# Maps, metaphors, and meanings:

# boundary struggles and village forest use on private and state land in Malawi

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Pauline E. Peters Harvard University Cambridge, MA 02138 pauline\_peters@harvard.edu, Fax: (617) 495-0527 **Abstract**: Recent studies have examined social and cultural perceptions of spatial relationships, with particular attention to contests over boundaries. 'Counter-mapping' offers a technique to defend local rights in these contests. However, this approach may inadequately represent certain complex socio-spatial ideas. Specifically, whereas recent studies emphasize contests over the legitimacy or location of boundaries, the case studies from Malawi in this paper illustrate equally important non-territorial struggles over the *meanings*—the de facto rules and practices—of boundaries. These struggles, embedded in local history and culture, involve efforts to 'untie' resource rights from territorial claims. These strategies would be poorly represented or even obscured in mapping efforts focused on re-drawing linear boundaries. This suggests a need to critically examine of the use of mapping and map metaphors in social analysis and practice. **Keywords:** counter-mapping, critical cartography, land tenure, political ecology, forestry Acknowledgements: The authors thank Arun Agrawal, Shaul Cohen, Christine Mitchell, Alec Murphy, Jesse Ribot, and Shivy Sivaramakrishnan for comments on early drafts of this paper. We also benefited from comments when an earlier draft was presented at the 1998 conference of the International Association for the Study of Common Property, in Vancouver, B.C. Thanks are also due to colleagues at the University of Malawi, especially the Centre for Social Research, and to our research assistants. Funding for research by the first author was provided by the Social Science Research Council, the National Science Foundation, the Wenner-Gren Foundation, and the Institute on Global Conflict and Cooperation. Research by both authors was supported by grants to the Harvard Institute for International Development from the U.S. Agency for International Development and the World Bank. Exceptionally helpful comments were provided by three anonymous reviewers. Above all, we thank the many people in Mchombo and Napolo villages who shared their ideas and their busy days to talk with us.

A central theme in recent studies of the ways that social groups conceptualize social and spatial relationships is the role of boundaries in shaping contests over resources. Whereas much of the published work focuses on contests over the location or legitimacy of boundaries, research we have conducted over the past decade (separately and together) leads us to pay more attention to contests over the *meanings* of boundaries and how they shape specific resource use practices. We became interested in these contestations over the meanings of boundaries in the course of research on environment, forestry, and population (Walker) and on agricultural commercialization, livelihoods, food security, and land tenure (Peters). In this paper, we show that past and current competition over resources in two areas of Malawi in Southern Africa can be elucidated through close examination of struggles over meanings. To what kinds of rights—to land, water, trees, shrubs, grazing rights, minerals, and so on-do boundaries pertain? For which people? Over what time period? On the basis of this analysis, we suggest that the job of mapping should not end with the drawing of boundaries; when social scientists assist social groups to draw maps, it is crucial that they also document and communicate what these boundaries mean for local people.

## Boundaries and the politics of mapping

There is a current vogue in social and cultural theory for the use of spatial metaphors—for example, the 'blurring of boundaries' between reality and fiction in popular culture or the 'mapping' of alternative sexual identities. The popularity of spatial metaphors has spurred critical reappraisal of the need to bring actual places and spatiality back into social theory (Moore 1998), echoing an earlier emphasis in geography on the 'social production of space' (Lefebvre 1991; Massey 1984; Smith 1984). In particular, a large literature on the 'politics of mapping' has

emerged that examines the ways maps are used as tools of political power (Cosgrove and Daniels 1988; Harley 1988; Kain and Baigent 1992; Mohanty 1991; Orlove 1991; Vandergeest and Peluso 1995). As Peluso (1995) observes, mapping is an intrinsically political act that can facilitate large-scale accumulation strategies that consolidate state control and work against the rights of local people.

Building on these studies, the recent 'counter-mapping' literature seeks to create a kind of 'ethnocartography' to defend local rights by using the same cartographic tools used in the past to deny local peoples' customary rights. In response to official state maps that omit local peoples' claims and make their territories appear available for appropriation, counter-mappers use modern technology to identify specific places and resources used by local people as a means of documenting and communicating detailed knowledge and historical and cultural connections to these places (Poole 1995a; 1995b). These maps can help to authenticate local peoples' customary resource uses and territorial claims. As Nietschmann (1995, 37) observes, "more indigenous territory can be reclaimed and defended by maps than by guns."

In a seminal work, Peluso describes the use of counter-mapping to defend local peoples' rights to forests in Kalimantan, Indonesia. Activists angered by decades of rapacious industrial timber exploitation used counter-mapping—including satellite global positioning systems (GPS)— to delineate and formalize local claims to threatened forest areas. However, Peluso importantly observes that such claims are not necessarily 'traditional'—counter-mapping "redefines and reinvents" customary claims and can create "new traditions" (1995, 384). Specifically, counter-mapping may redefine non-territorial resource use patterns as territorial claims. Dayak forest communities in Kalimantan hold both territorial and non-territorial, resource-specific concepts of rights, such as claims to specific types of trees or other resources in collectively-managed forest

areas. The techniques used in counter-mapping, however, redefine these non-bounded customary practices in territorial terms within linear boundaries.

In an important recent variation on the concept of counter-mapping, Moore (1998) examines the role of history, culture, and power in shaping multiple, overlapping cognitive maps of rights to use land in Zimbabwe's Eastern Highlands. In the early 1990s, some peasants in the Kaerezi Resettlement Scheme resisted the spatial patterns of concentrated residential areas and separate farming and grazing areas decreed by government, as well as the authority of the area's new chief to command alternative patterns. In resisting, peasants invoke history and culture to 're-map' the landscape. In particular, peasants invoke their role in the war of liberation against white Rhodesian rule to legitimate particular land use patterns and to delegitimate the authority of those wishing to impose undesirable mappings. This resistance is expressed not in maps per se but in the spatial practices of peasants who take up farming and residence in places that defy official maps and decrees. The image Moore creates is one of "overlapping", "complex", and "layered" maps drawn by the daily residential and farming practices of competing social actors.

Moore's study is an example of recent efforts to draw 'maps' that address the increasinglyrecognized complexity of social perceptions of spatial rights. Peluso (1996) describes "property zones" in Indonesia that vary spatially and temporally according to particular social groups and resource uses. Rocheleau and Edmunds (1997) describe "multidimensional" African landscapes of nested and overlapping boundaries, where rights to resources (specifically, trees) vary by space, time, the gender of the resource user, and specific types of trees and their products or uses. Schroeder (1997) shows how gendered rights to land in the Gambia shift over time through interactions between local practices and changing development priorities.

These studies add greater sophistication to efforts to represent the highly complex ways

particular social groups perceive rights to land and resources. Nevertheless, these studies generally focus on the struggle to establish, eliminate, or relocate boundaries. We suggest that another important type of struggle involves contests not over the legitimacy or location of boundaries, but over the meanings of accepted boundaries—the struggle to define how abstract lines on maps are translated into specific social practices. To the degree that the meanings of boundaries have been considered, it has generally been held that boundaries convert specific claims to resources into claims to territory that include all resources in a given area (Sack 1986).

We suggest, however, that the messages communicated by maps and boundaries may be as fluid, ambiguous, and contested as the social relationships they represent. Local people may struggle to demote boundaries from symbols of inclusive territorial rights to symbols of specific and contestable rights, opening the door for multiple claims to resources across boundaries. Sack's idea that a boundary "may be a simpler device for communicating possession than enumeration by kind" (1986, 22) depends on the acceptance by competing social groups of a shared meaning of boundaries as signifying inclusive rather than specific rights. Yet property involves on-going processes of communication (Rose 1994), and, far from eliminating the need for further discussion, boundaries may intensify struggles over the kinds of rights they signify.

## Poverty, population, and tree scarcity in Malawi

Malawi is one of Africa's poorest nations, reflecting the neglect and exploitation of small farmers under British colonial rule and the postcolonial regime of the late 'Life-President', Dr. Hastings Kamuzu Banda. For both rural and urban people, forests and woodlands represent crucial sources of firewood, poles, timber, fiber, and traditional medicine. Poverty is severe and chronic, and alternatives to forest products (e.g. electricity or kerosene for cooking) are beyond the financial reach of all but a tiny minority. In addition, Malawi's population density and birth rate are among the highest in Africa. Together, poverty, population, and heavy commercial exploitation of natural resources in Malawi drive, by some estimates, the second highest rate of deforestation in sub-Saharan Africa (WRI 1998, 292).

Although the most severe deforestation occurs on densely-populated customary lands (those under the authority of local chiefs and headmen), tree cutting is spilling over into both public and private forests. In densely populated areas of the Southern and Central regions, virtually every inch of cultivable land in customary areas is cultivated with little or no fallow. In these areas, the only remaining significant forested areas are under private and state ownership.

With the end of the Banda regime and its heavy-handed policing in 1994, tree theft from public and private lands accelerated dramatically (in some areas whole forests disappeared almost literally overnight). Illegal cutting was not absent in Banda's time, but the sanctions could be severe. To rural people today, tree theft is perceived as a matter of necessity, and is often justified in relation to long-standing grievances and cultural claims. People recall how the government, party officials, and the feared paramilitary Malawi Young Pioneers turned a blind eye to some of the severe depredations of state agencies. Residents thus experienced both harsh restrictions on protected forest areas and open flouting of the rules by privileged groups.

This exclusionary history came to the fore with the recent democratization in Malawi. Accelerated deforestation has been driven by a euphoric sense that 'democracy' means the overthrowing of all confining rules of the old regime (Walker 1999), a lack of enthusiasm among political leaders for enforcing unpopular forest regulations, and a reduction in state enforcement capacities. But, as the following case studies illustrate, the recent increase in tree theft also builds upon deeper historical and cultural precedents that shape present disputes over the meanings of

boundaries that separate villages from state and private forests.

The cases presented describe findings from two related sets of fieldwork. The Mchombo village<sup>1</sup> research site is part of an on-going long-term study of socio-economic changes among just over 200 households in six village clusters first begun in 1986 (Peters 1992, 1997; Peters and Herrera 1989). Additional fieldwork, which included the Napolo village research site in the Central Region of Malawi, was conducted over a 12-month period in 1995-96 (Walker 1997). Both sets of field studies used a multi-method approach that included social survey and ethnographic methods, recording of oral and archival history, and in-depth interviews with key informants. In the 1995-6 study by Walker, 89 households in Mchombo village and 65 households in Napolo village participated.

#### Mchombo village: untying resource rights from territorial rights on estate forest land

Mchombo village is located in the densely populated Shire Highlands of Southern Malawi approximately 25 km from Zomba Township. The village, like most of the neighboring settlements, is on land under 'customary' tenure, but is only a few kilometers from numerous private estates. Some of these are the few remaining European-owned estates of the Highlands. Others, which Mchombo village abuts, are small estates owned by Malawians, several of them left uncultivated. Mchombo is situated on land first claimed by the A. L. Bruce 'Magomero' Estate in 1894, part of an expanse that stretched across 648 square kilometers (White 1985). Although the estate held freehold title to the entire area and required labor from Africans residing on estate land, managers recognized villages on the estate as holding 'village' land. Managers and villagers generally recognized and honored boundaries between village and estate land. Problems arose usually when villages wished to expand.

For most of the colonial period, the European estates were thinly populated in relation to customary areas. As recalled by villagers as well as recorded in archives, much of the estate land remained uncultivated 'bush' up to the early 1950s. Thus, despite harsh labor obligations for African tenants, an advantage of life on the estates was the relative abundance of land and natural resources. Elderly villagers recall that the forest on estate land was sufficient to provide wild game, trees for fruit and medicine, fiber, and firewood and poles. Although successive European estate owners made some attempts to control access by Africans to forested areas, these efforts were largely ineffective. Collection of firewood, fruit, fiber, and medicine was effectively unregulated, and people became accustomed to using undeveloped areas of the estates as de facto reserves for these tree products. Collecting poles and timber was somewhat more complicated. Africans wanting to cut poles or timber were required to obtain approval from estate foremen, who would check to confirm that individuals had fulfilled their labor obligations to the estate. So long as an individual was in good standing, permission was routinely granted.

Even these minimal regulations were often ignored. The requirement to formally request permission to cut trees was considered inconvenient and was resented by many Africans, and compliance was at best partial. The estates employed African forest rangers, but the instances in which violators were actually caught and punished were few. When violators were caught, people today say the rangers often took pity and let them go with a warning or accepted a small bribe to ignore the offense. When asked how often people would be apprehended and punished, Village Headman Mchombo recalls, "It was a rare thing." In effect, all tree products, including large poles and timber, were relatively abundant and easily available from estate land.

After the political "emergency" of the late 1950s and the declaration of independence shortly afterwards, the situation in Mchombo village changed dramatically. Already during the

1950s, with African political control imminent and with tobacco profits small or negative, many Europeans returned to their native countries. Between the mid 1940s and mid 1950s, estates were broken up, some being bought in smaller holdings by Europeans, some by government for its resettlement schemes, and some by the new African elite. Owners often attempted to evict African tenants—including those in Mchombo village—to make way for expanded cultivation, and because land without "surplus Africans" commanded a higher price. By the mid 1950s, only seven tenacious African households remained in Mchombo village.

Most of the land that had been owned by the Bruce estate and that subsequently was divided into smaller estates was reclassified as customary land by the new government under Dr. Banda. Although Mchombo's land was redefined as 'customary', much of the area immediately surrounding the village was sold in small tracts to middle-class Malawians (mostly civil servants). This reshuffling of ownership had important consequences for Mchombo up to the present. Unlike the Europeans, the new African estate owners who neighbored the village held relatively small areas where incursions could be more easily monitored. Moreover, these African owners intended to cultivate much of the area that earlier was left as woodland and forest.

At the same time, the government initiated programs to relocate small farmers from the crowded customary lands to the less populated former estates. As a result, land in Mchombo village filled up quickly. The re-settlement programs continued until the mid 1970s, when there were about 80 households. Today there are 89—up from seven in the mid 1950s. With a much higher population, the remaining patches of woodland in the village disappeared. Today, virtually all wooded areas have been cleared, the few exceptions being small copses containing cemeteries, and small patches along rivers. Mango trees with some eucalyptus and gmelina punctuate a landscape of fields and compounds. The reduction in tree cover has created new difficulties in

obtaining tree products, forcing local people to rely even more heavily on the estates. However, unlike the Europeans, the new African estate owners clearly intended to keep smallholders out. Abiti Nzeru, now in her late 60s, recalls the transition:

"When [the estate] was here it was all bush, and people had no problem to get firewood. It wasn't stealing... In those days the land was free, before those African people [*Akuda*] bought the land from the Europeans [*Azungu*]. We had no difficulty getting wood before the Africans bought the land from the Europeans... nobody was stopping people from collecting firewood... But nowadays people are having difficulty getting trees from the estate land because the Africans bought it from the Europeans. Now you can be chased away or taken to court."

Despite the increased difficulty of obtaining trees from estate lands, 65 percent of households rely on the estates for firewood, and 59 percent rely on the estates for poles. Because they have used the estate lands as a de facto forest reserve for generations, few villagers see any moral problem with this. Seventy percent of households openly report that "we steal" (*timakuba*) these trees (Walker 1997). Another 23 percent report that they "buy" (*timagula*) the trees they take, and two percent say they bribe forest guards. There is evidence, however, that a substantial proportion of "purchases" are from forest guards without the knowledge of the owners, constituting another form of stealing.

In particular, people in Mchombo today rely heavily on trees taken from the neighboring Madsen Estate. In the past, the people of Mchombo relied on trees taken from other small estates nearby, but over time the trees on these estates disappeared. By contrast, aerial photography shows that from the late 1950s to the mid-1990s forest on the Madsen Estate substantially increased. The late Mr. Madsen (a mixed-race Malawian) was said to have been "very strict," and patrolled his estate and his forests with a gun. Today the estate remains largely undeveloped, and although Mrs. Madsen claims her relatives in town will be coming soon to cultivate the land, these relatives come rarely and have shown little interest in farming. People in Mchombo complain bitterly that even though much of the land is unused, Mrs. Madsen refuses to allow villagers to borrow or even rent land from her.

Now a disabled widow, Mrs. Madsen is able to employ only four forest guards, who cannot effectively keep neighboring villagers out of the regenerated forest on her land. Mrs. Madsen attributes the problem of tree theft to what she referred to in Chinyanja as the "laziness", "greed", and "jealousy" of villagers. People in Mchombo village see the situation differently. Mrs. Madsen and her late husband are said to be heartless for preventing people from using trees on the estate. In particular, they emphasize the few instances of violence used by the estate as evidence of the "cruelty" of the Madsens and their willingness to use harsh measures against decent people. This representation of the Madsens as local villains, in combination with the historical memory of access to trees on estate lands under the Europeans, serves as justification for incursions onto the Madsen Estate. Even Chief Mchombo and his wife are vocal about this:

Mrs. Mchombo: "Most people steal [trees from Madsen estate] because Mrs. Madsen is a very difficult woman... Even if you go to ask for firewood for a funeral she does not allow you. My husband went there to beg for firewood for Mr. Phiri's funeral, but she refused."

Chief Mchombo: "We are crying for that land. If she could only give us a small portion... we would be very happy."

Mrs. Mchombo: "It's just that she's cruel."

This depiction provides justification for stealing trees. Villagers complain that if they ask Mrs. Madsen for permission to cut trees, she will cruelly refuse unless they pay her in cash or perform labor for her even though she has plenty of trees. Thus, people feel justified in stealing what they need. There are rumors about brutal punishments administered by the estate owner if villagers are caught stealing, but none of these stories could be confirmed, and it appears these stories serve not to deter incursions but to reinforce the perception of Mrs. Madsen's "cruelty." Notably, stories depicting the "cruelty" of Malawian estate owners today are reminiscent of earlier stories about European estate owners who were said to have torn down the houses of tenants who fell behind in their labor obligations (when there appear to have been relatively few actual examples of such acts). These stories point to the selective vilification of private landowners in different periods. During the colonial period, the cruelties of the tenant labor system served as a key rhetorical device in the struggle against European control. Today, these earlier cruelties are submerged in Mchombo in favor of stories emphasizing the generosity of European estate owners who allowed villagers to use trees, creating a foil against which to highlight the "greed" and "selfishness" of the current Malawian landowners. Thus, local history and its interpretations are central to the strategies used by villagers to claim resources on the Madsen estate.

However, the main contest is not over the existence or location of the boundaries between private and village land but over the meanings of the boundary of the Madsen estate for villagers—whether crossing the boundary to collect tree products is acceptable, what types of tree products villagers should be allowed to collect, and whether they should pay for these products. Thus, although the boundary, as such, is largely undisputed, the meanings of this boundary are a matter of intense struggle. Over time, there remains the question of whether an escalating strategy by villagers to untie specific resource rights from Mrs. Madsen's territorial claim will ultimately undermine the boundary itself.

# Napolo village: escalating claims to public land

Napolo village is located in northwestern Kasungu District at the Zambian border—a sparsely-populated, undeveloped area that is geographically, economically, and politically at

Malawi's periphery. Napolo is bordered on three sides by small African-owned estates and relatively heavily populated smallholder villages. Napolo also shares a 1.7 kilometer border with the large Kasungu National Park, which substantially restricts land available in the village. In 1922, the colonial government attempted to control the spread of sleeping sickness by creating the park and relocating the inhabitants to areas outside its boundaries (Chintayo-Banda 1982; McCracken 1987). Napolo was not among the resettled villages, but the village may have at one time occupied land that is now inside the park. The present Village Headman Napolo and others date the first settlement of the village to 1918. In 1920 the village temporarily relocated to Zambia (reportedly because of attacks on villagers by lions), and on return in 1933 villagers found they had a new neighbor—the 231,600 hectare Kasungu National Park. People in Napolo today claim the park took part of the village land originally settled in 1918.

Despite the presence of the national park, land was relatively abundant throughout the colonial period, and Napolo remained heavily wooded. From the late 1960s, however, both natural population growth and immigration from other areas contributed to significant changes. The closing of traditional routes of labor migration and an increase in cash crop production also contributed to increased land pressure. From the 1920s, migration of male labor out of Kasungu District reduced the area that could be cultivated in the home villages, contributing to re-growth of large areas of woodlands (McCracken 1987). With the closing of opportunities for labor migration to other southern African countries in the 1980s, more male labor was available in the home village, with a consequent increase in the area and intensity of cultivation. The scarcity of wage opportunities encouraged some households to increase their production of cash crops (tobacco, soy beans, and sunflower seeds) while maintaining levels of food crop production, thus expanding farming onto land previously left fallow. Land pressure has also been exacerbated by

transfers of land by local chiefs to middle-class Malawians wishing to establish small leasehold tobacco estates, which were especially popular in Kasungu District in the 1970s and 1980s (Dickerman and Bloch 1991).

With population growth, increased cash crop production, and the withdrawal of land for private leasehold estates, forested land within the boundaries of the village has declined rapidly. Village Headman Napolo observes, "It wasn't like this before-there were big trees here like the ones that are found in the park today." Aerial photographs from 1962 and 1995 confirm an increase in cultivated area from 38 to 71 percent of land within the boundaries of the village (Walker 1997). This land clearing has produced a patchwork pattern, with intensively cultivated areas interspersed with patches of long-term fallow and, in a few cases, small areas of individually-controlled forest that have not been cultivated within local memory. Most people in the village, however, do not have enough land to practice long-term fallow. The bottom 25 percent of landholders in Napolo village have an average of just over one hectare, considered the minimum to support a family.

With increasing land scarcity and declining fallow, villagers experienced increased scarcity of tree products. Small and large landholders alike can still obtain most of the firewood they need from the remaining patches of woodland in the village. But obtaining poles is more difficult. Even landholders with substantial fallow areas are often unable to obtain trees of the right size and species for construction. Most fallow areas have trees less than 10 years old that can provide poles adequate only for constructing granaries, latrines, or other small domestic structures. For heavy roof rafters and structural supports, only large trees of certain types will suffice (the local favorite is *muwanga*, or *Pericopsis angolensis*). For these larger poles, 71 percent of households in Napolo rely on trees cut illegally in the Kasungu National Park.

People in Napolo village do not see stealing from the park as a moral problem. The history of land alienation to create the park in 1922 remains very much a part of the local social memory, and most people feel that the government, not villagers, is in the wrong. Although the exact location of the area settled by the first Headman Napolo in 1918 is unclear, the present Headman Napolo claims that part of the village was within the boundaries of what is now the National Park, and that this land was wrongfully taken by the government. As evidence, Headman Napolo claims there is a burial site inside the park with the remains of some of his ancestors. Regardless of its accuracy, this claim has a powerful effect. The research team for this study was surprised at the almost defiant attitude with which people in Napolo openly declare, "We steal (*timakuba*) from the park."

As in Mchombo village, these claims to resources are justified through story-telling that appears aimed at vilifying the landowner—in this case, the state. The state is represented by park rangers, who are widely said to be cruel in their treatment of villagers found taking trees or other resources from the park. Although people in Napolo village steal from the park every day, actual cases in which rangers catch people stealing are few (not a single incident was recorded in the 12-month research period for this study). Yet story-telling about cases of mistreatment of villagers at the hands of rangers is something of a local industry. Accounts of penalties meted out by rangers vary from small fines to brutal and bizarre punishments. A common story (never verified) is that people caught poaching game in the park are forced by rangers to cut off and eat the tail of their hunting dog—a form of punishment considered particularly despicable. These stories appear aimed not at deterring theft but at undermining the moral authority and legitimacy of the state and its local representatives as landowners.

This attitude is also reflected in growing demands that the government give the land in the

park back to villagers. Although land scarcity in the area is caused by the multiple factors discussed above, people in Napolo focus their rhetorical attacks on the park. Indeed, virtually any problem in Napolo village (e.g. poverty, hunger) is routinely blamed on the park. People in Napolo repeatedly urged the research team to appeal to the government to give them land in the park. In a focus group interview with the elders of Napolo village, for example, the intended topic of tree planting quickly shifted to a discussion about the national park: "The government should think about us. It has plenty of land. There is plenty of land there [in the park]. Here [in the village] people are cultivating everywhere." In the post-Banda period, this debate over redrawing boundaries between customary and public land has penetrated all levels of politics, and people in Napolo and other villages neighboring the national parks have re-tooled their strategies accordingly. Notably, tree theft and rhetorical ploys against the nearby private estates and well-to-do villagers with long-term fallows are rare, reflecting the perception that the park is a relatively unambiguous moral villain and thus an easier political target.

The boundary between Napolo village and the national park has thus become central to two related struggles. As in Mchombo village, the boundary as such has not yet been directly challenged. People in Napolo recognize and observe the boundary, at least with respect to the use of land (aerial photography shows a razor-sharp edge between the cultivated land in the village and the forested land in the park). However, the meanings of the boundary are challenged by people who point to the alleged taking of their land by the government in 1922, the "cruel" behavior of park rangers, and the scarcity of land in the village as justifying their taking of resources from the park. However, the practice of taking resources from the park supports, and is supported by, increasingly vocalized complaints that the boundary itself is illegitimate—even if clear ideas of the rightful boundaries have not yet been articulated. Thus, the shorter-term

strategy of re-defining the social meaning of the existing boundary supports an emerging effort to claim the land itself. The practice of taking trees and other resources from the park—the untying of specific resource rights from the territorial claims of the state—appears to be a key part of a parallel effort to challenge the existence or location of the boundary.

## Choosing strategies: historical context and the untying of land and resource rights

These case studies suggest that local people choose differing strategies to contest boundaries. In contrast to the explicitly territorial claims made by forest communities in Peluso's study of Kalimantan (1995), for example, people in Mchombo village choose not to assert claims to neighboring estate land per se, but to specific resources. In attempting to untie specific resource rights from the territorial rights of private property, people in Mchombo contest the meaning of the estate boundary but not its legitimacy or location. People in Napolo village pursue a dual strategy of contesting the meanings of a boundary with the national park while these escalating claims support a longer-term objective of reclaiming territory in the park.

Thus, the choice of strategies to contest boundaries may more closely reflect sensitivity to the local realpolitik than ideas about the legitimacy of the boundaries. People in Mchombo village display no fondness or respect for the estate owner, and have not fully accepted the ideologies of private property. Yet, despite the recent weakening of state police powers, people in Mchombo continue to perceive in private property an unassailable claim to land, if not to specific resources on the land. People in Mchombo have opted for a strategy of chipping away at the restrictions on their activities signified by the boundary—its meanings. Thus, people in Mchombo demonstrate that property rights, even if legally sanctioned, are not static; the social meanings of private property are shaped by on-going discourse and practices. People in Napolo respond to a different

local realpolitik. Rather than directing their efforts against relatively politically powerful estates or well-to-do villagers, people in Napolo have scented the national park's political vulnerability following the recent democratization and therefore focus on efforts to build territorial claims onto their longstanding contest over the meanings of the park boundary.

The importance of these local political realities in selecting strategies to contest boundaries demonstrates the historical embeddedness of these contests. Moore (1998, 352), discussing Gramsci's (1972) notion of subaltern politics, observes, "subalternity is seen to be forged relationally and historically." Resistance is not free to operate independent of powerful rules, cultural norms, institutions, and local histories. In challenging the meanings of the boundaries rather than their location or legitimacy, people in Mchombo, for example, accede to the local reality that the political and cultural domination and control of land (but not necessarily of resources) by estates remains relatively unassailable. Thus, people resist, but within a set of historical and cultural 'boundaries' they perceive they cannot cross.

The acceptance of the territorial rights of private property in Mchombo village also appears to reflect the relatively unambiguous character of geographic boundaries in the region's history. Almost all residents came to Mchombo from other areas long after village and estate boundaries had been established. In contrast, people in Napolo village claim that their ancestors arrived in the area before the establishment of the national park. Although both the date and the exact location where the village was first established are uncertain, this ambiguity has itself become a tool (Berry 1993) in the emerging struggle to reclaim parkland. The ambiguity of Napolo's historical relation to the park allows relatively expansive and perhaps exaggerated claims. No such historical ambiguity exists in Mchombo village, reducing the likelihood of success for expansive territorial claims. Similarly, Moore (1998) notes that the ambiguous history

of settlement in the Tangwena chiefdom in Zimbabwe has contributed to ongoing struggles to reclaim 'ancestral' lands. Moreover, this struggle has been empowered by political clout provided by the Tangwena peoples' historical role in the heroic national war of liberation—a political asset not shared by people in Mchombo or Napolo villages. In short, the choice of strategies to contest boundaries reflects the nature of political power and the specific historical and cultural circumstances in which these struggles are embedded.

The observation that social groups pursue differing strategies in contesting boundaries also suggests the importance of recognizing that people may conceptualize rights to resources that are separable from rights to territory, and are therefore not necessarily linearly bounded. Fortmann and Bruce (1988) observe that rights to trees and specific tree products may be separable from rights to land, and that these rights are defined according to the social position of the user. Thus, we may conceptualize a landscape in which rights are perceived as specific to certain kinds of resources and resource users rather than a landscape of comprehensive rights contained within territorial boundaries. Boundaries may thus be described as representing a 'bundle of rights' (Macpherson 1978) that can be broken apart to reveal distinct sets of rules and practices. The separability of specific rights within this 'bundle' may be of greater or lesser importance in differing circumstances. In the case study of Kalimantan described by Peluso, the territorial rights of forest communities are the chief concern. Dayak people do perceive resource rights as distinct from territorial rights, but their use of counter-mapping strategies "redefines and reinvents customary claims to standing forest resources and harvestable products as claims to the land itself" (Peluso 1995, 384). Thus, where territory is the chief objective, a logical strategy is to attempt to tie together the rights in the 'bundle'. In Mchombo and Napolo villages, the chief objective (at present) is resources rather than land per se, leading to a different strategy. Where

territorial boundaries are considered uncontestable, the conceptual *un*tying of resource claims from territorial claims may become a key element in strategies to maintain access to resources.

## Conclusions

The differing strategies used to assert resource claims discussed in this paper suggest that the value of mapping as a tool for the representation and communication of resource rights may vary according to the type of claim involved. Some types of customary land use may be difficult to map, such as rights to individual trees, or rights that are specific to particular occasions. Thus, mapping and map metaphors, including counter-mapping, may in some cases be a double-edged sword. The linear boundaries inherent to Western cartography may poorly represent the ways that some social groups conceptualize socio-spatial relations and resource rights.

Linear map boundaries tend to impart a sense of comprehensive rights to all land and resources within a given set of boundaries. In some cultures, boundaries impart a less inclusive sense of rights. By appropriating the conventional tools of cartography, efforts to map resource rights risk inadvertently prioritizing exogenous socio-spatial concepts at the expense of local ones. We raise the question of whether present cartographic techniques can adequately represent claims that are specific to particular individuals, resources, and events, and whether boundary-drawing may in some cases inadvertently submerge certain kinds of claims and rights.

For example, because people in Mchombo village do not assert territorial claims, a counter-map would likely display boundaries much as they are depicted in existing cadastral maps without revealing the complex sets of rights and responsibilities that local people perceive in these boundaries. In the worst case, counter-mapping could reinforce existing property boundaries while obscuring non-territorial resource rights. We believe this is not an unrealistic concern.

Peluso observes that counter-mapping can work to the advantage of communities "where changing political economies and technologies permit," and, "mapping almost forces the reinterpretation of customary rights to resources *territorially*, thereby changing both the claim and the representation of it from rights in trees, wildlife, or forest products to rights in land" (1995, 384, 388, emphasis in original). We suggest that the reverse of this logic may also be true: where political power works to the advantage of dominant social groups—such as estate owners in Malawi—mapping may redefine and reinvent the meanings of the boundaries in ways that favor dominant power groups. Where local people maintain important de facto access to particular resources that they are unlikely or unwilling to assert formally, counter-mapping could undermine that access. Thus, we suggest that counter-mapping may be an appropriate method in many, but not all, circumstances. Counter-mappers should consider carefully what types of claims (territorial or resource-specific) are in question and how specific historical, cultural, and political contexts are likely to shape the outcomes of counter-mapping exercises.

In addition, as the Malawi case studies have suggested, linear boundaries may give a misleading sense of precise and static definition in resource rights. To paraphrase Macpherson (1978), a boundary is not a thing; it is an expression of a social relationship. As such, boundaries do not define rights; people, in their relationships with each other, define rights that are signified by boundaries—and these relationships are always changing. Thus, as with any symbol, in reality there is always ambiguity and fluidity (Hobsbawm and Ranger 1983) in the meanings of boundaries. On a map, however, a linear boundary tends to impart a sense of precision, stability, and universal understanding and acceptance (indeed, this is why maps can have such power).

Thus, we submit that the use of maps and boundaries, even to empower local people, may present a Faustian bargain: there is a tension between efforts to empower local people by mapping

their landscapes and recognition that the complexity, fluidity, and ambiguity of concepts of property rights may be obscured by this process—possibly to the detriment of local people in some cases. Complexity, fluidity, and ambiguity are essential to many struggles over resources, and may be obscured by the seemingly unambiguous, rigid, and socially and politically decontextualized lines on a map. What is obscured—even by a counter-map—can have important consequences. For example, the counter-mapping literature has yet to examine questions of who represents the community in counter-mapping exercises, and whether the redrawing of local boundaries can play into strategies of accumulation and concentration of power by local elites (Peters 1996; Ribot 1996).

Finally, we note that the idea of 'blurring' boundaries, common in the broader literature on symbolic and social boundaries, has seeped into the discussion of the politics of mapping in ways that seem misleading. The definition of 'blur' is to make indistinct or vague. When boundaries are said to be blurred, we suggest that what is being described is the interaction of conflicting—but clear and distinct—ideas about the meanings of boundaries. In Mchombo, the practice of villagers crossing over to estate land to collect tree products might be described as a 'blurring' of the boundary. In fact, the boundary is intact and serves to focus debate about the kinds of rights or obligations it signifies. These meanings may be contested and multi-dimensional (pertaining in different ways to land, trees, or other resources), but to villagers and the landowners alike, they are anything but vague and indistinct. What might be described as 'blurring' is in fact a social contest over competing but distinct social meanings of boundaries.

## Notes

1. All local place names and personal names are pseudonyms, and historical and

geographical context has been described in this paper in a manner that could not reveal the identities or locations of participants in the study.

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