared by the Asantehene Land Secretariat (ALS)⁷. This marks the end of the first phase. During this first phase of the registration of land rights, including inheritance, we therefore encounter a multiplicity of administrative and non-administrative actors, who converge into a sphere of what we might call

⁷ The ALS is a Customary Land Secretariat that predates the institutional reforms that created the country-wide CLSs in 2003 under the Ghana Land Administration Project (LAP). For areas with paramount chiefs like Ofinso and Juaben, deed documents are prepared at the CLSs of the paramount chiefs.

⁵ The capital of the Upper East region

⁶ The capital of the Ashanti region

Table 1

Illustration of the interplay of factors on official registration: type of registration, region, and phases involved (for more details regarding the phase distinction see Abubakari et al., 2018).

Type of registration	Phase 1	Phase 2
First registration	Vary according to centralized and decentralized land governance structures	Based on the official procedure of the LC
Subsequent registration	N/A	Driven by the LC without explicit official procedure

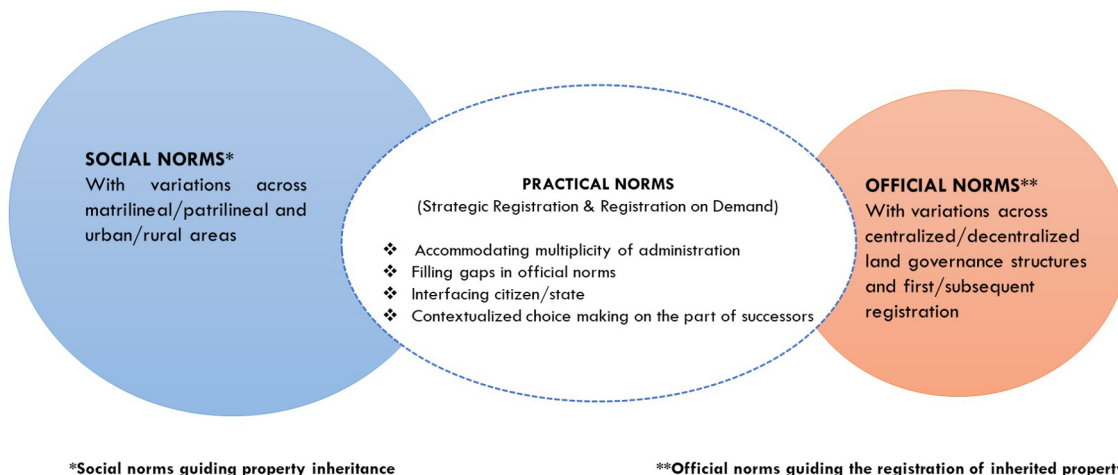


Fig. 3. The interaction of norms in Ghana’s legibility making through registration. Source: Adopted and modified from Olivier de Sardan (2015).

“proxy official norms” that derive from the interlinkages between statutory law, policy (e.g. the CLS) and historically evolved land governance structures and dynamics.

It is in the second phase of the first registration, where we encounter a small space within the process of registration influenced by “purely official norms,” that is norms guiding the practices of the agency officially mandated with land administration, the LC. For the second phase of registration the LC uses the same procedures written in its operational manual for nation-wide application irrespective of the type of transaction; whether inheritance transfer or sale. In this second phase applicants submit executed deeds at the Client Service and Access Unit of the LC which are then sent to the four divisions of the LC for registration. Observations made at the offices of the LC reveal that the internal processes are not linear but a series of back and forth movements between divisions with some overlapping roles (see Abubakari et al. (2018) for details). Also, deed documents need to be signed by heads of the divisions who are at the same time always busy with other administrative duties such as meetings. In combination, these activities reflect on the time, complexity and cost of registration.

4.2.2. A gap in the LC’s official norms: The process of subsequent registration

For updating inheritance transfers on already registered property, the exact requirements are not stated in the LC’s operational manual. Therefore, the entire process of subsequent registration evolved practically in a quite discretionary manner.

For updating to take place in the LC offices of the study areas, legal documents such as probates, letters of administration and vesting assents are often required. Whereas probates and letters of administration are provided by the court, vesting assents are prepared by legal professionals. The preparation of these documents lie outside the official mandate of the LC and their associated fees are high compared to the official fees of the LC⁸. This is because, the court and legal professionals

⁸ According to an official of the LC, the registration fees for a vesting assent at the LC is about GH¢ 200.00 while that of a lease is about GH¢ 600.00. This means that it is cheaper within the LC to update a previously registered

charge their fees as a percentage of the total value of the estate⁹ while the LC charges a fairly fixed fee for registering inherited property. In an interview, a male successor in the Upper East region said:

There are challenges in the registration. The registration process was not fast-tracked the way I expected it to be, and the expected expenditure on it too was more than I expected (Interview: June 2018).

As a result, successors who wish to, but cannot afford the fees of the court, do not register their inherited property at all.

The processes described above, demonstrate the multi-faceted nature of the administrative arena and also the incremental way of dealing with discrepancies and gaps in official norms, e.g. procedures. The latter, strictly speaking, come into play only in the case of first registrations, during the second phase. In dealing with its own gaps in reference to official norms and the multiplicity of administrative actors involved in registration, “registration-on-demand” is emerging within the official arena as a practical norm in response to requests for the registration of inherited property by successors. Such “registration-on-demand” is therefore influenced by both social and official norms, but it is also highly situation specific. To illustrate this, we zoom into the micro-spaces of interactions between state and citizens in the next section.

4.3. Citizen/state encounters in registration: The micro-spaces of practical norms

If successors pursue registration, they come into contact with a complex “proxy-official” scene, that we described in a simplified manner above, characterized by variations in official norms and the discretionary practices within administration that fill in gaps in the

(footnote continued)
inherited property than to register one that has not been registered previously. However, the cost of obtaining the prerequisite documents make the overall cost of updating a previously registered one higher than registering a fresh one.
⁹ Interview of LC official (June 2018).

official norms of the LC. It is at these micro-scale encounters, where the spaces of practical norms that serve bridging functions between social and official norms, between citizen and state, become manifest.

For applicants to go through the challenges of registration, a connection with internal operatives (i.e. LC staff and land agents) is imperative. Successors often engage LC officials or land agents privately to facilitate the registration process. Here then, LC officials and land agents act in informal manners. This switching between formal/informal roles may itself be conceptualized as a practical norm. The relationship between applicants and facilitators is built on trust, goodwill and personal relationships. For the facilitators within the LC, their affiliation affords them additional legitimacy as applicants are unable to differentiate between the official and unofficial roles of the staff of the LC, and this allows room for officials to engage more actively across the social/official boundary. These interactions have created a literal physical space, namely in front of the CSAUs. In these places LC officials and land agents interact with applicants in a sort of “informal market”. Envisioned originally as a one-stop shop to link citizens and their state’s administration through a smooth application process or in the conceptual language used in our paper: to connect the social and official normative arenas, the space in front of the CSAU has expanded into a place coordinated largely by these practical norms of mingling administrative/non-administrative capacities. Embedded in and at the same time driven by these practices is a semi-formal fee economy. Although the interactions in these spaces facilitate the movement of successors from the non-registration (social norms) to registration (official norms), the services offered here are not free. Applicants have to pay facilitation fees directly through negotiation, but more often indirectly through official fee adjustments and grafts. How the official fees are adjusted is indicated in the following interview quote by a successor of inherited property:

“.....I don’t know if it’s only me they have taken care of, but they would have taken care of a lot of people. When they know that you are from the United States or rich, if something is GH¢ 20.00 they will make it double or triple. So even if the registration will cost GH¢ 200.00 they will make GH¢ 2000.00.” (Interview: August 2018)

The quote illustrates that fee estimates take into account people’s backgrounds and possible income range. While this is by no means necessarily fair and can substantially increase the cost, and often makes registration unaffordable to prospective registrants, it illustrates how practical norms evolve from as well as inform the registration process at the scale of encounters between successors and administrators at a micro-scale of personal interactions.

5. Reflection and conclusion

Land tenure mapping is an intrinsically geopolitical endeavor. The official recognition of land rights through capture in cadastral databases and land registries is an important function of the state. It is one of the administrative techniques that render a society and territory more legible and thus governable (Scott, 1998). Such interventions of the state inevitably result in the transformation of existing non-state land tenure regimes, which are based on diverse relations between people and space. As such, the state’s cadastral interventions imply a shift in land control, which elicits confrontations and compromises between state and society (Cotula, 2007; Lund, 2016). Legibility making through land registration intrinsically brings into confrontation two aspects of land that are often conflictual and hardly complementary – *how it is owned, used and transferred* (de facto) on the one hand, and *how it is officially recognized and administered* (de jure) on the other hand. Accordingly, the recording of land rights provokes different forms of negotiation between the social and official arenas especially in the global south, including Africa, where non-state tenure regimes are prominent. In this context, land inheritance is embedded in social processes that go beyond the mere transfer of land and use but

constitutes an essential ingredient to the coherence and evolution of family lineages as basic social units (Abubakari et al., 2019). This is a spatial epistemology where land is not an object separate from groups or individuals, but constitutive of the relationship. From the perspective of administration (the official arena) land is regarded as something that can and should be documented in its physical dimensions upon transfer.

Against this background, our study asked, how does legibility making take place in practice, and according to which or whose norms? Our results demonstrate that practical norms emerge as a sort of bridge between the social sphere, itself highly differential, and the official sphere. Practical norms fulfill various functions in this way, for instance substituting for gaps in official procedures and negotiating an administrative sphere that is itself diverse due to historical contingencies, such as the role of the traditional governing actors (for example, the Asantehene Land Secretariat in the Ashanti region), and due to relatively recent efforts to formalize customary institutions through the CLS network. They also guide the choices or necessities of people, especially in urban and urbanizing areas. Landholders, specifically successors, may search for legitimacy and security for property holdings, especially in urban contexts of higher property values and developed land (Spichiger and Stacey, 2014), where social norms are more multi-faceted and in more frequent contact with official normative contexts. Depending on the outcomes of sharing within the social arena, successors explore different strategies in search of legitimacy and security. They draw on both family networks (social norms) and the formal registration system (official norms). The reaction of successors after sharing is one that is dynamic, practical and situational. The motive of these reactions is to either enhance existing legitimacy (within family) or create new ones (with formal registration). Demand for registration of inherited property therefore depends on and varies with the strategic choices being made on part of the landholders within their respective social context and the affordability of such choices. We have summarized these insights in Fig. 3.

Our priority for this paper was to shift the lens onto the specific processes of land rights registration and to identify relatively broad patterns at the cost of discussing the details of customary forms of land holdings, for instance. In this paper, we are specifically interested to shed some light onto the practices of legibility making in a context like Ghana, where administration and society are closely interwoven, and where the initiative to make the territory legible does not necessarily come from the side of the state, but where societal actors also exhibit varying interest in registration. This is important, because a fair amount of research in the domain of land administration has focused on how to improve the state’s or administrative processes of land registration as the locus to effect positive change. For example, studies on land information updating across the global south too often point to administrative inefficiencies such as procedural complexities (van der Molen, 2002; Binns and Dale, 1995), long transaction times and high transaction cost (Biraro et al., 2015; Chimhamhiwa et al., 2009; FIG, 2014).

While our findings within the administrative processes of Ghana’s LC resonate with this mainstream literature, we found additional complexities such as the lack of explicit procedures for the registration of inherited property. The procedures are not explicit in the operational manuals of the LC, but have evolved through practice (practical norms) and are considerably plastic as they allow room for discretion and therefore change over time. Their evolution is not only driven by internal administrative shortcomings, but also shaped in response to landholders varying needs and requests to register inherited property; which is why we refer to these practical norms as “registration-on-demand” – a reactionary response to a societal need, akin to Scott’s (1998) notion of “metis” as a form of practical knowledge. In this sense, the state’s legibility making processes draw from the practical improvisation through discretionary procedures which on the one hand work to promote the primary function of the LC – to record land rights, but also add to the existing complexity of the LC’s processes as highlighted in earlier studies on land administration (Zevenbergen, 2002).

Departing from the mainstream land administrative literature, our study explores legibility making beyond the official arena, delving into the social arena which provides the foreground for the official arena in terms of land rights production. The eventual decision to either register inherited property or not, is the combined effect of social, official and practical normative arenas that elicits a dynamic process of legitimization which property holders explore. The positions they take depend on the nature of property claims (competing or complimentary), the manner of property sharing and holding, and the existence of ‘halfway-documents’. Therefore, there is not one set of obstacles to registration, which would call for one set of solutions. Instead, we need to appreciate the diverse nature of the factors that play roles in land registration in order to provide “fit-for-purpose land administration” (FIG, 2014; Zevenbergen et al., 2013; UN-Habitat, 2008).

What then does this quest for fit-for-purpose solutions need to consider at a more fundamental level going beyond the question of what needs to be documented how and by whom? The norms that we describe in this paper are not stable sets of rules – implicit or explicit – that govern practices in a predetermined manner. They also emerge from practices and accordingly change through time. As such, land registration itself opens spaces for the reshaping of both social and official norms, as well as for the emergence of practical norms. Cadastral development – in its manifold forms across different geographic contexts – therefore is more than the attempt to “represent (updated) ground realities” in an official database or map, but is itself part of the long-term practice of making and sometimes un-making the state, of governance actors negotiating their legitimacy and roles vis-à-vis one another, sometimes peaceful and sometimes conflictual. Recognizing this shifts both the notion of existing customary land tenures as well as the techno-managerial solutions proposed for land administration into a different light: the nature of customary land tenures itself changes through the practice of registration, and techno-managerial solutions are not merely neutral tools of management to achieve a given task, but are themselves actors imbued with political agency and carriers of (new) norms in the governance of land.

Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.geoforum.2019.11.002>.

References

- Abubakari, Z., Richter, C., Zevenbergen, J., 2018. Exploring the “implementation gap” in land registration: How it happens that Ghana’s official registry contains mainly leaseholds. *Land Use Policy* 78. <https://doi.org/10.1016/j.landusepol.2018.07.011>.
- Abubakari, Z., Richter, C., Zevenbergen, J., 2019. Plural inheritance laws, practices and emergent types of property—implications for updating the land register. *Sustainability* 11 (21). <https://doi.org/10.3390/su11216087>.
- Abubakari, Z., van der Molen, P., Bennett, R.M., Kuusaana, E.D., 2016. Land consolidation, customary lands, and Ghana’s Northern Savannah Ecological Zone: An evaluation of the possibilities and pitfalls. *Land Use Policy* 54, 386–398. <https://doi.org/10.1016/j.landusepol.2016.02.033>.
- Barnes, G., Griffith-Charles, C., 2007. Assessing the formal land market and deformalization of property in St Lucia. *Land Use Policy* 24, 494–501. <https://doi.org/10.1016/j.landusepol.2006.08.001>.
- Binns, B.O., Dale, P.F., 1995. Cadastral surveys and records of rights in land: FAO Land Tenure Study 1. Rome. Retrieved from <http://www.fao.org/docrep/006/V4860E/V4860E07.htm#ch6>.
- Biraro, M., Bennett, R.M., Lemmen, C., 2015. Accelerated land administration updates. In: Zevenbergen, J.A., de Vries, W.T., Bennett, R.M. (Eds.), *Advances in responsible land administration*. CRC Press, Boca Raton, pp. 145–162.
- Chimhambiwa, D., van der Molen, P., Mutanga, O., Rugege, D., 2009. Towards a framework for measuring end to end performance of land administration business processes - A case study. *Comput. Environ. Urban Syst.* 33, 293–301. <https://doi.org/10.1016/j.compenvurbysys.2009.04.001>.
- Cotula, L., 2007. Introduction. In: Cotula, L. (Ed.), *Changes in “customary” land tenure systems in Africa*. Russell Press, Nottingham.
- De Herdt, T., Olivier de Sardan, J.-P., 2015. *Real Governance and Practical Norms in Sub-Saharan Africa*. Routledge, London.
- Dowling, J., Pfeffer, J., 1975. Organizational legitimacy: social values and organizational behavior. *Pacific Sociolog. Rev.* 18 (1), 122–136. <https://doi.org/10.2307/1388226>.
- Elias, T.O., 1956. *The Nature of African Customary Law*. Manchester United Press, Manchester-England.
- Ferguson, J., Gupta, A., 2002. Spatializing states: toward an ethnography of neoliberal governmentality. *Am. Ethnol.* 29 (4), 981–1002.
- FIG, 2014. *Fit-For-Purpose Land Administration*. FIG Publication 60, Copenhagen, Denmark.
- Fogelman, C., Bassett, T.J., 2017. Mapping for investability: Remaking land and maps in Lesotho. *Geoforum* 82, 252–258. <https://doi.org/10.1016/j.geoforum.2016.07.008>.
- Galaty, J.G., 2010. Official and practical norms in theoretical context: A commentary on Olivier de Sardan. *Can. J. Dev. Stud.* 31 (1–2), 21–25. <https://doi.org/10.1080/02255189.2010.9669328>.
- Gezdi, V.S., 2014. PNDC Law 111 in Ghana and international human rights laws. *Global J. Polit. Law Res.* 2 (2), 15–26.
- Goffman, E., 1961. *Encounters: Two Studies in the Sociology of Interaction*. Bobbs-Merrill Company Inc., Indianapolis.
- Gray, L.C., Kevane, M., 2001. Evolving tenure rights and agricultural intensification in Southwestern Burkina Faso. *World Dev.* 29 (4), 573–587. [https://doi.org/10.1016/S0305-750X\(00\)00115-7](https://doi.org/10.1016/S0305-750X(00)00115-7).
- Helmke, G., Levitsky, S., 2004. Informal institutions and comparative politics: A research agenda. *Informal Inst. Comparat. Polit.* 2 (4).
- Hendriks, B., Zevenbergen, J., Bennett, R., Antonio, D., 2019. Pro-poor land administration: Towards practical, coordinated, and scalable recording systems for all. *Land Use Policy* 81, 21–38. <https://doi.org/10.1016/j.landusepol.2018.09.033>.
- Hornby, D., Royston, L., Kingwill, R., Cousins, B., 2017. Introduction: tenure practices, concepts and theories in South Africa. In: *Untitled: Securing Land Tenure in Urban and Rural South Africa*. University of KwaZulu-Natal Press, Pietermaritzburg, South Africa.
- Hsieh, H.-F., Shannon, S.E., 2005. Three approaches to qualitative content analysis. *Qual. Health Res.* 15 (9), 1277–1288. <https://doi.org/10.1177/1049732305276687>.
- Kalir, B., Schendel, W. Van, 2017. Introduction Nonrecording states between legibility and looking away. *Focaal - J. Glob. Historical Anthropol.* 77, 1–7. <https://doi.org/10.3167/fcl.2017.770101>.
- Kingwill, R., 2014. Papering over the cracks: an ethnography of land title in the Eastern Cape. *Kronos* 40 (1), 241–268.
- Kutsoti, E., Morck, R., 2012. Family ties, inheritance and successful poverty alleviation: Evidence from Ghana. NBER Working Paper 18080. Cambridge, UK.
- Kuusaana, E.D., Kidido, J.K., Halidu-Adam, E., 2013. Customary land ownership and gender disparity: Evidence from the Wa municipality of Ghana. *GJDS* 10 (2). <https://doi.org/10.4314/gjds.v10i1&2.4>.
- La Ferrara, E., 2007. Descent rules and strategic transfers. Evidence from matrilineal groups in Ghana. *J. Dev. Econ.* 83, 280–301. <https://doi.org/10.1016/j.jdeveco.2006.09.001>.
- Li, T.M., 2005. Beyond “the State” and Failed Schemes. *Am. Anthropolog.* 107 (3), 383–394. <https://doi.org/10.1525/aa.2005.107.3.383>.
- Lipsky, M., 1980. *Street-Level Bureaucracy: Dilemmas of the individual in public services*. Russel Sage Foundation, New York.
- Lund, C., 2013. The past and space: On arguments in African land control. *Africa* 83 (1), 14–35. <https://doi.org/10.1017/S0001972012000691>.
- Lund, C., 2016. Rule and rupture: state formation through the production of property and citizenship. *Dev. Change* 47 (6), 1199–1228. <https://doi.org/10.1111/dech.12274>.
- Lund, C., Benjaminsen, T.A., 2002. Formalization and informalization of Land and water rights in Africa: An introduction. *Eur. J. Dev. Res.* 14 (2), 1–11.
- Mangla, A., 2015. Bureaucratic norms and state capacity in India: Implementing primary education in the Himalayan region. *Asian Survey* 55 (5), 882–908. <https://doi.org/10.1525/AS.2015.55.5.882>.
- Médard, C., Golaz, V., 2018. Entwined values: protecting and subdividing land in Buganda. *Crit. African Stud.* 10 (1), 47–66. <https://doi.org/10.1080/21681392.2018.1491802>.
- North, D., 1990. An introduction to institutions and institutional change. In: North, D., Alt, J. (Eds.), *Institutions, Institutional Change and Economic Performance*. Cambridge University Press, Cambridge.
- Olivier de Sardan, J.-P., 2014. La manne, les normes et les soupçons: Les contradictions de l’aide vue d’en bas. *Revue Tiers Monde* 3 (219), 1–24.
- Olivier de Sardan, J.-P., 2015. Practical norms : informal regulations within public bureaucracies (in Africa and beyond). In: De Herdt, T., Olivier de Sardan, J.-P. (Eds.), *Real Governance and Practical Norms in Sub-Saharan Africa: The game of the rules*. Routledge, New York.
- Pedersen, R.H., 2016. Access to land reconsidered: The land grab, polycentric governance and Tanzania’s new wave land reform. *Geoforum* 72, 104–113. <https://doi.org/10.1016/j.geoforum.2015.12.010>.
- Pejovich, S., 1999. The effects of the interaction of formal and informal institutions on social stability and economic development. *J. Markets Morality* 2 (2), 164–181. <https://doi.org/10.1016/j.corsci.2008.05.022>.
- Plessis, J. Du, Augustinus, C., Barry, M., Lemmen, C., 2016. The continuum of land rights approach to tenure security: consolidating advances in theory and practice. In: *Land and Poverty Conference*.
- Richter, C., 2014. Digital transformations in Indian cities: between paper list and GIS map. University of Twente, The Netherlands. <https://doi.org/10.3990/1.9789036536547>.
- Scott, C., J., 1998. *Nature and Space*. In: *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. Yale University Press, London, pp. 11–52.
- Spichiger, R., Stacey, P., 2014. Ghana’s land reform and gender equality. DIIS Working Paper 2014:01. Copenhagen, Denmark.
- Tagoe, N.D., Mantey, S., Adjei, S., Soakodan, M., 2012. *The Role of the Land Survey in Land Acquisition and Compensation - A Case Study of the Tarkwa Mining*

- Communities, Ghana. FIG Working Week. Territory, Environment and Cultural Heritage, Rome, Italy.
- Timmer, J., 2010. Being seen like the state: emulations of legal culture in customary labor and land tenure arrangements in East Kalimantan, Indonesia. *Am. Ethnol.* 37 (4), 703–712. <https://doi.org/10.1111/j.1548-1425.2010.01279.x>.
- UN-Habitat, 2008. *Secure Land Rights for All*. Nairobi: UN-Habitat.
- van der Molen, P., 2002. The dynamic aspect of land administration: an often-forgotten component in system design. *Comput. Environ. Urban Syst.* 26, 361–381. [https://doi.org/10.1016/S0198-9715\(02\)00009-1](https://doi.org/10.1016/S0198-9715(02)00009-1).
- Van Meter, D.S., Van Horn, C.E., 1975. The Policy Implementation Process: A conceptual framework. *Admin. Soc.* 6 (4), 445–488. <https://doi.org/10.1177/009539977500600404>.
- Weber, M., 1947. *The Theory of Social and Economic Organization*, edited with an introduction by Talcott Parsons. The Free Press, Glencoe, Illinois.
- Whittal, J., 2014. A new conceptual model for the continuum of land rights. *South African J. Geomatics* 3 (1), 13–32.
- Zevenbergen, J., 2002. *Systems of land registration: Aspects and effects*. TU Delft, The Netherlands.
- Zevenbergen, J., Augustinus, C., Antonio, D., Bennett, R., 2013. Pro-poor land administration: Principles for recording the land rights of the underrepresented. *Land Use Policy* 31. <https://doi.org/10.1016/j.landusepol.2012.09.005>.