Symmetrical, non-sovereign cartography as a means for conservation: insights from a participatory forest mapping exercise

K. N. Gomathy[1]

University of Hyderabad, India

Abstract

Studies of participatory mapping consider it to be a grassroots activity that secures customary rights, the sovereignty of marginalized communities, and as a tool for conservation and sustainable resource management. Political ecology sees such grassroots struggles as sites where multiple (human) groups/actors articulate and contest their knowledge of, and control over, entities called 'resources.' However, 'resources' exclude the role of other-than-humans, thereby perpetuating asymmetrical and anthropocentric ways of knowing and conceptualizing place-based struggles. In the quest for distributive justice, the modern principle of sovereignty also goes unchallenged. Through an ethnographic observation of participatory mapping among the indigenous Gonds of Adilabad in South India, this *Grassroots* article shows that by incorporating other-than-human actors as equal agents of conservation, the Gonds have produced a non-sovereign, symmetrical map that challenges notions of human sovereignty over a seemingly inert 'nature.' Grassroots mapping can include other-than-humans, making it a potent exercise in revealing and articulating more-than-human ways of conservation.

1. Introduction

Participatory mapping is one of the most creative grassroots tools for conserving life worlds against destructive anthropogenic practices. Popular discourse on grassroots mapping sees it as a means to negotiate and secure the sovereignty, knowledge, and agency of marginalized humans over their 'natural resources' (see Pearce & Louis, 2008; Bryan, 2011; Rye & Kurniawan, 2017). However, there are two difficulties. First, radical ecologists point out that sovereignty is a modern principle that implies domination by certain humans over nature: "ecological sovereignty" (Smith, 2011, p.11). Sovereignty is a foundational principle of modern nation states, and it strengthens an underlying metaphysical divide between humans as *subjects* and non-human nature as resources and *objects* (Smith, 2011). Using participatory processes to extend this principle across 'non-modern' communities or indigenous groups, whose worlds are not necessarily built on these divisions, is therefore problematic. Second, 'political ontology scholars', particularly from Latin America, have pointed out

that exploitative and exclusionary anthropogenic practices have affected not only vulnerable human collectives but also other-than-human beings, who are often grouped as 'nature' or as part of supernatural beliefs in popular discourse (de la Cadena & Blaser, 2018). This is often the case because of the difficulty that local people have in demonstrating the "real" (Stengers, 2018, p.101), or equally valuable, existence of these entities in ways that are acceptable to western science. Thus, these researchers are concerned about the possibility of translating the erosion of these more-than-human worlds into a political issue (de la Cadena & Blaser, 2018).

In the social sciences, non-human actants have received increasing attention in anthropological literature (cf. Descola, 2013; Viveiros de Castro, 2005; Tsing, 2014) and Science and Technology Studies (cf. Latour, 2007; Haraway, 1988; Barad, 2003; de la Cadena, 2015), among other disciplines. However, studies in political ecology dealing with conservation ethics have not focused extensively on the agency of nonhumans or the various obligations that humans have towards them (Lorimer, 2012). Referring to this research gap, Little and Reinhardt (2007) argue that the biophysical forces called 'nature' are not simply a backdrop against which social agents perform their part. Thus, they advocate for a heuristic principle of "epistemological symmetry" (Barnes & Bloor, 1982, cited in Little & Reinhardt, 2007). According to this principle, any event or conflict is always the outcome of 'social' and 'natural' forces combined. Hence, political ecology researchers should admit the role of both human and non-human agents while investigating a phenomenon (Little & Reinhardt, 2007).

Responding to this call, this *Grassroots* article considers the practices of grassroots mapping and their potential to render other-than-humans politically visible. It examines the case of a participatory mapping experience among the indigenous Gonds of Adilabad, in South India, carried out in collaboration with an NGO. Through an ethnographic exploration of these mapping practices, the article highlights the role of other-than-humans (such as forest and village deities, ancestral spirits, and grazing animals) in the Gonds' understanding of their territory and in their claims to land. As a result, a more symmetrical conservation goal emerges that does not take for granted human sovereignty over other-than-human actants. In this way, this Grassroots article contributes to an inclusive political ecology that incorporates other-than-humans as active participants in the world, and as central in the grassroots struggle for land and territorial governance.

The article is organized into three sections. The first describes the mapping activity in which other-than-humans enter as agents of conservation on whose behalf the Gonds make claims to land. The second section details the practices through which humans and other-than-humans collectively perform the making and conservation of the Gond world. Finally, the implications of a grassroots mapping characterized (in this case among the Gonds) by epistemological symmetry and by an ethics of non-sovereignty are raised for political ecology and conservation.

2. Mapping the agents of conservation

In India, colonial and early post-colonial forest policies, with their top-down approach and a focus on commercial and conservationist interests, excluded the rights and relations of indigenous people to their forests (Reddy *et al.*, 2005). However, the latest legislation in the form of the Forest Rights Act, 2006 (FRA) provides the *gram sabha* (village assembly at the grassroots level) with the power to pass resolutions and recommend claims (individual as well as community forest rights), which are then recognized by higher authorities. However, some analysts have pointed out that this Act is poorly implemented, and that this is due to the lack of actual mapping and estimation of the extent of forestland, which is often located outside village boundaries (Trinadharao, 2016). Moreover, there is inadequate institutional support from State forest departments to map and assess these areas, resulting in poor recognition of community rights (Trinadharao, 2016). Meanwhile, under the guise of integration into the national and global market economy, deforestation and conversion of the commons, including grazing lands, into agricultural lands are rampant in these areas. In such a scenario, indigenous people often partner with non-governmental organizations in participatory mapping activities.

The mapping

During the winter of 2015, I was among the *Gond* people in Gadiguda village, located in the northern part of the South Indian state of Telangana. Two individuals, L. Rao and A. Rao addressed the *Gram Sabha*

(village assembly) that gathered on the premises of a local school about the need to map the Gond's territory. L. Rao was the community representative and volunteer with a local NGO, while A. Rao was a member of the Forest Rights Committee constituted under Forest Rights Act 2006. L. Rao mentioned the fact that there were no definite boundaries or demarcations of the Gond's territory, especially for their grazing lands. This lack of clarity had led some individuals to expand their fields into those areas. As a result, the land available for grazing has gradually decreased, making it difficult for the community to maintain their herds. In addition to addressing these issues, he explained that the mapping exercise would support the Gond's request for a common *patta* over such lands (legal record of collective ownership), from the government and the forest department. "It would be for the benefit of the community", said the village *Sarpanch* (chairperson) of the *Panchayat* (local self-government). Thus, attendants to the meeting began chalking out on the ground a map of the area to be requested under various communal rights (see Figure 1).

Figure 1: Participatory mapping in progress. Source: Author (Dec 2015), Fieldwork

The community members first drew a square post with a flag denoting the seat of *Aakadi pen* (the god of hills and forests). It helped them decide the boundary separating the village from the forest and hills. The seat of *Aakadi pen* and the areas adjacent to it became the foothills, and the areas to the north were marked as forests and hills, while agricultural fields and hamlets were marked to the south. They said that *Aakadi pen* controls forests and guards the herd boys and the cattle that venture into it for grazing. As the Gond have collective obligations towards this god, the place of *Aakadi* pen had to be protected and claimed under community *patta*. Within the area identified as forest, they mapped the following six areas: VSS areas (under the control of forest department and conservancy laws, NTFP (non-timber forest products) areas, *Aayurveti*

(medicinal) plants, bamboo growing areas, community burial grounds, and grazing lands. Across the foothills they marked IFR (individual forest rights) lands. To the south of the *Aakadi pen*, they began mapping their villages amidst vast agricultural lands (marked as revenue lands). Each village was represented by a collection of houses arranged in rows next to the seat of *Auvval pen* (village mother goddess). L. Rao said that just as the *Aakadi pen* guards the forest, each village has its own guardian god, called *Aki pen*, and its own village mother, called *Auvval pen*. He added that the community as a whole has ritual obligations to both of these deities, be it seasonal rites during festivals or at times of disasters. Finally, they marked gazing pathways, roads, and streams. Figure 2 shows the resulting map of the Shivnara forest village, which comes under Gadiguda Gram Panchayat.

Figure 2: Map of Shivnara forest village on paper. Source: L Rao (Dec 2015), Fieldwork.

Forests and hills occupy a meager portion of the land shown on the upper section of the map (Figure 2). In contrast, the revenue/agricultural lands (marked as rectangular plots) occupy the lion's share. This is evidence of rampant deforestation and conversion of grasslands for the cultivation of high-yielding crops such as cotton and soya. The main road runs across the middle of the village separating it in two parts, Shivnara A

and B. The places controlled by territorial deities are marked in squared posts with flags. The arrows indicate grazing pathways spread across the whole area in all directions. The dotted lines indicate streams into which the perennial river branches out.

After the mapping exercise was over, the elders and *Sarpanch* had discussions with the NGO workers and made decisions about the amount of land that the community would require for various purposes. They decided to request 100 acres (40.5 ha) for grazing, 200 acres (81 ha) for bamboo, 2 acres (0.8 ha) for the building of a temple for *Aakadi Pen* (the forest deity), 15 acres (6.1 ha) for medicinal plants, 10 acres for community burial grounds, 10 acres (4.4 ha) for *Auvval Pen* (the village mother deity) and 30 acres (12 ha) for non-timber forest produce (NTFP). A formal application for these lands would be forwarded to the VRO (Village Revenue Officer) and the Beat Officer. With the *Sarpanch*, they decided on the matter in subsequent meetings.

Although operating within a rights-based framework that privileges human agency and sovereignty over non-human resources, here the indigenous Gond people have de-centered themselves as humans and waived their ecological sovereignty when it comes to conservation. Their map is not an expression of collective ownership 'rights' of humans over non-human resources. Rather, they are restating their 'duties' towards other-than-human agents that conserve and make the world of Gonds. Much like a story or folklore, this map articulates a more-than-human world and expresses the interest of the Gond in securing the rights and localities of the other-than-humans on whose behalf they make territorial claims. However, as Blaser (2009) puts it, "though stories are a good entry point to an ontology… (We) must attend to the ways in which those stories are embodied or enacted" (Blaser, 2009: 877), to which we now turn.

3. Performing conservation with other-than-humans

It is not difficult to understand why the community claimed 100 acres (40.5 ha) of land for grazing during the mapping exercise; the Gond economy is based on agriculture and animal husbandry. However, understanding why the community claimed 200 acres (81 ha) for bamboo cultivation is not as straightforward. The reasons behind this choice become clearer when we consider that bamboo is not merely a plant for the Gond. Each month in the Gondi calendar is dedicated to the worship of one or more of the Gond's traditional clan and local deities known as *pen*, as well as some gods and goddesses of the 'Hindu' pantheon. In the world of Gonds, the living, the dead, and their gods all have a social life. Though *jiv* (the life force) leaves the body of humans when they die, the personality of the dead (*sanal*) continues to linger near their burial fields and wander in the forests (von Furer-Haimendorf, 1979). *Persa pen* is the supreme clan deity in whose company the dead ancestors of Gonds continue to protect their living clansmen. Each *saga* (exogamous patrilineal descent groups) has its own *Persapen*, and each *Persapen* is represented by an iron spearhead and a whisk made of a cow's tail. These objects are fixed on a bamboo shaft whose nodes stand for the number of lineages in that clan. Thus, in this context, the bamboo is no longer merely 'natural'; instead, bamboo sticks become "social objects assembled through and involved in co-fabrication of socio-material worlds." (Whatmore, 2006, p.604). Since these objects are symbols of clan's gods, they inspire awe and invoke unity among lineage members across different villages.

A typical Gond village is not only a geographical unit but "a ritual and social unit that persists as long as there is the continued occupation of the land and collective performance of rites to the guardians and mother deities of the village" (von Furer-Haimendorf, 1979, p.42). It is therefore natural that these rituals require their own space and that they affect the mapping exercise. For example, the focal points of Gond rites (sowing, harvest, marriages, and also dealing with disasters and epidemics) are the teakwood post of *aki pen* (the village guardian god) and the sanctuary of the mother goddess *auvval pen*, for whom the community claimed 10 acres (4 ha) of land. In addition to the village mother, there are several other female deities in the Gond's world that are referred to as *auvval*. For instance, *siwa auvval* is the boundary goddess who brings diseases to the village in the rainy season. During the month of *pola* (July-August), the community performs a ritual to banish her from the village (von Furer-Haimendorf, 1979). Maintaining a good relationship with the village mother and healing practices using *Ayurveti* (medicinal) herbs by practitioners (*bhaktal*) serve as prevention and remedial

measures. Thus, in addition to the 10 acres of land for the village mother, the community also claimed 15 acres (6 ha) of land for medicinal plants.

Another important deity mapped by the Gonds was the *aakadi* pen/forest spirit, for whom the community claimed 2 acres (0.8 ha) of land. *Aakadi* in Gondi language refers to the rainy month of June-July. The forest becomes lush, and cattle and herders who venture for grazing are vulnerable to its affective power in terms of attacks from snakes and scorpions, among others. A few days before the full moon, the *aakadi* rites are performed. Known as the *Daturi* ritual, it is a re-enactment of sending off cattle into the forest and securing their safe return. For this ritual, the herd boys, cattle, and older men gather before the *aakadi pen.* The deity is symbolized by a stone located at the bottom of a tree on the path that leads from the village to the forest. After the sacrifice of goats and chickens, the *dewari* (the village priest) draws a ritual line using turmeric powder from the sacrificial stone of *aakadi pen* up to the foothill. Herd boys then drive the cattle across this line accompanied by cheering and blowing of horns. This activity is a message to the dangers lurking in the forest to flee (von Furer-Haimendorf, 1979).

The mapping exercise reveals that Gond villages are populated by other-than-human beings (forest and village deities, the dead, cattle, bamboo, medicinal plants, and animals) that constitute the Gond's 'social' life and that actively affect the world that they cohabitate with humans in different ways (providing guardianship, inflicting harm and healing, hovering, wandering around, and so on). Thus, the conservation and sustenance of a world emerge as a collective performance enacted not by humans 'over' other- than-humans, but collectively by humans 'and' other-than humans.

4. Conclusion

Political ecology incorporates approaches from various disciplines (across the social and natural sciences) to understand human-environment relations and eco-social conflicts among various groups. To that extent, it is "epistemologically plural" (Tetreault, 2017, p.1). However, it is not yet "epistemologically symmetrical" (Little & Reinhardt, 2007) in the sense that it has not yet found ways to incorporate other-than-humans as active participants in conservation politics. This article is a response to such a call for symmetry. The indigenous Gonds of Adilabad have tried through their mapping exercise to "make public" (de la Cadena & Blaser, 2018) other-than-human agents involved in the politics of conservation. By acting as social agents and as beings who perform conservation with humans in various capacities, these other-than-humans invite political ecologists to rethink the notion of other-than-humans as beliefs, natural resources or backdrops, differential access, and use of which causes conflicts among human social groups.

Moreover, an approach that looks at participatory mapping as a means to secure and articulate the sovereignty of powerless people over their ecology, fails to question the very idea of sovereignty as a modernist ethical principle. Instead, ethnographic encounters with grassroots initiatives, especially participatory grassroots mapping, show that the role of other-than-humans is central to local communities' conservation practices and land claims. For instance, this article showed that for the Gonds, the *akadi pen* (the forest spirit) guards their cattle and herders. The seat of the *akadi pen* in the form of a stone at the bottom of a tree enables the Gond to determine where forests begin and where they end. The stone sanctuary of *avval pen* (village mother) marks the boundaries of their village. All the non-human entities (forest and village spirits, grazing animals, the spirits of the dead, medicinal herbs, bamboo) on whose behalf claims were made, help humans conserve the Gond territory. Their roles range from guarding the village and forests, forging lineage unity among humans, healing, hovering, and becoming unruly at times. By mapping these beings, Gonds are advocating a politics based on an ethics of non-ecological sovereignty. The naming of deities and spirits in this map indicates that the Gond indigenous people acknowledge that they are not sovereign with respect to the ecology of their territories. There are other actors responsible for the existence of life and whose inclusion as agents of conservation and sustenance is equally important. The more-than-human map of the Gonds shows that sustainable resource management can adopt a symmetrical and non-sovereign ecological framework as the organizing principles of conservation and sustainability.

K.N Gomathy

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