

Ambivalent cartographies: Exploring the legacies of indigenous land titling through participatory mapping

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Introduction

In August 2011, I began a six-month stay in Tarairí (a pseudonym), a remote Guaraní indigenous community in the Chaco region of South-eastern Bolivia. My objective was to gain a new perspective on the dynamics and legacies of Native Community Lands (*Tierras Comunitarias de Origen - TCOs*), collective indigenous territories created under Bolivia's 1996 INRA Law during a period of neoliberal reform. I had already spent eighteen months investigating the TCO land titling process, an endeavour that had involved engagements with indigenous organisations, local NGOs, the state land reform agency and non-indigenous land claimants.¹ By living in Tarairí – a Guaraní-speaking community at the heart of the TCO claim 'Itika Guasu' – I sought to gain a new perspective on indigenous territories beyond the world of indigenous politics, NGO activism and state bureaucracy. I wanted to understand not only the implications of this legal-bureaucratic process for indigenous community members, but also the life-world and everyday struggles that gave meaning to the Guaraní project of 'reclaiming territory'.

My plans for community-level work encountered an early obstacle when, after just two weeks in Tarairí, I broke my ankle playing football. Following a 24-hour journey to get medical treatment in the regional capital, I returned to Tarairí with my lower leg in plaster. One day, not long after my return, I was sitting in the crumbling adobe pre-school centre while the children painted my plaster with colourful representations of community-life. As usual, I had with me a notebook that I used for my Guaraní language study. Two

¹ I began the research in 2008, when I worked for ten months as a self-funded volunteer in the NGO CERDET (Centro de Estudios Regionales para el Desarrollo de Tarija). My first year in Tarija was spent attending indigenous assemblies, amassing documentation on the Itika Guasu TCO claim, researching regional history and conducting interviews with a variety of actors involved in the titling process. I returned to Tarija in January 2011 for fourteen months of doctoral fieldwork, which included interviews and archival research on the mapping of indigenous territories, interviews and participant observation with non-indigenous land claimants and community-level ethnography in Tarairí.

teenagers, curious about the gathering, had picked this up and were marvelling over the columns of Guaraní and Spanish words when a large folded sheet of paper fell out. It was a map of the TCO divided into polygons, which I had highlighted in different colours to show the land awarded to the Guaraní in two separate land titles. The map became subject to intense scrutiny by the young woman and man, who were able to identify some place names and rivers. I asked them if they had ever seen a similar map before, and they said they hadn't. In the conversation that followed, it became clear that they did not know what 'Native Community Land' or 'TCO' meant, although they were aware that they lived in 'Zone 2'.²



Figure 1. Young man and woman examine photocopied map of TCO Itika Guasu (photos by author)

Having spent much of my previous fieldwork immersed in Guaraní assemblies and NGO offices, where the TCO was a central political and geographical category, and visual representations of it were ubiquitous, these young people's lack of familiarity came as something of a surprise. As the weeks went by, however, I realised that they were not exceptional. The TCO, its boundaries and its legal results did not crop up in everyday conversations in Tarairí, even when people discussed problems of land access, as they frequently did.

² Official state and NGO maps of TCO Itika Guasu represent the territory as divided into three zones. These were created by NGOs in the early 1990s and were subsequently incorporated into the institutional structure of the Guaraní organization and used to structure state land-titling work.

I have begun with this seemingly mundane encounter, because it prompted me to ask new kinds of questions about the power and limits of official legal-cartographic knowledges – questions that led me to experiment with new methods, including participatory mapping, focus group discussions and a walk to official boundary markers. This paper reflects on the possibilities and limitations of these methods, as a complement to those deployed at other scales, for understanding the power-knowledge dynamics that structure subaltern groups' engagements with postcolonial state bureaucracy and cartography.³

At one level, this paper is about what we can learn about state bureaucracies by venturing beyond offices or archives to view their legal-cartographic knowledges 'from the margins of the state' (Das and Poole, 2004) – including from the perspective of the people and places they claim to represent. More specifically, the paper reflects on the possibilities and limits of participatory mapping as a method for exploring the power effects and erasures of state maps. As I will elaborate, my participatory mapping exercises in Tarairí intended to make visible indigenous geographical imaginaries that had been effaced by the official TCO land-titling process. What I discovered was that these methods shed light on the translations, exclusions and silences that had underpinned the production of activist and official maps of indigenous territories.

The paper is structured as follows. Part one discusses maps as a foundation and manifestation of state power and bureaucratic authority – and as a potential instrument for indigenous decolonial struggles. Part two situates my mapping experiments in the context of my broader methodology and in relation to two previous traditions of participatory mapping: Participatory Action Research and counter-mapping. Part three details the participatory mapping exercises I conducted in Tarairí, the insights they yielded and the unanticipated power dynamics they gave rise to. The paper concludes by describing a walk with community members to an official boundary marker as a basis for further reflections on the power of maps in postcolonial contexts and the ambivalent possibilities of participatory mapping as a means of interrogating these power effects.

Bureaucratic abstraction and the power of maps

³ I use Foucault's neologism 'power-knowledge' (*savoir-pouvoir*) (1981: 92-102) to refer to the ways in which cartography reflects and reproduces power relations, rendering some knowledges 'true' and legitimate and others 'false' and illegitimate.

Maps play a central role in processes of state-formation and in the everyday functioning of state bureaucracies (Lefebvre, 1978 and 1991; Scott, 1997; Thongchai, 1997; Mitchell, 2002; Wood, 2010; Brenner and Elden, 2009). Maps do not merely represent objects *in* space, but *produce* the abstract, homogenous space of the state – a spatial production that overwrites historical conditions and internal heterogeneity, providing a *tabula rasa* for the operation of state power and capitalist social relations (Lefebvre, 1991; Brenner and Elden, 2009). As representations of space (Lefebvre, 1991: 33 and 38-39), maps are integral to the physical and social production of state space, including the state's material infrastructure, state bureaucracy and mental conceptions of the state and its territory (Lefebvre, 1978: 224-5).

The capacity for abstraction underpins state bureaucracy; it enables knowledge to be removed and concentrated at new sites, producing an apparent gap 'between reality and its representation, between the material and the abstract, between the real world and the map' that makes possible rule at a distance (Mitchell, 2002: 116). From a more instrumentalist perspective, maps have been discussed as a central technique through which the state's territory is 'rendered legible' (Scott, 1997). Following the rise of geographical information systems (GIS), state mapping has become increasingly linked to forms of statistical knowledge, providing the basis for 'cartographic calculations of territory' (Crampton, 2010). As representations, maps help construct the 'geo-body' of a nation – its territory, its related values and practices, and its historical consciousness (Thongchai, 1997). The 'power of maps' lies partly in their capacity to present themselves as objective and value-free, obscuring ethnocentric and class-based hierarchies of representation (Harley, 1989).

In postcolonial contexts, the abstract space of state cartography is predicated on the violent dispossession and erasure of indigenous peoples (Radcliffe, 2011; Sparke, 2005). Maps thus form an intrinsic part of the 'coloniality of power' – an assemblage of Eurocentric knowledge practices that subjugate indigenous epistemologies and sovereignties (Quijano, 2000). At Bolivia's Chaco frontier, the cartographic erasure of indigenous peoples has historically gone hand-in-hand with state-backed indigenous dispossession – from the awarding of supposedly 'empty' lands to settlers to the recent parcelling off of the Chaco subsoil to transnational hydrocarbon companies (Anthias, 2018).

However, maps are not only instruments of the state. Over recent decades, a proliferation of ‘countermapping’ initiatives have sought to demonstrate how mapping can also be a tool of empowerment for marginalised groups, particularly indigenous peoples (Chapin et al., 2005). Using participatory methodologies (discussed below), indigenous mapping projects aim to challenge the exclusions of postcolonial cartography and protect indigenous peoples from ongoing processes of territorial dispossession. Yet, the endpoint of such projects is often legal-cartographic recognition *by* the state – as in the case of Bolivia’s TCOs.

The possibilities and limits of such cartographic engagements has been a central question for scholars studying indigenous mapping and land claims processes.⁴ While some scholars have emphasised the empowering effects of indigenous mapping (Hunt and Stevenson, 2017; Herlihy, 2003), others highlight how modern cartographic conventions work to silence alternative territorialities (Bhandar, 2011; Mollett, 2013), reinscribe state sovereignty over indigenous territories (Ng’weno, 2007; Wainwright and Bryan, 2009) and make indigenous territories legible to outsiders, including governments, investors and military actors (Bryan and Wood, 2015). These debates point to broader dilemmas of postcolonial recognition, where subaltern groups are forced to engage in colonial knowledge practices that reproduce their marginalization (Fanon, 2007; Coulthard, 2014).

Within this context, this paper considers what kinds of *methods* might enable the researcher to probe into the possibilities, power and erasures of maps as a site of encounter between state and indigenous territorial projects – and what mapping itself might offer in this regard. In the next section, I outline the methodological pathway that led up to my participatory mapping activities in Tarairí and situate these methods in relation to previous approaches to participatory mapping.

Participatory mapping as a reflexive methodology

During my first year of fieldwork in the Bolivian Chaco (2008-9), my focus was on understanding the politics and outcomes of the TCO land titling process. I conducted in-depth interviews with Guaraní leaders,

⁴ For example, see Bryan, 2009 and 2012; Wainwright and Bryan, 2009; Mollett, 2013; Bryan and Wood, 2015; Peluso, 1995; Ng’weno, 2007; Hodgson and Shroeder, 2002; Bhandar, 2011; Herlihy, 2003; Gordon et al., 2003; Radcliffe, 2011; Chapin et al., 2005; Louis et al., 2012; Hunt and Stevenson, 2017.

NGO staff, state officials and private landowners, analysed legal documentation and cartographic data, and attended meetings of the Guaraní organisation and the local cattle ranchers' association. These methods revealed how racialised institutional inequalities, colonial discourses of rights and hydrocarbon interests had shaped the outcomes of TCO claims, resulting in the fragmented legal landscape depicted on the map I had inadvertently shown the young people in Tarairí ([author citation] 2018).

It was only after I returned to the UK that I thought to enquire into how 'TCO Itika Guasu' as a geographical category had come into being. When I returned to Bolivia in 2011-12, I interviewed activists involved in mapping indigenous territories during the 1990s, searched institutional archives for records of this indigenous mapping process and triangulated these sources with Guaraní accounts of the construction of a territorial claim. This work revealed that the boundaries of TCO Itika Guasu were neither the inscription of an indigenous geographical imaginary nor an imposition of the state, but rather the result of a complex set of political struggles involving diverse actors, imaginaries, and agendas. I was struck by the agency of *non-indigenous* actors – activists, anthropologists, NGOs, and finally state bureaucrats – in mapping indigenous territories. Documents and maps I collected provided evidence of the translations and pragmatic adjustments involved in making indigenous territorial claims legible – and acceptable – to the state.

Notwithstanding these insights, I began to feel that my perspective on TCOs was limited by my location within an institutional field of power – the world of NGOs, indigenous organizations and state bureaucracy. Through a period of participant observation in Tarairí, I sought to gain a different perspective on the Guaraní struggle for territory – a perspective grounded in everyday life of Guaraní communities. My initial months in Tarairí were spent participating in daily tasks. While talk of the TCO was rare, there was much to be learned from observing community life. This included the persistent problems of land scarcity facing community members; how lines drawn by state cartographers had come to be significant in inter-communal resource conflicts; and the networked more-than-human relations that constituted Guaraní territory beyond state maps. Still, as I neared the end of my six-month stay, I reflected on the gap between my research outside and inside the community. Inspired by the incident with the TCO map and the young people (described in the Introduction), I decided that it was time to venture beyond my participant-observer positionality and ask people explicitly about the TCO, its boundaries and its legal results. To this end, I planned a series of more structured activities to explore the relationship between community members' knowledges of territory and

the legal-bureaucratic knowledges of the state.

In designing these activities, I drew on two main methodological traditions. First, Participatory Action Research (PAR), which uses participatory and visual methods to as a means to shift the power relations of the research process, facilitate local ownership of research and empower participants to transform their situation (Chambers and Guijt, 2011; Cornwall, 2011). PAR uses a variety of map elicitation exercises – including social maps, health maps, demographic maps, mobility maps, resource maps, and maps from transect walks – to capture participants’ perceptions, experiences, views and objectives. I had encountered PAR during ethnographic methods training at the University of Cambridge and while working at the Institute of Development Studies in 2007-8. A Bolivian friend who worked in a local NGO also gave me specific ideas.⁵ While not activist in orientation, my methods resembled PAR in so far as they were participatory, visual and experimental and sought to give voice to local knowledges that were effaced by official knowledges of the TCO.

I was also informed by countermapping methodologies. While these can vary widely (Hunt and Stevenson, 2017), in the context of indigenous territorial claims, countermapping often involves activist researchers working with community members to map territorial boundaries, indigenous place names and resource use practices, which are then transferred onto standard base maps (Chapin and Threlkeld, 2001). My interviews with activists and anthropologists had revealed the specific methodologies used to map indigenous territorial claims in Bolivia, which included indigenous place names, land use charts and oral accounts of territorial boundaries. Unlike activist counter-mappers, however, my methods were not designed to achieve state recognition or make indigenous geographies legible to outsiders. Rather, I sought to explore the lasting effects of such recognition for indigenous communities. As such, while my methods were similar to those deployed in countermapping projects, the objectives were quite different, giving rise to an approach that was exploratory and reflexive rather than strategic and oriented towards a final cartographic product.

In their Introduction, the editors of this Special Issue identify *stages*, *positions*, and *techniques* as three pathways of immersion in the bureaucratic field. Following my engagements at other scales, my participatory mapping experiments in Tarairí aimed to interrogate the legal-cartographic construction of TCOs *off stage* – beyond the world of state bureaucracy and indigenous politics. These activities also staged

⁵ Credit to Aldo Villena, based on his work at Comunidad de Estudios JAINA.

a new kind of encounter between Guaraní and state knowledges of the TCO. As I elaborate below, this entailed a shift in my *position*, from ethnographic immersion in community life to a more removed standpoint: as the facilitator of focus groups and an authority on official knowledges of the TCO. If this distanced me from my Guaraní interlocutors, then it entailed its own kind of immersion in the *techniques* of state bureaucracy. This experience not only revealed the diffuse power of maps, but also highlighted my own privileged access to state knowledges and imbrication in a bureaucratic field of power. In what follows, I describe the design and rationale of my mapping activities, before considering the insights they yielded and their unanticipated effects.

Centring local knowledges? Experiments in participatory mapping

Design and rationale of mapping activities

I began by organizing two focus groups (for men and women), based around a series of mapping activities. I decided to hold separate focus groups for men and women because I had observed strong gendered differences in labour, mobility, expertise and community organization. Most adult men spent much of the year away from the community working in casual jobs, leaving women to take charge of most domestic and communal tasks. Men were more likely to speak Spanish and take on roles within the indigenous organisation. As such, I anticipated gendered differences in knowledges of territory and the TCO. I also expected that women would be less forthcoming in a group that included men.

I announced the focus groups at a communal assembly (a form of gaining consent) and visited each of the thirteen households to issue an invitation. Following the model of community assemblies, most households sent one representative for each ‘yemboati’ (Guaraní: meeting), generating a manageable number of participants (9 men and 10 women) and ensuring even representation across households. I selected the community’s health centre as the site for the group activities, placing several large tables and chairs in the courtyard. The focus groups were held on different days beginning in the late afternoon, once the daytime heat had subsided but several hours of light remained.

The focus group activities were structured in three parts:

Activity 1: Tarairí and its surroundings

- a) Participants drew a map depicting 'Tarairí and its surroundings'.*
- b) With reference to the map, each person described places where they go on the map when they're not at home and what for.*
- c) With reference to the map, the group discussed: Does the community have limits? Where are these? Are they the same as the legal limits of the community?*

In the first exercise, participants were asked to draw a map depicting 'Tarairí and its surroundings'. I stressed that it did not have to be an official or correct map and asked them to include whatever they considered to be important. The objective was to explore how community members imagined their location within the surrounding landscape and what places and geographical features they deemed significant. Activity 1b explored their movements in and around the community. I was particularly interested in noting differences between men and women, and between different age groups.

Activity 1c aimed to shed light on the extent to which community members conceived of Tarairí as having a boundary. Although the TCO is legally a collective territory of 36 Guaraní communities, in their surveying work state cartographers had measured communities individually. Ethnographic experiences suggested that this had influenced Guaraní understandings of community boundaries and associated resource rights – something I was keen to explore further with the help of visual aids.

Activity 2: Other important places

- a) On a new sheet of paper, participants were asked to draw other important places where they go when they are not in the community.*
- b) I elicited from group: Why is the place important? What do you do there? How often do you go there? How long do you stay? How many of the group go there?*
- c) I asked participants how they describe the community and its location to outsiders, both within O'Connor Province and further afield.*

Activity 2 aimed to gain a sense of community members' movements beyond the community and what imaginative geographies accompanied these. I sought to understand Tarairí as a place constituted in relation to other places, where the boundaries of the TCO may or may not be significant. By asking community members how they described the community to outsiders in different places (2c), I also hoped to explore the

degree to which ‘TCO Itika Guasu’ was recognised by non-indigenous inhabitants of the region and how racialised hierarchies in knowledge, sovereignty and territoriality structure indigenous peoples’ ability to make the TCO present in their interactions with non-indigenous outsiders.

Activity 3: Discussion of SAN-TCO (the state land-titling process)

a) I asked participants: What is the TCO? What is it called? What is it for? What is the titling process called? Where does the TCO begin and end? (I show a map of province) How much has the state already titled?

b) Explanation: I gave a presentation covering a brief history of the land struggle, the land titling process, and progress so far

c) Discussion: Is it important to finish the titling of the TCO? Do you believe it will be completed?

Activity 3 addressed more explicitly the relationship between community members’ geographical knowledges and the state’s legal-cartographic production of the TCO. Activity 3b provided an opportunity to share knowledge that I had acquired about the TCO before leaving the community. This was guided more by local norms of reciprocity than by a conviction that this knowledge would be beneficial for community members. In conjunction with the discussion that followed (3c), I was also interested to observe the value community members themselves placed on this knowledge.

Evaluation of mapping activities

While there is not space for a detailed account of all these mapping activities, it is worth highlighting some of the insights they generated. First, as I had hoped, they shed light on gendered differences in territorial imaginaries and practices. For example, in Activity 1a, the men gave priority to the household plots they farm, while the women began by drawing the communal plot and omitted individual household plots altogether. In Activity 2, the maps produced by men and women were strikingly different, revealing gendered geographies of work, travel and kinship relations. The women’s map showed the four Guaraní communities most often visited, usually on foot, while the men’s map showed various places the men go to work, including a nearby hacienda, Bolivian cities and a farm outside of Buenos Aires.

These mapping activities helped construct a picture of indigenous spatial practices that transcended the logic of bounded territories represented on state maps of TCOs. In Activity 1b, both groups' maps challenged the primacy of the TCO as a spatial category – the women's map showing strong links to some TCO communities and few links with others, while the men's map showed how livelihoods are forged across multiple spaces beyond the TCO. Subsequent discussion (2c) s highlighted the marginality of the TCO within non-indigenous geographical imaginaries and revealed how geographical descriptions were shaped by racialised hierarchies; the men reported fearing discrimination if they admitted to being from a Guaraní community, but also being made fun of (and criticised more harshly for their Spanish) if they tried to 'deny their race' by not mentioning it.



Figure 2. Men's map of "Tarairí and its surroundings" (Activity 1)

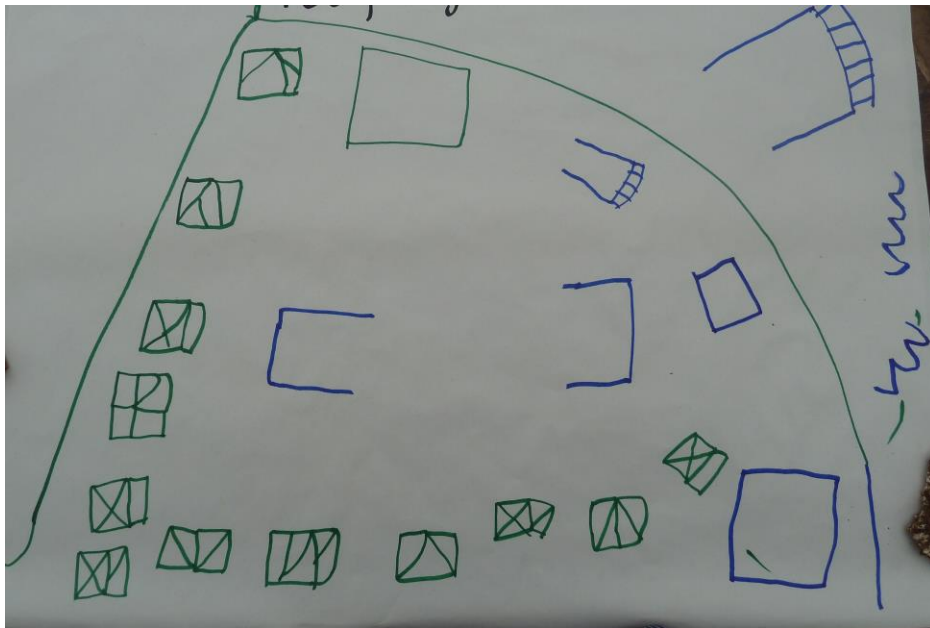


Figure 3. Older women's map (Activity 1)

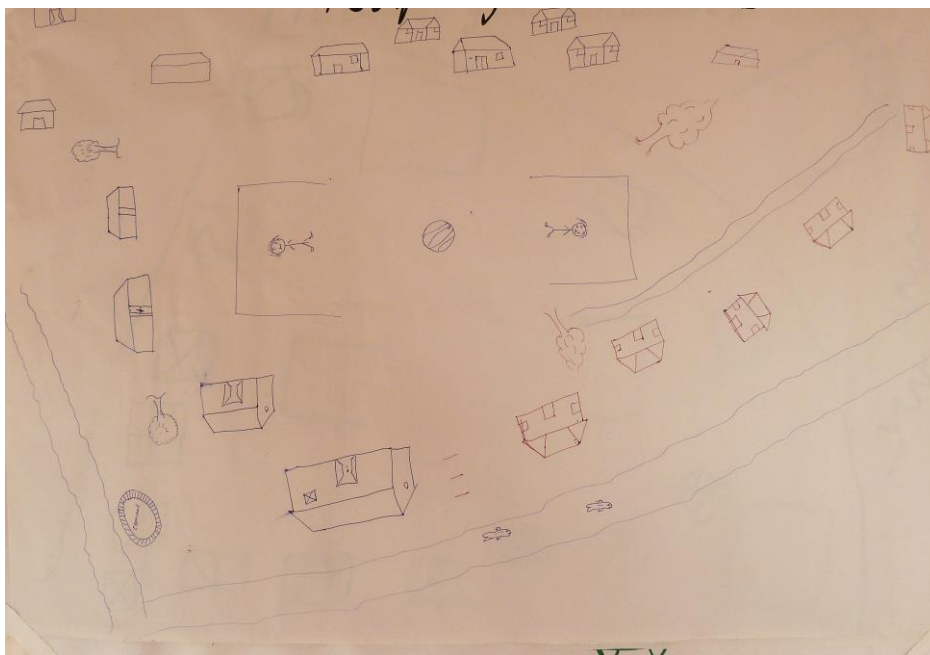


Figure 4. Younger women's map (Activity 1)

The activities also extended insights I had gained from participant observation regarding local conceptions of community boundaries and associated environmental entitlements, and how the TCO titling process had influenced these. The discussion with the men's group in Activity 1c was particularly illuminating, revealing

that community boundaries were not necessarily accepted or clearly located but could not be completely ignored – particularly given that a neighbouring community had fenced some palm trees within an area delineated as by state cartographers as belonging to that community. The discussion also revealed how conceptions of boundaries had shifted over time, with young men amused by older men's memories of a territory without boundaries.

Despite these insights, these activities challenged the idea of participatory mapping as a means of centring local knowledge or rendering legible indigenous geographies eclipsed by state maps. Instead, community members' approach to mapping was heavily influenced by their prior experiences of maps and their ideas of what was appropriate to this convention. For example, the men elected as their scribe Pablo, the community's nurse and the only state employee in the community. Pablo's approach drew on his previous experience making a map of the community for a state fumigation programme against the parasite that causes the Chagas disease – a hand-drawn map that hung on the wall of the community health centre. What made the men so proud of the map they produced was the fact that it conformed to (or at least aspired to) positivist norms of scientifically accurate cartographic representation (Harley, 1989).

Anticipating a similar dynamic among the women, I divided them into two groups: older women, who had no formal schooling and speak little or no Spanish, and younger women, who had completed primary Spanish language schooling in the community. This avoided only the younger women being elected as scribes and the older women, despite initially claiming that they “did not know how to draw”, eventually produced a map that was less tied to conventional (non-indigenous) forms of representation. This was the only map that included the forested hills behind us, described as ‘īwī’ (Guaraní: territory) and represented by a wiggly line. Nevertheless, the older women remained uncomfortable with the activity and evidently felt that their map was inferior to the map produced by the younger women.

In other words, the very act of mapping seemed to privilege non-indigenous forms of representation and those who were familiar with such conventions, while marginalising those who were not. This raised questions about the indigenous mapping efforts of the 1990s, when activists, anthropologists and NGOs had engaged indigenous community members in mapping out territorial claims that could be presented to the state, which eventually became recognised as TCOs. Whose knowledge, I wondered, had informed the production of these maps and whose knowledge had been excluded?

These ambivalences deepened during the final activity (Activity 3), when I explicitly asked participants about the TCO and its boundaries. The following passage from the men's focus group (based on abridged fieldnotes and a transcribed recording) is illustrative of the dynamic that emerged:

I ask what the TCO is. Pablo says 'Tierra Comunitaria de Origen' (Native Community Land); others say that don't know this. Someone says 'it's something old'. Pablo is on the point of explaining to others but I tell him to hold off and ask the younger men if they have heard of the TCO. There is a long pause. I ask if we live inside a territory; they say they don't know. Boni explains apologetically that they don't know, INRA should have come to explain to the community members. I ask if people have heard of Itika Guasu. What is it? They say the Pilcomayo River (the direct Guaraní translation). I ask those who know more to explain what is the TCO. Pablo explains:

Pablo: Where the limit of Tarairí is – that's what the TCO means for us.... I don't know where it includes, but we have the TCO. We are inside of the TCO...because there's a map, I believe Kuñati⁶ has it, there's a map [that shows] where the TCO extends to, where it encompasses, to the east, to the north, to the south, to the west....

Boni: 3 zones

Pablo: For the three zones – that's what the TCO is. And the zone Itika Guasu is also where we live. The TCO is very...that is...it's recognised by the state. The TCO is recognised. It's where.... where a landowner can't sell the land.

He claims he learned this from taking part in APG meetings and chastises the younger men present for not taking part:

Pablo: Because we lack [knowledge]. Now Kuñati herself is asking you.

- True. And we don't know anything.

Pablo: And now you can feel bad – how bad that we don't know.

- Sometimes one goes to the meeting and...

- Doesn't pay attention

Pablo: They don't pay attention.

Later in the conversation, Pablo reiterates his the point:

⁶ Kuñati means 'white [Guaraní] woman' in Guaraní and is my name in Tarairí.

We too, as the interested party, we have to be up to speed, because it's always useful – people come here to ask and we have to know something to answer, you see? Even me, I know nothing! Look, Kuñati – it's not long ago that she came and she already knows everything. And we, the interested party, we don't know anything! Above all, young people... If there is ever a course, if there's a training in some things we should go. That's what the office of [the Guaraní organisation] is for. They should have documentation to... at least to see something of the TCO. [We should say] 'I'm interested in that, I need photocopies, lend me some, or if not, give me the photocopies – I want to know'. That's what we have to do. Why does Kuñati come with these papers and already know well? Because she goes, she wants to know, [she says] 'Lend me [the documents]'. And she goes away to study them and then she knows well. And despite the fact that she's from another country, and we, who are the interested party, we don't know anything. And she comes here to ask and we don't know how to answer.

This passage illustrates how my questions about the TCO produced power-knowledge inequalities between participants and myself, as well as within the group. While I appeared as the informed 'expert', and Pablo the most knowledgeable man, the other men were made to feel humiliated by their limited familiarity with official legal-cartographic knowledges of the TCO. This was particularly shameful, in Pablo's view, given that the TCO was supposed to be *for* the Guaraní. It was made to sound like the men had neglected their duties as Guaraní community members.

While this dynamic was uncomfortable, it was also revealing. It showed how the inaccessibility of the state's legal-cartographic knowledges – which were concentrated at sites outside the territory, such as state agrarian reform offices in Tarija and La Paz – reinforced the men's feeling of exclusion and disempowerment in relation to the TCO. This distance was not only geographical; it was also the distance 'between reality and its representation, between the material and the abstract, between the real world and the map' (Mitchell, 2002: 116), which made the inhabitants of Itika Guasu feel that their knowledge of the territory was insignificant. This contrasted with the previous activities where, despite being disciplined by the conventions of cartography, the men produced a map that they felt ownership of and that gained meaning from their own practices. It is also possible, however, that the men were exaggerating their ignorance of the TCO as a strategy to elicit dominant knowledges – something I have observed on other occasions of Guaraní engagements with the state.⁷

⁷ I am grateful to Bret Gustafson for pointing out this possibility.

Whatever the case, my discomfort with the dynamic led me to move on swiftly to the next part of the activity, in which I shared some maps and information I had collected on the TCO, including the photocopied coloured map I had shown the young people. While undertaken in a spirit of reciprocity, this only served to reinforce the power-knowledge relation, positioning me as the expert imparting knowledge to the ‘ignorant’ men. As I noted afterwards, the dynamic was one of an NGO-style ‘*capacitación*’ (training session) – precisely what the men complained they were lacking. While I remained uncomfortable with this, I also observed myself feeling validated by the men’s interest and attention. This was a reversal of my usual role in the community, where I appeared an incompetent participant in Guaraní community life (exacerbated by my limited Guaraní language skills and mobility), who was continuously asking people to explain things to me.

Reflecting on the activity, I wondered: Should I have shared more of this knowledge earlier? Or was I intervening *too much* in the dynamics I was researching? I observed how this exercise was transforming not only my relationships with community members but also, potentially, their relationship to and understanding of the TCO. Above all, I critiqued myself for making the men feel that the TCO – that is, the state’s legal-cartographic construction of it – *should* matter to them. This had not been my intention, and yet, in giving my presentation, I was performing and investing myself with the power and authority instilled in its abstract knowledges of the state. This made me thankful that I had waited until my final month in the community to share information about the TCO. Even if it had left me feeling for previous months that I wasn’t getting quite to the crux of some of my research questions, the important insights I gathered from observing community life would have been jeopardised by doing this exercise earlier.⁸

Conclusion: A walk to the limits, or countermapping in reverse

A few days after concluding the mapping activities, I set off on a trek with twelve community members from Tarairí. The objective was to locate the boundary post that marked the legal limits of the fragment of TCO land on which their homes, and some of their agricultural plots, were located. It was my second time using a global positioning system (GPS) device, following a solo trial run the previous day. Spurred on by the false

⁸ Based on these experiences, I approached this final activity somewhat differently with the women, focusing more on their experiences of land scarcity and memories of the land struggle, and only probing knowledge of the TCO’s legal-cartographic construction (which was minimal) as an aside to these discussions.

security of GIS coordinates, I'd strayed off navigable paths and ended up getting disoriented and horribly scratched amidst the variety of thorny plants that make up the dense Chaco forest. In contrast, my Guaraní companions moved nimbly through the landscape, sauntering up steep rocky hillsides in rubber flip-flops, stepping effortlessly through tangled foliage and clearing obstacles with machetes. Meandering on and off barely visible paths, they paused to remark on familiar and forgotten places. They knew the territory—its natural features, its plants and animals, spirits and stories—in a way that I never would. As I followed them, sliding and falling on slopes of loose rock, I reflected happily that we had returned to our normal dynamic: I was the incompetent visitor and they my expert guides.



Figure 5. Tarairí community members visit community boundary marker

It turned out that we didn't need the GPS device after all; older community members knew the location of the withered yellow fencepost left by state officials more than a decade ago, even if the invisible lines connecting it to other boundary markers seemed less clear. When we finally arrived at the boundary post – part of a tree trunk marked bearing the no longer legible inscription “SAN-TCO [a scratched-away GIS

code] INRA⁹” – I reflected on the lived practices and encounters of land-titling, which had remained elusive to me in my years investigating the bureaucratic processes and political struggles around indigenous land rights. It was these experiences, of leading inept state officials through the territory or rowing them along the Pilcomayo River, that community members were most likely to remember. The legal-bureaucratic outcomes of such activities remained elusive, while the physical traces of such surveying work appeared as scattered ruins amidst a vast and vibrant landscape.

And yet, the previous days’ mapping activities had given our encounter with the fence post a new significance. Here, I seemed to be suggesting, was a crucial link between the abstract knowledges of the state and the lived realities of territory. The very pretext for our trek was that legal-cartographic knowledge of the state – made accessible by my privileged access and capacity for translation – *mattered* for Guaraní lives and land control. As we stood around contemplating the unremarkable fence post, I began to have my doubts. Community members, however, were quick to make connections between the week’s diverse activities and proceeded to enact their own (reverse) translations. On return to the community, the men informed me that they planned to add the official boundary to their map, which they’d carefully reproduced using coloured marker pens and proudly pasted to the wall of the health centre. Relying on their memory of the boundary post’s location – and assisted by the state and NGO maps I carried – they drew a dotted red line marking the official legal boundary between Guaraní communal land and adjacent private properties. The contingent outcome of power-infused bureaucratic processes, this line separated the community from spaces where they cultivated maize, raised sheep, collected forest products, and walked through regularly to visit adjacent communities.

⁹ SAN-TCO is an acronym for *saneamiento de TCO* (TCO titling); INRA is the Spanish acronym for the National Institute of Agrarian Reform, the state agency responsible for land titling.



Figure 6. Men's map of Tarairí with added legal boundary of TCO land (dotted line)

Once again, I felt uncomfortable about how my methodological forays into mapping seemed to have revived and reinforced the power of abstract state knowledge, now expressed in a 'bright line' (Blomley, 2010) that cut violently through a map that I had imagined might shed light on alternative Guaraní territorialities. As a tool for challenging or transcending official legal-cartographic knowledges, participatory mapping had proved limited, and had even backfired. At the same time, these methods served to illuminate something profound about the power of maps and of the abstract knowledges of postcolonial state bureaucracy. These findings highlight the value of venturing outside state offices and archives to perceive the legal-bureaucratic knowledges of the state 'from the margins', including from the perspective of indigenous peoples, who are often compelled to enter into an ambivalent 'politics of recognition' with the state (Coulthard 2015). As a power-infused process of translation, citation and hybridization, mapping methodologies provide an illuminating window onto such bureaucratic encounters and their enduring effects in postcolonial landscapes.

Acknowledgements

I am grateful to community members of Tarairí for their hospitality, care and active participation in this research. Thanks to three anonymous reviewers, Special Issue editors, and colleagues in Rule and Rupture, University of Copenhagen for their incisive comments on earlier drafts of this paper. This research benefitted from funding from a Economic and Social Research Council PhD studentship and from the European Research Council (ERC). ERC Grant: State Formation Through the Local Production of Property and Citizenship (Ares (2015)2785650 – ERC-2014-AdG – 662770-Local State).

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