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To cite this article: Örjan Bartholdson & Roberto Porro (2019) Brokers – A Weapon of the Weak: The Impact of Bureaucracy and Brokers on a Community-based Forest Management Project in the Brazilian Amazon, Forum for Development Studies, 46:1, 1-22, DOI: [10.1080/08039410.2018.1427621](https://doi.org/10.1080/08039410.2018.1427621)

To link to this article: <https://doi.org/10.1080/08039410.2018.1427621>



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Published online: 27 Jan 2018.



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Brokers – A Weapon of the Weak: The Impact of Bureaucracy and Brokers on a Community-based Forest Management Project in the Brazilian Amazon

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Abstract The bureaucracy that regulates land tenure, agriculture and community-based forest management (CBFM) in the Brazilian Amazon aims at achieving an impartial administration and process of practices that complies with the intention of laws, regulations and decrees and safeguards the rights of the citizens at large and particularly people in a vulnerable position. Yet the local power-holders' actual interpretation and implementation of laws, regulations and decrees is to large extent opaque, arbitrary and contingent upon subjective intentions, interests and perspectives. These irregularities and arbitrariness affect poor smallholders hard and hamper their access to resources and formal rights. This paper intends to show how the smallholders who have initiated a CBFM project in a settlement in the north-eastern region of the Brazilian Amazon are unable to manage the project on their own, because they lack financial capital, as well as the necessary social and political capital to be able to obtain compulsory permits and make the contracted firm and people comply with the terms of the contracts. In order to transcend these difficulties, the smallholders utilize their social networks, above all vertical contacts, to attract brokers. The paper argues that this strategy assigns great power and influence to various brokers, and affects how policies are implemented, how resources are distributed or not distributed and how power relations are articulated. These aspects of governance and governmentality are grossly under-theorized in research on development projects in general and CBFM in particular. The paper is based on participant observation and various forms of interviews, carried out in 2012–2017.

Keywords: Brokers; bureaucracy; pilot project; community-based forest management; smallholders; deforestation; the Amazon

Introduction

The forestry consultant Leon has gathered the community. He has just concluded a five-day assessment of the community-based forest management (CBFM) project of a relatively newly formed settlement, *Projeto de Desenvolvimento Sustentável Virola Jatobá* (PDS VJ), in the municipality Anapu, which is situated along the

Tranzamazon highway in the state of Pará, Brazil. The assessment has been conducted on behalf of the environmental agency of the state of Pará, SEMAS, and the State Public Prosecutor's Office, Ministerio Público. The land of the settlement is owned by the state, and the settlers mainly derive their livelihood from subsistence agriculture, primarily rice and maize, and small-scale production of cash crops, such as cassava and cocoa. The settlers' incomes, however, are very small, and the CBFM project that was initiated in 2008 has supplemented the incomes with cash from logging operations. The settlers of the community are either people who have migrated from the nearby states of North-eastern Brazil, mainly Maranhão, to the state of Pará, or whose parents migrated. Most of the settlers have led a nomadic life, staying at the most a couple of years in each place. The main reason for the migration is search of arable land, which is very scarce in the states they have left. The community consists of 135 households and around 150 adults have gathered to listen to Leon's information about the assessment. The settlers cannot recall any previous meeting in the community that has gathered so many people. The project has opened opportunities for new sources of incomes besides agriculture for the settlers. New incomes have been invested, e.g. in motorbikes for transportation of goods and people, as well as in small businesses.

However, the CBFM project that initially was supported by a branch of the federal government, the colonization and land reform agency, INCRA, proved to be much harder to successfully administer than either the community or the authorities had imagined. In order to be able to carry out the logging, transportation and sale of the timber, the community had contracted a timber company and recruited a forest engineer, with the help of external development funding. The support of the timber company turned out to be a double-edged sword, however. On the one hand, it had provided the needed expertise and infrastructure, but on the other, it wrenched the management out of control of the villagers themselves.

The consultant Leon listed in his report 32 breaches of forest management legislation that ranged from poor logging practice to the illegal transportation of timber. Almost all were caused by the actions of the timber company and the forest engineer. At the meeting in the settlement facility, where Leon and his team presented their assessment of the CBFM, both the company and engineer were absent. Leon specifically stated that the main culprit of the breaches of the legislation was the timber company, but both during the meeting and afterwards settlers of the PDS secretly told us that the responsibility and blame actually would fall on their own shoulders. The land reform agency, INCRA, which once had encouraged the CBFM scheme, withdrew its support from the project as soon as they received information from the assessment team.

After the assessment, Leon and his team submitted the report on forest management of the settlement PDS VJ to the state environmental agency, SEMAS. Leon told the settlers that they would have to correct the most flagrant breaches of the Brazilian forest legislation within one month. He agreed that it seemed unfair that the blame in reality

was put entirely on the shoulders of the community members, in the absence of the timber company, but argued that this was judicially correct. The countdown would start as soon as SEMAS would officially register the report. But the report never became official, however, and its status would become much disputed. Brokers would eventually intervene and cause a process which would change the status and impact of the report profoundly.

The intervention of the brokers

The interpretation and implementation of laws, regulations and decrees related to CBFM in Brazil tend to constitute acts of structural and symbolic violence against the few smallholder groups who engage in the activity. The settlers do not have the technical capacity to conduct the forest management operations on their own and they lack the necessary capital to pay for forestry expertise, labour and transportation. Furthermore, they lack the knowledge and social capital needed to obtain logging, transportation and sale permits of timber. This paper argues that settlers thus are unable to initiate and administer CBFM projects without the constant help and intervention of a specific type of intermediaries, so-called brokers. Yet the essential role of brokers is almost never explicitly pointed out when CBFM and other development projects are designed or evaluated. What these brokers do and who they are may vary substantially depending on the context, but they must possess assets and capitals which the subalterns lack (cf. Spivak, 1999). In this paper, we aim to demonstrate that brokers are absolutely essential for the creation of CBFMs, but that their pivotal role constitutes a black box in Latour's (2007) sense of the term and are not explicitly articulated in project designs and policy document. The Brazilian society is highly economically and socially hierarchical and the only way for subalterns to access resources and influence bureaucratic interpretations and decisions is often through the help of an intermediate person or organization, who possess enough social and political capital to be able to gain access to high-placed officials and influence decision-making processes.

Nominally, these smallholders are in charge of the management process, and sometimes they are able to re-interpret and even modify policies and project implementation in their favour through the use of brokers. The smallholders' ability to attract brokers who are influential is of vital importance for their well-being and the success of the brokers depends on their political, social and cultural capital. We will discuss the settlers' difficulties of running a CBFM, by looking specifically at the process of the assessment made by Leon and the team from the state environmental agency SEMAS and the Public Prosecutor's Office (*Ministério Público*), as well as scrutinizing the essential role of the interventions of brokers.

The implementation of the CBFM in the settlement PDS VJ had political and social outcomes that none of those involved had expected. Community members' main intention with the project was to be able to improve their own economy and contribute

financially to the local community at large, but the impacts would transcend these objectives. Extraordinary events often drastically alter the interpretive frames actors use to make sense of them (Sahlins, 1987; Zizek, 2014). Attempts to incorporate new event into existing frames of understanding may lead to a comprehensive restructuring of the frames.

The CBFM project that the settlers of the PDS VJ succeeded in establishing was supposed to be handled by the organizations founded by the settlers and to strengthen the community's democratic organization. But the administration of the project instead ripped open the concealed tensions within the community and its association, and also created new fault-lines within the settlement. The entire aim of the CBFM was called into question, and almost all actors seemed to dispute its very rationale. But, as we will be shown later in the paper, like a phoenix the project would rise from the ashes after external interventions and negotiations, led by brokers, and the CBFM would be open for yet a new re-interpretation of the present and past, thus transforming the previously assessed failure of the CBFM into challenges that could be managed and overcome.

This paper is based on ethnographic fieldwork, including participant observation, interviews and conversations, conducted during fieldtrips lasting two to three weeks between 2012 and 2016. Twenty-one fieldtrips were made to the settlement during this time period. The interviews were conducted with settlers, bureaucrats on different administrative levels, non-governmental organizations (NGOs), the rural union, the Catholic Pastoral Commission and other actors involved in the CBFM project. The interviews spanned from recorded semi-structured individual and focus group interviews, to informal interviews. More than 30 interviews with settlers have been recorded, and there are more than 50 interviews with settlers that were written down. One of the two co-authors of this paper (Roberto Porro) has also been involved in a research and development support project in the settlement that started in 2014 and that will continue until 2018.

The presence of the state in the Anapu region

Recent research shows that the state as an imagined unitary body conceals its actual fragmentary character as an unstable assemblage of institutionalized political power (Abrams, 1988; Dean, 2010; Li, 2007a). The state in the Brazilian Amazon appears as anything but a coherent unity. It consists of various branches, and its objectives and actions often display contradictory purposes and actions.

The federal and the regional state appear and intervene in the lives of smallholder at the PDS VJ in a number of ways. State agencies legitimate the control of a specific territory, distribute the land into specific demarcated plots and decide which families may receive usufruct rights to these plots; they provide the legal framework for action that specifies what a household may or may not do on its land and how the communal forest shall be treated. State agencies also partly provide infrastructure, housing, schools and access to credit. The main branches of the state that the smallholders interact with are

the federal government and the land reform agency, INCRA, and the environmental agency of Pará state, SEMAS. Some federal and regional state policies that affect smallholders and often appear in a contradictory way are the regulations for forest conservation, land distribution and land use, state agricultural support and credits, conditional cash transfers, as well as development projects of all kinds.

The state also appears arbitrarily and irregularly in the smallholders' lives through negative sanctions, as when smallholders slash down and burn trees and shrubs to create farms and areas of arable land. On the one hand, INCRA has given the settlers of the PDS VJ the right to annually open up 3 hectares of new land for cultivation, up to maximum area of 20 hectares, but on the other they must obtain a permit to deforest from SEMAS for these 3 hectares, since they use slash and burn to clear the areas from trees and shrubbery. The permits, however, are almost never issued in time, so the settlers clear the land anyway, since they often are in dire need of arable land. In order to be able to inform the heads of SEMAS, who are located in the state capital Belem, and obtain permission in time the settlers are in need of someone who speaks in the behalf, that is, a broker.

Such constraining and confusing laws, regulations and decrees are not only to be found in everyday practices, but also expressed through different documents issued by distinct state agencies and mediated by all kind of state agents. Some of these prohibitions and constraints are known to smallholders, either in a general or more specific form. Others only appear after an event has occurred, and their meanings and interpretations often depend on the intervention of a mediator. Such is the case with the specific regulations on logging.

The policies regulating settlements in the Amazon have created a specific system of knowledge, practices, technologies and ideologies that make up an overarching discourse in Foucault's (1974) sense of the term. This discourse takes on different shapes depending on the perspective and position of the actor. A representative of the federal state, such as the local head of the land reform agency INCRA, will struggle to distribute land to smallholders, according to criteria based on need, position in a waiting list and recommendations. He will attempt to create clear, undisputed and demarcated boundaries for the land reform territories, try to settle land disputes among smallholders and negotiate with other actors whose actions affect the territories under INCRA's jurisdiction. In order to achieve these aims the head of INCRA will have to draw on documents, maps, written and oral testimonies and discuss with superiors within INCRA. However, there are also other actors with an interest in the land areas, such as the federal and state environmental protection agencies, IBAMA and SEMAS, trying to make sure that the legal area of forests are conserved and not threatened. The federal agricultural research agency EMBRAPA will offer general agricultural support to smallholders, but the state support to cocoa growers is handled by the federal agency CEPLAC. Previous owners of land that the state has decided to expropriate and distribute to smallholders will often dispute the expropriation and appeal to courts to get the decision overruled, presenting documents and maps over

the disputed area, to support their arguments. All these actors will back up their arguments with documents and subjective interpretations of them. The smallholders have to cope with this tangle of demands, interpretations, practices and rulings. They try to manipulate them to their own advantage to as large extent as possible, if possible through the help of a broker.

The documents, their form and content, the interpreters and mediators, as well as the recipients of the communication, are encompassed by what Hull (2012b) chooses to label 'graphic ideologies'. According to Hull (2012b, p. 14)

graphic ideologies are sets of conceptions about graphic artefacts held by their users, including about what material qualities of an artefact are to count as signs, what sorts of agents are (or should be) involved in them, and what the roles of human intentions and material causation are.

As recipients of information, the smallholders have very little capacity to influence or question the interpretation of state documents on their own. Their main chance of affecting the interpretations and implementation in their own favour is by using a broker, who possesses more political, social and cultural capital than they do.

The smallholders are well aware that there are different levels and branches on both federal and state levels; applications and appeals have to be packaged within the formats accepted by the state, and the right people have to be accessed. If the settlers encounter resistance on one level they know that it might be possible to circumvent it by appealing to a higher level or start a dialogue with another branch of the state. Access to higher levels, however, are often beyond the reach of the smallholders themselves and they will need an organization or person, who can act on their behalf. Bureaucracy might be perceived as an iron cage, but it is an iron cage with many entrances and exits.

Smallholders also remember that state interventions have been made in a haphazard manner as far back as they can recall. The old generation of migrant farmers who were given land along the Transamazon highway during the early 1970s vividly recall how the state withdrew as rapidly as they had intervened, leaving them in a hostile environment without basic services. João migrated to this area in 1970. He still lives in a very modest timber shed, even though he acknowledges that the living standards have greatly improved during the last decade.

When we came here in the 1970s the entire area was malaria infested. We desperately tried to make a living while we kept succumbing to malaria all the time. Without the help of neighbours few of us would have survived.

Today the state does not abandon the region as it did in the late 1970s, but its interventions are capricious, haphazard and hard to integrate into individual and collective life plans. Its main interventions in the area are linked to the overall economic development

of Brazil at large, exploring mineral resources and constructing hydroelectric dams (Hecht, 2013; Randell, 2016).

Brokers – to bridge the gap between the state and the settlers

NGOs of all forms are active in development and conservation projects. Sometimes they act as extended branches of the state, sometimes as part of transnational, national and regional movements and organizations, representing the most vulnerable groups and strata, and, above all, functioning as brokers between settlers and the state (Bartholdson et al., 2012; Lewis and Mosse, 2006). This entangled bundle of connections and unclear decision-making make the bureaucratic procedures surrounding agriculture, forestry and conservation very complicated and ‘messy’. One consequence of the contacts and brokers that permeate all levels is that even those settlers of the PDS who live in the periphery, have poor access to television and lack computers, regularly receive information on international, national and regional developments, policies and actions through their network of brokers. This aspect has increased as a result of their recently gained mobility through the purchase of motorbikes, mainly bought by the income the settlers have received from the CBFM, allowing greater interaction with authorities on all levels, NGOs, the rural union, Churches, corporate representatives and scholars.

The contact and negotiations with authorities are, if possible, based on direct face-to-face dialogue. As noted above, to rely on the formal bureaucratic apparatus alone in Brazil is seldom a successful strategy (cf. DaMatta, 1991). You need someone who speaks on your behalf, who moves the document from one unit to another, who supports your application or contestation. Sometimes the settlers have direct contact with state officials. Such was often the case with the local head of the land reform agency, INCRA, Ricardo. He was quite accessible and often travelled out to the settlements by motorbike or car. Other power-holders were more distant and less accessible, such as the representatives of the environmental protection agencies, SEMAS and IBAMA. The settlers were also aware that higher levels in the state bureaucracy could modify or even reject decisions at lower levels. To access these levels or inaccessible local bureaucrats you often needed intermediaries.

In this paper, we make a distinction between intermediaries at large and brokers specifically (cf. Lindquist, 2015). Intermediaries form a bridge between individuals or the community as a whole and authorities of various kinds, corporations and NGOs. The broker is a specific intermediary actor, who profits from the gap between sender and receiver, extracting some benefit from the contact (Lindquist, 2012). Lewis and Mosse (2006) point out that intermediaries and brokers tend to conduct their acts of translation between distinct systems and frames of knowledge, culture and practices; brokers are often the result of weak states that rely on brokers to negotiate with local actors and make the state present. The benefits that these brokers’ gain do not have to be financial, but may well be non-material. Brokers benefit from dealing with poor information flows between actors, rigid formal bureaucratic obstacles and unclear

paths of access to decision-makers and the complex systems of hierarchy. The basis of brokerage is often informal, personal relationships.

These brokers may consist of smallholders with an extensive vertical social network, NGOs, consultants, union representatives, traders and even state officials. Such contacts in the PDS are often in the form of patron–client relationships. The vertical relations of such brokers risk attenuating their horizontal links within the community. Brokers enable the smallholders to access the level of decision-making and resources that otherwise would have been out of their reach. CBFM projects are no exception. Brokers play an important role for the funding, organization and administration of such projects. The external actors consist of forest engineers, auditors, state officials, consultants and traders who have a profound impact on the projects (Elfving, 2010; Porro et al., 2015). Goods, know-how, information and contacts flow between the communities and external sources via brokers (Cromberg, 2012). The latter facilitate contacts, communication and may supply the required administration, as well as increase the economic impact of the project. The brokers that the smallholders need must possess one or more of the following qualities; they must be able to interact with influential power-holders that the smallholders either cannot reach or influence, they must be able to translate their description of local socio-economic conditions into relevant state or development discourses and narratives. They must be able to bridge gaps between state branches or between the state, NGOs or private interests. The brokers, however, tend to have their own agenda and objectives, which do not necessarily coincide with those of the community that seek their help. Vertical relations with brokers may also be prioritized at the expense of horizontal community relations (cf. Porro et al., 2015). The most important broker in our study was a high level and well educated middle-aged male agricultural expert, Jorge, who initiated a state-sponsored research project in the settlement PDS VJ. He gradually became increasingly involved in the settlement and would start to engage himself in issues which were not part of his official tasks. After the CBFM was stopped he negotiated with both the local heads of INCRA and SEMAS to attempt to limit the damage to the settlement and he would later also use his contacts and expert knowledge to help the settlers to initiate a new CBFM.

The colonization of the Amazon along the Transamazon highway

The municipality of Anapu, where the PDS VJ is located, was formally created in the mid-1990s, and has around 20,000 inhabitants. Its territory covers lands along part of the Transamazon highway. These lands were colonized during the 1970s, as part of the military government's plan to offer Amazon land to landless farmers and entrepreneurs. The main activity in Anapu was initially cattle ranching, demanding vast areas of deforested land. A continuous flow of migrants, however, has settled in the municipality. At present, the land in the area is divided between small-scale family farmers and large landowners, often dedicated to cattle ranching. Anapu is one of the poorest

municipalities in Brazil (PNUD et al., 2013), and among its inhabitants the families in the PDS settlements form one of the poorest strata. One of the reasons for the latter's poverty is that the settlers do not own the land, which belongs to the state, but only possess usufruct rights to it. This makes the productivity of the land very important for well-being, since they are not allowed to sell the land and the lack of ownership makes it hard to obtain credits. What settlers are able to cultivate on the land varies greatly, depending mainly on soil quality and access to water.

The politics of the Brazilian Amazon is anything but simple. The various policies implemented by the state in the Amazon often pull in different directions. Different policy objectives are promoted by distinct federal and state branches, whose policies overlap and often clash. Global policies, discourses, trade networks, tension between political centralization and decentralization, and not least the conflicts between economic development and conservation affect the Amazon on all scales (Hecht, 2013). Actors from the federal level, the state and the municipalities intervene both for conservation and economic development. They demarcate land for the settlers, for conservation, for indigenous groups, initiate small- and large-scale development projects, build roads, offer land to settlers and attempt to reclaim land from those landowners who are unproductive.

Large-scale decisions affecting smallholders are mostly taken in settings geographically and socially distant from the smallholders. To influence these or to carve out niches of livelihood opportunities and mitigate negative impacts of these decisions the smallholders are in need of people or organizations that intervene on their behalf. To affect major decisions requires long-term engagement and collectively organized brokers, while in order to improve or defend one's living conditions smallholders tend to rely on local brokers. Popular movements and NGOs are powerful actors and brokers in these processes, both to influence small and large issues, and they have increased their power and have to be consulted in many of the decisions that the authorities take (Bratman, 2014).

Land reform, environmental concern and illegal logging in Anapu

Already in 1999 the Brazilian government, through its agrarian land reform bureau, INCRA, was considering a new form of settlement, *Projeto de Desenvolvimento Sustentável* (PDS). The PDS was supposed to serve to the purpose of providing a tenure modality to combine forest conservation within a specific demarcated territory with agricultural food production, conducted by formerly landless families. The missionary Dorothy Stang, who represented the Catholic Pastoral Land Commission (CPT), proposed that two PDS settlements should be established in Anapu. Sister Dorothy and her supporters argued that the PDS would constitute barriers between loggers and the rainforest, and that the settlements would allow smallholders to be perceived as forest 'protectors' instead of destroyers. But in order for them to succeed and maintain the PDS territory and its perceived community solidarity, the land could not be

privately owned. INCRA formally inaugurated the two PDS settlements in Anapu in 2004 (INCRA, 2002, 2012). PDS Esperança, located at the southern part of the municipality, was allocated 23,000 hectares for the settlement of 230 families, while PDS VJ, at the northern part of Anapu, currently comprises just over 39,000 hectares and contains 160 homesteads.¹

In 2005 the 73-year-old Dorothy Stang was shot dead in PDS Esperança by two hired gunmen, on behalf of local large landowners. News of the assassination were distributed all over the world, which forced the Brazilian government to act. A combination of media focus, legal reforms and emergency procedures temporarily reduced illegal logging, but the state's protective presence waned after one year and logging operations increased again.

Challenges for social organization and collective action within the PDS

No individual tenure rights are allowed in the PDS, with use rights provided through renewable concession contracts to user groups. The land use is individual, though, while the PDS at large is regulated by collective decisions through the community association. Each household nominally receives 20 hectares for agriculture, and PDS farmers are allowed to clear a maximum of three hectares of land per year. Internal rules of the PDS, which should be formalized through a utilization plan include ranching restrictions, the need to reside on the land in order to maintain usufruct rights and prohibition of selling one's plot when leaving (De Sartre et al., 2012). According to the legislation of the Amazon biome, 80 per cent of rural landholdings must be maintained as forest reserves. This protected area is set aside for common use and assigned for conservation purposes. Sustainable forest management plans in the legal reserves can be submitted to the state environmental agency.

During the 13 years that the PDS VJ has existed, more than 500 families have lived there, with the annual average turnover rate of families in the settlement being approximately 20 per cent and steadily increasing (Porro et al., 2016). The initial group of settlers, called *os pioneiros*, has a much lower turnover rate and also displays a larger reciprocal exchange of labour and services than the other settlers.

Social stratification in the community is limited, due to the lack of ownership of land and low levels of capital accumulation. Very few run small businesses, especially within the settlement. In North-eastern Brazil, as well as most other parts of rural Brazil, the social network of reciprocal labour cooperation, exchange and mutual support

¹ According to INCRA's guidelines, the area of the PDS VJ allows the settlement of 352 families (INCRA, 2012). Conditions of local topography, soil quality and infrastructure, as well as disputes concerning contested land areas, resulted in the establishment of 160 homesteads. However, while 160 plots were established under PDS regulations, other 60 families occupied a portion of the land independently and contest the PDS modality, requesting the partition of near 6000 hectares from PDS land. During our study, the actual residents in the PDS VJ varied between 130 and 140 families (Porro et al., 2015).

mainly consists of close kin and people you regularly interact with in the community (Duarte, 1998; Porro, 2002). The high level of plot turnover in the PDS VJ, however, reduces these social networks. In North-eastern Brazil extended families are often used in the agricultural labour cycle in the farmers' regions of origin, but such extended families seldom exist among the families in the PDS. Larger reciprocal labour exchange forms, so-called *mutirões*, are also lacking. The settlers bring with them their social organization and agricultural practices from their home regions, mostly the poor hinterland of North-eastern Brazil, and struggle to adapt them to the new ecological and social conditions.

There is a lack of trust within the social groups responsible for the CBFM (Porro et al., 2015), as well as between these groups and the community at large. This lack of trust is the outcome of several interconnected factors, such as continuous migration and limited kin groups, lack of transparency and illegal timber trade. The CBFM pumped up money into the community, but also made community members suspicious of their leaders, who they suspect of bribery and conflict of interests. The general low level of social cohesion and trust within the settlement contributes to the low level of trust that the residents feel for the governing bodies of the settlement, the association and the cooperative. This is publicly demonstrated when acute problems arise, such as the poor execution of the CBFM in partnership with the timber company, thus eroding the legitimacy of the governing bodies. The weak social trust and social reciprocal networks within the community also create a greater dependence on brokers to negotiate with external actors and intervene actively on the behalf of the settlers than otherwise would have been the case, since the community association is too weak to represent the settlers efficiently.

However, the interaction with brokers risks increasing the distrust within the community organizations and within the settlement at large. A former president of the association, Osvaldo, based part of his political influence in the settlement on personal contacts with representatives of the timber company and influential people in the Anapu area. Initially, these contacts helped him to gain support within the settlement, since many residents believed that these contacts would benefit the community at large. But when the CBFM project ran into problems and eventually was stopped, Osvaldo's personal contacts and negotiations were instead seen as an example of his alleged corruption and untrustworthiness. If the entire association is involved in the relation with a broker this strengthens the collective organization and action, as was the case in the initial phase of the CBFM. But when the interactions with a broker are initiated by a specific individual or by small groups, it may lead to competition between factions within the settlements and internal tensions and conflicts, as was the case concerning the dialogue with the consultant Leon, which one of the political factions in the community initiated. There is also a need to distinguish between informal and institutional brokerage; the latter are made up of brokers who represent an organization of some kind, and who are often the legitimate representatives of the state. Brokers who only

intervene along with individuals or small groups of smallholders are almost invariably informal ones.

The mysterious trajectory of the assessment report

Anthropological scholarship has slowly started to give attention to the mediating power of the bureaucratic documents themselves (Hetherington, 2011; Hull, 2012a; 2012b). The interpretation of the texts of the documents may vary depending on a number of factors, such as the documents' position within the bureaucratic value chain, on the readers' 'framing', position and individual capriciousness, and of the political sensitivity of the moment.

The subjects of bureaucracy and the documents that define and constrain them have to adapt to the specific bureaucratic frames and interconnected categorizations. All forms of individual improvisation and 'bending the rules' have to take place within the parameters defined by the bureaucrats. The settlers do not have the power to re-define or re-classify the shibboleths of the bureaucratic framework on their own. There is, however, a potential distance between the formal classifications and categorizations and how people perceive, internalize and react toward them. The settlers are sometimes able to profit on this gap between formal definitions and informal usage by attracting brokers as mediators, who have the power to interpret and draw on these bureaucratic terms and discourses.

When Leon and his team presented their assessment report of the forest management project during the community meeting described in the beginning of the paper, we were dumbfounded by the harsh conditions for a potential re-opening of the CBFM that they presented. Most of the leading community members, however, seemed quite unscathed by the apparent predicament. This was even more surprising for us since we knew that the incomes from the CBFM had often made a large difference in the lives of the settlers. However, several of the settlers understood that the report was not formalized yet, and that the final verdict might deviate from Leon's pronouncements at the meeting. The report also became something of a weapon in the struggle between two of the leading factions for the control of the association.

When the report was presented at the meeting in the settlement it was never questioned that it was done on behalf of SEMAS and the Public Prosecutor's Office. It was taken for granted that it was only a matter of time before the report would be registered and its demands on the CBFM made formal. One of the leading young members of the community, Edith, had been seen speaking with Leon during the period they conducted the assessment. She was also the one who seemed to take the report's verdicts most literally. There are a number of actors to blame, she told us. Firstly, the timber company. Secondly, the forest engineer that the community had employed, but who was hand in glove with the company. Thirdly, the association's president, which had not taken his job seriously. His control of the operations had been very poor and he rather seemed to have cooperated with the company clandestinely.

They never questioned the information that the company gave them, for a start. The company, for example, never followed the management plan. They just took the beef off the plate; taking only the really valuable tree species, leaving the others behind. They were in a hurry and believed that SEMAS and the Public Prosecutor's Office risked closing down the management/.../. There were people who even accused us [Edith's political faction, see below] for the company's shortcomings. The company had told people that they would pay the community money they still owed us, if our group stopped accusing them of irregularities, so several settlers came to us and told us to shut up. We were even accused behind our backs of cooperating with the company!

Edith seemed to believe that the community was incapable of handling the forest management and that it would be best for the community if the operations were closed down.

The other political faction of the PDS VJ was not as pessimistic. They stated that the requirements put forward in the report were harsh, but that they might be able to solve these if the community would come to an agreement with the timber company. 'If we can negotiate with them, sign a new contract and make them take away the timber that now rots on the ground we can solve this', one of the leading members of the cooperative stated. The president and vice-president of the association chose to stay away from the meeting, however.

At this stage, it seemed as if the entire board of the association would have to resign. But in just a few weeks the community would hold a new election for the board of the association and a young idealist faction had appeared, led by Edith and a young man called Agamemnon. They tried to recruit a middle age respected woman to their faction; she seemed to accept, but then she suddenly decided to form a group of her own. The poor management of the CBFM was the most divisive issue between the groups.

Leon's report was first believed to be an official document, which would be authorized and then turned into concrete action. It was discussed by many settlers, as well as by local state representatives, as if its conditions were already formalized. We discussed with Osvaldo how the community would act in relation to the requirements, and he stated that the association had already started negotiations with both the timber company that had carried out the harvesting and with another company. The former would not clear the forest of timber on the ground, without having guarantees that it would be selected for a potential new round of forest harvesting.

Other settlers seemed to believe that Leon's report was the straw that broke the camel's back. A small number of veteran settlers started to invest more time, energy and resources in the production and processing of *açaí*-berries, which is a major commodity in the state of Pará. Others just went back to their small-scale agricultural production. But the above-mentioned delivery contract, regarded as illegal by the authorities, also continued to rapidly gain supporters among the settlers. Rumours around the production of Leon's report then started to circulate. According to representatives of INCRA, the two representatives from SEMAS did not agree with Leon's

conclusions and wanted milder requirements. But there were also discussions among the local authorities when the report was to be formalized by SEMAS. The report entered into a liminal state; it had been submitted, but not authorized; during a period of six months it was treated as a document, the requirements of which would eventually come into force. But slowly the document became increasingly peripheral to formal and informal discussions.

The bureaucracy that the settlers have to face frames their life trajectories and opportunities and often seems unpredictable to them. Laws and regulations many times have different origins and objectives and thus often seem to contradict each other. The resolution of these contradictions often appears as arbitrary to the settlers, and depends on the outcome of negotiations or outright manifestation of power, both legal and illegal. But this unpredictability and the conflicts between distinct objectives and areas of jurisdiction also enable actors to utilize the ambiguities of these legal grey zones, or create practices that do not follow the regulations.

The trajectory of the assessment report of the CBFM project in the settlement PDS VJ and the links with the future of the project itself, demonstrate these grey zones clearly. Six months after Leon team had visited the settlement, Edith, who was now working in the city of Altamira, stated that ‘we had to keep our eyes open, something was about to happen.’ A couple of days later a Greenpeace report on the deforestation in the Amazon was published and circulated, which explicitly pointed out the CBFM of the PDS VJ as an example of illegal timber trading. All the information in Greenpeace’s report seemed to coincide with the information in Leon’s report. Unexpectedly the report did not cause an uproar, but the impact on the PDS VJ seemed small, however. The main authorities involved, INCRA and SEMAS, did not seem very upset. Leon’s report was still kept in the office of SEMAS, but had not been authorized.

People at INCRA and SEMAS now told us that Leon had worked in coordination with Greenpeace all along. When we objected and argued that the team also consisted of evaluators from SEMAS, INCRA officials told us that Leon had conducted a joint report for Greenpeace and the Public Prosecutor’s office. Another official argued that Leon had actually only worked for Greenpeace, but had played a consultative role for the Public Prosecutor’s office.

Half a year after Leon had presented his evaluation report it had faded into the shadows. Those who had the deepest insight into the bureaucracy controlling the PDS settlements believed that the report was still at SEMAS’s headquarter in the capital city of the state of Pará, and that its fate was directly dependent on one of the heads of SEMAS, Adhemar.

CBFM reborn

We are sitting in a circle in an open-air meeting and party hall. The subject is the CBFM in the PDS settlements. The participants are representatives of the PDS associations, the PDS VJ cooperative, INCRA, (both the federal and municipal offices), the rural

workers' union (STRR), the Brazilian Agricultural Research Corporation Embrapa (also the conveners), and of the Public Prosecutor's office. Conspicuously absent is the deputy head of SEMAS, Adhemar, who initially had promised to come. Embrapa has funded a grant to conduct a re-assessment of the CBFM at PDS VJ. Initially the land reform agency, INCRA, supported the CBFM, but during the last years it became opposed to the activities because of the problems and irregularities that appeared. Or rather, the local head of INCRA had become increasingly critical of the CBFM. The meeting conveners have been able to summon the federal head of INCRA's environmental division, who is supportive of an agenda that includes forest management at land reform settlements. He starts by lamenting that farmers always believe that INCRA can do everything connected to the land; but when it comes to CBFM he emphasizes that the land reform agency's part is actually quite modest.

The license process to obtain a permit for forest management is extremely complicated and bureaucratic. INCRA mainly consists of agronomists, they feel lost when it comes to CBFM issues. If we go ahead with a new round of CBFM we need more cooperation partners and the contracts and the processes have to be transparent./ ... /what we would like to do is to fund a couple of CBFM pilot projects.

Despite the resistance from a number of actors, including the local head of his own agency, INCRA's environmental coordinator seems determined to re-initiate the CBFM in PDS VJ. He argues that CBFM projects probably are the best methods to stop illegal logging.

We must learn from our mistakes. A large problem is the damned bureaucracy. It must be simpler to run a CBFM-project. We don't have any possibilities to fund CBFM project in all settlements scattered over the Amazon. But I believe that it would be strategic to create a couple of pilot projects that can be used as blueprints in the future for CBFM-projects.

The head of INCRA's environmental division then announces that INCRA is willing to offer a onetime payment of near 2 million Brazilian reais (US\$740,000) for forest management operations. This happened less than one year after the CBFM project appeared to have been permanently terminated by the assessment report and lacked funding and technical expertise. Residents of the settlement seemed to have adapted to the new circumstances and few expressed any hope that the CBFM would restart. However, the gradual transformation of Leon's report from a legal to an informal document opened up the possibility of renewal of the CBFM project. Yet, the attempt to renew the project demanded the intervention of brokers, who had the cultural, social and symbolic capitals needed to negotiate with distinct federal and state branches, and to bridge policy gaps between the objectives of distinct federal and state agencies. A relaunch also required the power to draft and circulate new documents, applications, agreements, contracts, etc., that would make the CBFM appear as a new project rather than the continuation of a failed one.

The renewal of the CBFM also demonstrated how researchers can become brokers, or function as brokers in specific situations (cf. Bartholdson, 2007, pp. 79–84). Main brokers behind the renewal of the CBFM were researchers based at federal institutions who held strategic positions as they had researched the PDS settlements and knew actors in the federal and state branches of the government and the various research, development and academic organizations involved in the PDS settlements. During previous research visits, when the CBFM had been suspended, they acted as informal advisers to the settlement organizations and were able to bring up issues concerning land distribution and settlement, as well as aspects of the CBFM with local state representatives. By applying for project resources within national and state sources they secured funding for a three-year project in PDS VJ, uniting agronomists and foresters in a joint development and research project. Through this project it would be possible to conduct a forest inventory of the logged areas, to make another and a more thorough assessment of the irregularities. They also discovered that it was possible to apply for funding for a new round of sustainable forest logging operations at INCRA, and such an application was subsequently submitted. By bringing together the different actors - state representatives of the distinct branches, NGOs and popular movements – it was possible to bridge the policy and communication gaps between the state bodies and achieve a transparency, hitherto unknown in the history of the PDS settlements. This has been achieved, however, by facing severe bureaucratic and economic challenges that at times seem almost insurmountable.

Brokers – the black box of development projects

The CBFM project constitutes an event that transcends its original objectives and the bureaucratic frame that is supposed to encompass it. The political and social reality in the settlement is altered by the project, in ways none of the actors involved had foreseen. It causes divisions and fusions at both local and bureaucratic levels that have repercussions on many other areas outside the CBFM itself. The project itself is re-interpreted and reframed from its original formulation and perceived differently by both the settlers and INCRA.

We may regard the CBFM as a vehicle of assemblage; drawing together the settlers, various strands and levels of the state, NGOs, scholars, activists, as well as documents, such as laws, regulations, assessments and contracts. Tanya Murray Li (2007a, p. 264) defines assemblage as ‘the continuous work of pulling disparate elements together’, which definitely applies to this study. INCRA’s objective might be to strengthen the settlements, by providing the settlers with needed additional income, while decreasing the threat from illegal loggers; the environmental agencies IBAMA and SEMAS attempt to apply measures to conserve the rainforest; the settlers’ aims coincide with INCRA’s in general terms, although multiple specific plans can be connected with specific social groups; the timber companies strive to make profits from the trade

with timber and logging permits; and the consultants, as Leon's intervention demonstrates, can have both open and hidden agendas.

CBFM is situated within an arena of overlapping bureaucratic subfields (Bourdieu, 1994; 2014), where numerous actors follow their own 'logic of practice'. The bureaucratic fields display an internal logic, which often are very hard to grasp from an external point of view. The newborn CBFM in the PDS VJ would not have emerged if it had not been for the leading brokers' efforts to persuade the head of INCRA to re-initiate the project and thus transcend the bureaucratic and regulative divergences between INCRA and the state environmental agency, SEMAS. The CBFM of the PDS VJ is thus very deliberately created by the ideas and actions of specific actors. The brokers' actions, however, transcend their original objectives and even the fields, and cause ecological, social and cultural changes, which partly escape the actors themselves, who try to maintain the original objectives. Documents, instead of guiding the process, may well receive their importance and interpretation depending on the will of its reader and their position within the distinct fields and trajectories (cf. Fairclough, 2003; Hull, 2012a). For the settlers, the agricultural and forest bureaucracy does not take so much the form of an 'iron cage' (cf. Weber, 1978), as a straightjacket that substantially restricts their practices and potential opportunities. Modern bureaucracy in Brazil aims to be both impartial and partly protective of subalterns from the exploitation and oppression of stronger groups, but the last aim is not fully fulfilled. The laws and rules that regulate agriculture and forestry are created at centres far from the smallholders. The interpretation of these laws and rules, however, are often done closer to the smallholders. Sometimes the latter might even propose alternative interpretation through brokers, such as NGOs, popular movements and state representatives sympathetic about their situation. Subalterns at large, not least smallholders, may also sometimes exploit the struggle between distinct bureaucratic subfields concerning interpretations of laws and rules, as well as which regulations will be prioritized.

When the authorities suddenly agreed with the claims of the local organizations to give the CBFM of the PDS VJ a second chance, this was accomplished through brokers, who are well disposed toward the settlement. They both proposed alternative interpretations of events and documents and encouraged the authorities to accept these new interpretations. In order to be able to achieve such a change of course there is a need for brokers, who possess the right sort and amount of social, cultural and symbolic capitals, and thus are able to influence power-holders at different levels within the bureaucratic subfields, as well as bridge the tensions and contradictions between these subfields. The settlers themselves presently lack all such capital and are thus unable to re-initiate the CBFM on their own.

If the settlers at PDS VJ are able to turn the new CBFM into a success story (and this will be the subject of a forthcoming paper), it can be used by INCRA as a pilot project for CBFMs at other locations. The failures of the previous CBFM project have to be downplayed and re-assembled in a new form; drawing on new policies and documents, as well as on the re-interpretation of old ones. In order to accomplish this there is a

factor, likely lacking in all settlements, that none of the actors mention; the intervention of brokers who possess abundant amounts of economic, social, political and symbolic capital. Without such brokers the pilot project can never be replicated. On the other hand, if a CBFM has access to such brokers, the project can probably succeed, provided that it is internally well organized.

The role of the brokers constitutes a Latourian ‘black box’ (Latour, 2007)² to be found in many development projects; even the brokers often believe that forthcoming projects in some miraculous way will be able to do without them. In pilot projects, their role is often to facilitate the initiation and administration of the first project, be drivers in the process of assemblage, and help the target groups to overcome potential challenges. In reality, many projects risk falling like a house of cards if and when brokers pull out. We believe that the main reason for the authorities’ inability to grasp this fact is caused by the formal discourse of the development projects and the actors’ misrecognition of the actual situation, because of their inclusion within a bureaucratic field, thus turning the specific perspectives, norms and values of the field into *doxa* (cf. Bourdieu, 2000). The main actors who conduct most of the acts of assemblage are not an integral part of the design of the formal models they apply, but only temporary facilitators, according to the development discourse. Those who are on the receiving end, however, are mostly well aware of the important role the brokers play. In the PDS VJ settlement groups, factions and individuals constantly search for brokers, who can help them with all kinds of issues. As Graeber (2015, pp. 71–72) has argued, subalterns conduct what he calls an ‘interpretive labour’ all the time so as to decipher the complexities of the dominating groups’ ideas, values, rules and practices. The settlers cannot afford the luxury of adhering merely to the formal discourse of the project models, but have to grasp the fine-tuned social mechanisms behind the projects.

Conclusion

A CBFM project requires forest inventories, based on inventory maps, inventory lists, detailed budgets and contracts between the parties involved in all operations of the management, permits, audits, etc. These various documents in their turn require a wide array of different people from different sectors and societal levels, laws and regulations and technologies; making the project more complex than the initiators would ever have imagined in the start, and also expanding the network of people involved beyond the initial plans (cf. Hetherington, 2011; Li, 2007a; 2007b). The CBFM of the PDS VJ would in the end thus become more complex than either the smallholders or the local branch of INCRA had initially imagined. While it requires numerous experts and power-holders to produce and interpret the documents that regulated the

2 The use of the concept ‘black box’ in this paper is borrowed from the works of Bruno Latour. We specifically use the concept to designate an essential part of the functioning of objects and processes that is not observed, but taken for granted by the actors who use the objects or participate in the processes.

project, it makes the smallholders dependent on brokers who could speak on their behalf and access power-holders in key positions. No wonder that the smallholders were unable to foresee the outcomes of the project.

When the Public Prosecutor initiated an assessment of the CBFM and found a number of irregularities, the responsibility to take necessary measures to clear up these issues fell entirely on the shoulders of the smallholders. However, they lacked the necessary resources to be able to carry this burden. The CBFM was then put on hold and few people, if any, believed that the logging operations could restart. But two events caused the CBFM to take yet an unexpected turn.

First, the assessment's status would be debated by authorities and brokers, and the report would in a protean manner take on various forms, depending on the interests and predilections of the concerned authorities. Second, new brokers who had the capacity to bridge bureaucratic gaps between distinct branches of the authorities and to invest new resources, economic and human, in the CBFM process, would intervene on behalf of the smallholders.

The intention behind the legislation that regulates CBFM and the evaluation of its effects is to create impartiality and to protect the rights and interests of the local users and beneficiaries. The reality, however, is quite different, as shown in this paper. Local users more often do not possess the necessary forms of capital to safeguard their rights. However, other actors involved in forestry, above all timber companies, have economic, social and cultural capital to either turn legislation and policies to their advantage or dodge them. The locals, however, make use of a form of 'weapons of the weak' (cf. Scott, 1985), which mainly consist of modern forms of patron–client relationships, connecting smallholders individually and collectively to different brokers. These brokers often have access to the capital needed to challenge predatory actors involved, bridge gaps between governmental bodies and make the interpretations of documents more advantageous to the locals. The brokers' interventions often affect the project and lead to changes of both forms and contents. Brokers have their own agendas and interests, which do not necessarily coincide with the locals' interests, or force them in an unexpected direction.

The incomprehension of the actual role that the brokers play cause projects, such as the CBFM to either constantly fail or develop in unintentional directions. The designers of the projects search in vain for the mechanisms that make a project work, but the main asset is the role of the brokers, who are often withdrawn when the project is up for reproduction. The brokers really constitute a 'black box' (Latour, 2007).

One of the most essential aspects of projects, such as CBFMs, is the local users' ability to contact and attract influential brokers who can intervene in the process. Left on their own the smallholders in the PDS VJ were forced to take the blame for all irregularities and they lacked the necessary political and social capital, as well as finances skills and expertise to operate and restart the CBFM. Political and social capitals were perhaps the most important assets that the smallholders could possess, since they facilitated the contact with the brokers.

Funding

This work was supported by Vetenskapsrådet [grant number 421-2011-2114].

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References

- Abrams, Philip, 1988, 'Notes on the difficulty of studying the state', *Journal of Historical Sociology*, Vol. 1, No. 1, pp. 58–89.
- Bartholdson, Örjan, 2007, *From Slaves to Princes. The Role of NGOs in the Contemporary Construction of Race and Ethnicity in Salvador, Brazil*, Stockholm: Stockholm Studies in Social Anthropology 62, Stockholm University.
- Bartholdson, Örjan, Malin Beckman, Linda Engström, Klara Jacobsson, Kristina Marquardt and Lennart Salomonsson, 2012, 'Does Paying Pay Off? Paying for Ecosystem Services and Exploring Alternative Possibilities', Uppsala: Reports: Department of Urban and Rural Development no1/2012.
- Bourdieu, Pierre, 1994, 'Rethinking the state: Genesis and structure of the bureaucratic field', *Sociological Theory*, Vol. 12, No. 1, pp. 1–18.
- Bourdieu, Pierre, 2000, *Pascalian Meditations*, Cambridge: Polity Press.
- Bourdieu, Pierre, 2014, *On the State. Lectures at the College de France 1989-1992*, Cambridge: Polity Press.
- Bratman, Eve Z., 2014, 'Contradictions of green development: Human rights and environmental norms in light of Belo Monte dam activism', *Journal of Latin American Studies*, Vol. 46, No. 2, pp. 261–289.
- Cromberg, Marina, 2012, 'Meios de vida no polo Pro-ambiente da transamazonica, PA [Livelihood within the Pro-ambiente project along the Transamazon highway, PA]', Programa de pos-graduação em planejamento territorial e desenvolvimento socio-ambiental, MPPT. Centro de ciencias humanas e educação. Universidade de Santa Catarina.
- De Sartre, Xavier A., 2012, 'Berdoulay, Vincent and da Sulva Lopes, Raquel, 2012, Eco-frontier and place-making: The unexpected transformation of a sustainable settlement project in the Amazon', *Geopolitics*, Vol. 17, No. 3, pp. 578–606.
- Dean, Mitchell, 2010, *Governmentality. Power and Rule in Modern Society*, London: Sage.
- Duarte, Élio Gárcia, 1998, *Do mutirão a ocupação de terras: manifestações camponesas contemporaneas em Goiás* [From mutirão to Occupation of Land: Peasant Manifestations in Contemporary Goiás], São Paulo: Faculdade de Filosofia, Ciências e Letras, USP
- Elfving, Maria, 2010, 'Payment for Environmental Services. A Tool for Forest Conservation and Empowerment of the Local People in the State of Amazonas, Brazil?', Bachelor thesis in

- development studies, FU5313. International Social Science Program. Linnaeus University, Sweden.
- Fairclough, Norman, 2003, *Analysing Discourse. Textual Analysis for Social Research*, London: Routledge.
- Foucault, Michell, 1974, *The Archaeology of Knowledge*, London: Tavistock Publications.
- Graeber, David, 2015, *The Utopia of Rules. On Technology, Stupidity, and the Secret Joys of Bureaucracy*, Brooklyn: Melville House.
- Hecht, Susanna B., 2013, *The Scramble for the Amazon and the Lost Paradise of Euclides da Cunha*, Chicago: The University of Chicago Press.
- Hetherington, Kregg, 2011, *Guerilla Auditors. The Politics of Transparency in Neoliberal Paraguay*, Durham: Duke University Press.
- Hull, Matthew S., 2012a, 'Documents and bureaucracy', *Annual Review of Anthropology*, Vol. 41, pp. 251–267.
- Hull, Matthew S., 2012b, *Government of Paper. The Materiality of Bureaucracy in Urban Pakistan*, Berkeley: University of California Press.
- INCRA – Instituto Nacional de Colonização e reforma agrária, 2002, 'Portaria / INCRA / SR-01 (G) / No 39/2002'. 13 de novembro de 2002.
- INCRA – Instituto Nacional de Colonização e reforma agrária, 2012, 'Relação de projetos de Reforma Agrária [The conditions of the land reform projects]', www.incra.gov.br/index.php/reforma-agraria-2/projetos-e-programas-do-incra/relacao-de-projetos-de-reforma-agraria/file/1115-relacao-de-projetos-de-reforma-agraria (accessed 27 January 2014).
- Latour, Bruno, 2007, *Reassembling the Social. An Introduction to Actor-Network-Theory*, Oxford: Oxford University Press.
- Lewis, David and David Mosse, 2006, *Broken and Translators. The Ethnography of Aid and Agencies*, Bloomfield: Kumarian Press.
- Li, Murray T., 2007a, 'Practices of assemblage and community based forest management', *Economy and Society*, Vol. 36, No. 2, pp. 263–293.
- Li, Murray T., 2007b, *The Will to Improve. Governmentality, Development, and the Practice of Development*. Durham: Duke University Press.
- Lindquist, Johan, 2012, 'The elementary school teacher, the thug, and his grandmother: informational brokers and transnational migration from Indonesia', *Public Affairs*, Vol. 85, No. 1, pp. 69–89.
- Lindquist, Johan, 2015, Brokers and brokerage, anthropology of, in *International Encyclopedia of the Social & Behavioral Sciences*, 2nd edition, Amsterdam: Elsevier.
- Matta, Roberto. 1991. *Carnivals, Rogues, and Heroes: An Interpretation of the Brazilian Dilemma*, Notre Dame: University of Notre Dame Press.
- PNUD / IPEA / FUNDAÇÃO JOÃO PINHEIRO. (2013), 'Perfil do Município de Anapu. Atlas do Desenvolvimento Humano no Brasil 2013 [Profile of the Anapu municipality. Atlas of Human Development in Brazil 2013]', http://atlasbrasil.org.br/2013/pt/perfil/anapu_pa (accessed 27 January 27 2014).
- Porro, Roberto. 2002. 'Palms, Pastures and Swidden Fields: Political Ecological Trajectories and Socio-Natural Transformations in Peasant Communities in Maranhão, Brazil', PhD-dissertation. University of Florida.
- Porro, Roberto, Noemi M. Porro, Marion C. Menezes and Örjan Bartholdson, 2015, 'Collective action and forest management: Institutional challenges for the environmental agrarian reform in Anapu, Brazilian Amazon', *International Forestry Review*, Vol. 17, No (S1), pp. 20–37.
- Porro, Roberto, N. S. M. Porro, H. J. do Nascimento Assunção, F. Cezária, O. Watrin and M. T. S. M. Thamyres, 2016, 'Mobilidade, renda e desmatamento no PDS Anapu.

- Diversidade e resiliencia do campesinato em assentamento com ênfase ambiental na Amazônia’.
- Randell, Heather, 2016, ‘The short-term impacts of development-induced displacement on wealth and subjective well-being in the Brazilian Amazon’, *World Development*, Vol. 87, pp. 385–400.
- Sahlins, Marshall, 1987, *The Islands of History*, Chicago: Chicago University Press.
- Scott, James C, 1985, *Weapons of the Weak. Everyday Forms of Peasant Resistance*, Yale: University Press.
- Spivak, Gayatri Chakravorty. 1999. *A Critique of Postcolonial Reason. Toward a History of the Vanishing Present*, Cambridge: Harvard University Press.
- Weber, Max, 1978, *Economy and Society*. Berkeley: University of California Press.
- Zizek, Slavoj, 2014, *Event. Philosophy in Transit*. New York: Penguin Books.