"We Drew What We Imagined"

Participatory Mapping, Performance, and the Arts of Landscape Making

by Bjørn Ingmunn Sletto

Participatory mapping has emerged as a dominant paradigm in participatory approaches to international planning, conservation management, and community development in the Global South and is considered a technology with emancipatory potentials for subordinate or marginalized groups. However, the literature on community-based mapping has been criticized for its dualistic approach to power, culture, and the local and for reifying material and discursive forms of domination operating through Western projects such as development and global environmentalism. An ethnographic engagement with mapping projects conducted in Trinidad in the fall of 1998 and in Venezuela from 2001–2004 provides a deeper understanding of participatory-mapping workshops as theaters for the performance and negotiation of identities, reflecting the complex articulations between global, political-economic processes and desires for place and belonging. Ultimately, this critical reading indicates an urgent need for greater reflexivity in the application of participatory-mapping approaches.

What we drew on our map, was all we knew, to the limit of our knowledge. We have drawn places we have heard about but that I have never been to. I have never seen Rio Arapopo. What we have put down is imaginary. But much is missing still.

—Rosa Emilia Fernández

Rosa Emilia Fernández had a complex, unusual, and intimidating audience when she spoke these words in 2002. She and two other women had spent the afternoon sketching a map of what they understood (and desired) to be the territory of Kumarakapay, an indigenous Pemon village in the Gran Sabana, in far southeastern Venezuela. Rosa Emilia, Leticia Fernández (no close relation), and Cristina Rossi (Leticia's daughter) had never before drawn such a map without the direction of elder men. They were now participating in a workshop to map land uses and places with historic significance, in other words, doing the work typically considered the right and responsibility of elder men. Leticia, Rosa Emilia, and Cristina were alternatively bemused, insecure, and pleased to take their place among the men to draw what Leticia at one point called the women's "own map."

They were drawing their own map in part because I had made an intrusive request a few days earlier. I was in Kumarakapay to assist with a project to map the lands of the indigenous Pemon in sector 5, one of eight self-designated sectors of the Pemon homeland. A few days before the workshop in Kumarakapay, I had suggested to the local coordinator for the mapping project, Claudio Gómez, that the entire community be invited, that the participants be divided into groups by age and gender, and that each group draw a map and present it to all participants at the end of the day. I had made the point to Gómez and his brother Juvencio, the village chief (*capitan*) at the time, that if the mapping process incorporated the vision and knowledge of both women and men, the final territorial map would be more complete and rhetorically powerful, and it would thus better serve the goal of achieving land rights for the Pemon. As would happen again on many occasions, I had made a conscious, albeit uneasy, intervention in the social life of the village. As a social scientist, I was concerned about reproducing the essentializing dichotomy between indigenous tradition and modernity; as an activist scholar, I was aware that indigenous movements often obtain more influence when they employ primitivist imagery (Haley and Wilcoxon 1997, 764; Milton 1996; Ulloa 2005).

When Rosa Emilia presented the women's map to her audience—the dozen or so teenagers, a handful of other women, a half-dozen adult and elder men, and the white, male cartographer from abroad—her words were measured, almost apologetic: the women had drawn places they had heard about but never seen. Because vision and walking are privileged ways of gaining knowledge among their people, the women felt that their map was "incomplete." As she explained to me later, two of the village elders present, César Duran and Antonio Pérez, were *abuelos* (grandfathers) known for their ex-

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ceptional knowledge of the farthest reaches of village territory. Rosa Emilia believed that the women's map failed to live up to the standards of detail and accuracy she imagined were reflected in the elders' map. At the same time, she relished the opportunity to present the women's perspective on the landscape in which she, Leticia, and Cristina had lived their entire lives.

As I became friends with Rosa Emilia, Leticia, Cristina, and their extended families over the course of the next four years—playing my sometimes contradictory roles as researcher, cartographer, colleague, friend, teacher, rival, and intruder—I kept returning to her words. I began to appreciate the complexities of the "culture-making" taking place in the mapping project: how the performances of project participants were structured by the presence of complex audiences and complicated by a lack of clearly established rules of production and reception (Myers 1994). I began to realize that "the map," as it simply came to be known among Pemon in the Gran Sabana, was contingent not only on knowledge of the materiality of the landscape but also on the temporalities and imaginaries that infuse it and give it meaning. The map was the result of contested performances of *people* who in different ways embody this landscape and (re)produce its meanings; in so doing, they negotiate and reproduce what it means to be Pemon and to rightfully *belong*. I came to understand that places existing only in someone's imagination also are constitutive of landscapes and contribute to forming personal biographies (Tilley 1996). The map was not simply a technical product of local and scientific knowledge but also a work of art, embodying, reflecting, and acting on the social as well as the material. Ultimately, I realized that the *process* of making the map had been as important as the end product for what it had revealed about the entanglements of identities, social relations, landscape, and power in places on the margins.

Participatory Mapping, Performativity, and Talking Landscapes

In this article, I wish to consider the roles of memory, performance, and embodiment in participatory mapping, in part to draw attention to the negotiations of power, identities, and authenticities implicated in community-based productions of spatial representations. I draw primarily on my experiences with the mapping project in Venezuela—and also with a briefer project in Trinidad—to suggest that an ethnographic consideration allows us to consider critically the notion of participatory mapping as a counterhegemonic activity. First, I reflect on the ways in which the processes of imagining, talking about, and drawing landscapes shape and refract relations of power in multiple, complex, and sometimes contradictory ways, and second, I consider how these processes ultimately reveal the ways in which neocolonial structures shape places on the margins.

Drawing in part on insights from the anthropology of art,

performativity, and landscape (e.g., Geismar and Tilley 2003; Gell 1998; Ingold 1993; Myers 1994; Okafor 1994; Rose 2000; Stoller 1994*a*, 1994*b*, 1996, 2004; Taylor 2003; Tilley 1996; Trigger and Mulcock 2005), I suggest that participatory map production is intimately implicated in performances of the past, the present, and often divergent, imagined futures. Focusing explicitly on process instead of form thus allows me to foreground the embodied performances taking place in mapping projects (see Ingold 1993 and Rundstrom 1990 for early cultural interpretations of indigenous maps). I am speaking here of performances similar to those of Stoller's West Sahelian griots, who negotiate social life by "talking it" (Stoller 1994*b*, 357). In the case of drawing maps—and even talking about and preparing to draw maps—these performances articulate desires and imaginations of what the map should look like, should do, and will do, for maps are always made for a purpose: they are the abstracted material representation of landscapes as they (are seen to) have been, are, and could/should be.

Unlike griots, however, performers in community mapping workshops challenge each other for the right to "talk" the past, the present, and the future, their authority derived in part from the ways in which they embody space and time. Performers become the rightful "owners" of the landscape (Rose 2000, 289) based in part on their embodiment of the landscape and on their relationship with the histories that are embedded within it and thus define it. From the outset, then, I assume that mapping is inextricably linked with questions of rights and authority, not simply in binary terms of local or indigenous versus nonlocal claims to land rights, resources, and so on but also in terms of the negotiations of what constitute authentic readings of histories and futures. Through these storytellings, authenticities and meanings of landscapes are (re)defined, relations of power are negotiated, and ultimately, structures and processes of neocolonial control are made visible. The stories informing and deriving from mapmaking thus provide frameworks for social and political assessment and agency (Taylor 2003); that is, if we view the performances associated with participatory mapping as *art*, then participatory mapping is implicitly and unavoidably action "intended to change the world rather than encode symbolic propositions about it" (Gell 1998, 6).

I should clarify what I mean by "performance" and "storytelling" in the context of mapmaking. I am not speaking here of the ritualized telling of stories, such as elder Pemons' carefully staged recitals of ancestral *pantons*, but rather conscious, competitive talking about landscape, time, and people akin to Trinidadian "liming." As Eriksen (1990) explains, liming is best understood as a semiformal activity constituted by relationships between the performers, who are consciously reflecting on the social and political-economic situation of the storytellers and their community. However, although it could be argued that members of all societies "lime" (Eriksen 1990), I do not propose to use the term as a metaphor for the linguistic performances in mapping workshops. Instead,

the concept of liming allows me to arrive at a positive categorization of what I mean by performance and storytelling in this context: by "stories," I mean speech acts informed by an awareness of social and political-economic relationships, that is, linguistic performances that are simultaneously rhetorical and embodied. By coupling this interpretation of storytelling with a modified version of Stoller's (1994*a*) concept of "performance," I attempt to draw attention to the links between the speech act and the embodiment of the storyteller, arguing (with Ingold 1993) that landscapes are imbued with the histories and lived experiences of people. Thus, claims to and perceptions of such embodiments of landscapes inform what stories "count" and hence how landscapes are produced.

Although I propose to expand Stoller's (1994*a*) definition of the term "performance" beyond commemorative ceremonies to speech acts akin to liming, I draw on his notion that "social memories are constructed and conveyed" (p. 638) through embodied performances of speech acts. These performances "constitute rather than reflect action. They are not limited to verbal utterances, they are also 'encoded in set postures, gestures and movements'" (Stoller 1994*a*, 638–639, quoting Connerton 1989, 59). This is to say that words spoken about places, landscapes, and people are weighed and to varying degrees repeated by the various audiences (not only the ethnographer or cartographer, but also local listeners) based not simply on their rhetorical quality but also on the embodiment of the speaker and his or her relationships with the entanglements of space and histories.

From this perspective on performance as social action, participatory mapping can be understood as a performative process of place making (I borrow the notion of performance as social action from Myers 1994, 680). Through the performative, iterative productions of identities and spatialities that take place during the mapmaking process, the workings of power are made visible. Storytelling as liming sheds light on—and shows awareness (or lack of awareness) of—the "turbulent relations among perception, state power and lived experience" (Stoller 2004, 821; see also Taylor 2003). As a semistructured theater of embodied performances, map production is thus always informed by and implicated in relations of power; that is, the simultaneous negotiation of identities and production of spatialities occurring when participants think and talk about place and landscape unveil relations of power and the shifting and fluctuating relationships between place and people.

This brings me to another conceptual leap, which I hope will be justified by the case studies presented below. I suggest that by making explicit and visible such productions of spatialities and their embeddedness in structures of inequality, ethnographers and cartographers engaged with participatory mapping can move beyond cultural relativism and facilitate an emancipatory politics—in terms of both "abuses by other societies . . . and the protection of individuals within a society" (Turner 1997, 276–277; see also Bourgois 1997). Perhaps, by revealing the tensions, negotiations, and contestations that characterize participatory-mapping projects, we can heed the "first rule of practice" of griots: "to create a dynamic tension between the poetic and the political, the past and the present," and thus foreground the power relations in the world (Stoller 1994*b*, 358).

Participatory Mapping, Knowledge, and What It Means to Be Local

Before I turn to my case studies of participatory mapping in Venezuela and Trinidad, it is necessary to explore what maps *are* and what maps *do* as well as what violence is inflicted when cartographers draw maps of (and even with) indigenous and local communities. Maps are representational objects intimately implicated in projects of place making, and therefore they are tools of power. They have unwritten indigenous occupations of places, shaped public opinion in times of crisis and war, and created expectations for the proper ordering of the social and the natural. Maps put things and people in their place. Not only do they order the material world and make us visualize the *where*, but through their rhetorical power they also simultaneously obscure the *why*. Most maps—especially "scientific" maps produced by regional, state, and global institutions and their agents—are mute about the social context and consequences of their own existence.

The late historical geographer J. B. Harley (1988, 1989, 1990, 1992) posited that maps are inherently ideological representations that reflect the social contexts and interests of their creators, that cartography is a social practice used to reproduce dominant world views, and that claims to mimesis provide the map with its rhetorical power. Subsequent authors have explored the role of cartography in early state building, the implications of cartography in the colonial project, the ways in which cartography has been used in the orientalization of indigenous and native peoples, and the authoritative role of geographic information systems (GIS) and remote sensing in excluding alternative spatialities in development, conservation, and urban planning.[1]

Exactly because of the power of maps to underwrite hegemonic, symbolic, and material practices, indigenous peoples, residents of marginalized urban neighborhoods, and other subordinate groups now draw on the rhetorical power of maps to present alternative world views and futures. Such "ethnocartography," "indigenous mapping," "cultural mapping," or "community-based mapping" is said to represent local or indigenous interests and conceptions of landscapes and so lead to more democratic decision-making processes. However, beyond the potential role of participatory mapping in development and conservation planning, such "countermapping" (Peluso 1995) also represents an alternative and more just way of thinking about and producing landscapes (see Chapin,

1. Crampton (2001); Duncan and Ley (1993); Monmonier (1991); Pickles (1995, 2004); Rundstrom (1990, 1991, 1993); Scott (1999); Wood (1992, 1993).

Lamb, and Threlkeld 2005 for a survey of the history and advances in indigenous mapping).[2]

The conception of participatory mapping as a means to justice and self-determination has been the subject of rigorous and thoughtful critiques by both mapping practitioners and activists and theorists in anthropology and related fields. These analyses often focus on the potential Western uses and abuses of native knowledge involved in the reinscribing of gendered, temporal, and dynamic conceptions of space into synchronic Cartesian cartographies (see, e.g., Rocheleau 2005) and the incorporation of indigenous information into the knowledge management systems of development institutions (Samoff and Stromquist 2001). Also of concern are the limits imposed on participation in mapping projects, the social and cultural implications of technology transfers, the role of such projects in local conflicts, and the potential reproduction of uneven gender relations or other inequalities of power and access to resources in local communities (see, e.g., Sundberg 2004 on the role of mapping in the gendering and labeling of indigenous peoples in Guatemala).[3] "Mapping" has thus become central to the discussion surrounding culture, conservation, and territory, both as a research and planning tool and as a metaphor for exploring the complex links between place and people at multiple levels of analysis (see especially Brosius, Tsing, and Zerner 2005).

The literature on participatory mapping has been criticized for reproducing the binaries that define the raison d'être of development: between local and global, developed and underdeveloped, First and Third World, modern and nonmodern, indigenous and nonindigenous, and most important, rational science and un-"disciplined" local knowledge (see, e.g., Brosius 1997, 1999, 2001; Kirsch 2007; Milton 1996; Nygren 1999; Ulloa 2005). Instead, according to such critiques, local and scientific knowledge must be seen as contested, "heterogeneous" or "hybrid" knowledges incorporating local and global dimensions (Agrawal 1995; Appadurai 1995; Gupta 1998; see also Moore 1996; Myer 1998; Nader 1996; Nygren 1999, 282; Sillitoe 1998). Similarly, cultures are no longer comfortably viewed as discrete phenomena occupying neatly demarcated "fields" but instead are seen as fluid and contingent results of the increasingly rapid contraction of space and time in a globalizing world (Stoller 1996; see also Appadurai 1992; Escobar 2001; Gupta and Ferguson 1997).

These understandings of the mutual production of the local and the global are useful for problematizing claims of authority in mapping projects and speak directly to the debate regarding anthropologists' role in reproducing what some au-

thors refer to as "invented traditions," "imagined communities," and the like (Anderson 1991; Barth 1969, 1995; Hobsbawm 1983). Conversely, anthropologists concerned with deconstructing essentializing claims have been chided for taking an "uncharitable" stance toward research subjects (Eriksen 1993, 71) and for ignoring the genuine enchantment with nature commonly found among indigenous people (Brosius 1999). This debate has been amply reviewed elsewhere (see, e.g., Haley and Wilcoxon 1997; Kirsch 2007); here, I emphasize the importance of teasing out the *material* relations of power that also shape these productions of identities and spatialities. More specifically, desires, fantasies, and fears shape and are shaped by both the material *and* the symbolic production of landscapes. In turn, these subjectivities lead to the production of specific spatialities, for example, spatial imaginaries such as Rosa Emilia's map of places she had never seen but which she nevertheless intensely desired to see.

I turn now to an analysis of two participatory-mapping projects, one a short-term project I initiated and conducted in an Indo-Trinidadian squatter settlement on the social and geographical margins of the Caribbean island of Trinidad and the other a longer-term, more extensive project in indigenous Pemon territory in Venezuela. Despite their different histories and social geographies and despite my shorter engagement with the Trinidadian project, I include both in this article, to illustrate the ways in which participatory mapping in local places brings contests surrounding rights, identities, and authenticities to the fore and simultaneously facilitates the unveiling of the multiple, complex relations of power that shape the production of local-global landscapes in the Global South, whether these landscapes are popularly considered "indigenous" or not.

Kernahan, Trinidad: Performance, Contestation, and Not-So-Local Knowledge

Located on the edge of the 24,000-hectare Nariva Swamp on the east coast of Trinidad, Kernahan is an informal settlement populated by about 300 descendants of indentured workers from India. The majority of the settler families arrived in the 1970s from Indo-Trinidadian communities on the west coast of the island, especially the communities fringing the Caroni Swamp. Like the Caroni, the Nariva is a seasonally dry palustrine wetland characterized by a patchwork of swamps, mangroves, marshes, and uplands supporting a complex mosaic of scattered plant communities (Bacon 1990, 223). Most of the swamp is passable on foot only in the dry season, or "crop time," from January through May. In the rainy season, only the sandy upland areas (remnants of sea ridges created through successive sea level decreases) are accessible to local hunters and fishermen.

These extreme conditions of alternating drought and flood shape the principal, intimately connected land-use systems in

2. See also Chapin and Threlkeld (2001); Harris and Weiner (1998); Herlihy (2003); Herlihy and Knapp (2003); Herlihy and Leake (1997); Kassam and Maher (2000); Poole (1995); Toledo Maya Cultural Council (1997).

3. See also Fox (1998); Fox et al. (2005); Fox, Yonzon, and Podger (1996); Gordon, Gurdián, and Hale (2003); Hodgson and Schroeder (2002); Offen (2003); Orlove (1991, 1993); Rocheleau and Ross (1995); Roth (2004); Stocks (2003); Walker and Peters (2001).

Kernahan: rice farming and freshwater fishing. Small-scale rice planting is often viewed as a tradition that defines Indo-Trinidadian village identity (Vertovec 1992, 213), but it is also an adaptive strategy linked in intriguing ways to the freshwater cascadu fishery. The cascadu (*Hoplosternum littorale*) is found in seasonally inundated wetlands in Trinidad and lowland South America and is characterized by underdeveloped gills and a highly vascularized gut that enables it to breathe air (Carter and Beadle 1932; cited in Ramnarie 1994, 291). Its life cycle begins at the onset of the wet season in June or July, when the first flood induces the fish to scatter throughout the swamp, build nests, and breed. During the dry season, the fish retreat to the deepest parts of the rivers, which are permanently inundated.

To more easily catch cascadu, fishermen "clean" rivers to keep them open and thus provide habitat for the fish. Similarly, rice paddies provide a suitable environment for cascadu and make them easy to catch in close proximity to the village. My primary research interest was to study the links between fluctuating subsidies for rice and attendant changes in the spatial extent of the freshwater fishery. Specifically, with increases in subsidies, the acreage of rice paddies expanded, incomes from rice production increased, and more cascadu became available to catch near the village. As a result, less fishing was conducted in far-flung areas of the villagers' fishing zone (Sletto 1998, 2002, 2005).

To elucidate the specific changes in the spatial extent of fishing zones during the past two decades, I used a mixed, participatory research methodology including surveys, interviews, and participatory mapping. My principal informants were a group of about a dozen fishermen, about half of whom were older than 50 and retired from fishing and the other half young and still actively fishing. I recruited these fishermen through word of mouth, and with the help of the elder fisherman Michael Cecil, I organized a series of participatory-mapping workshops to draw natural features, toponyms, and the location of fishing grounds over the course of the previous 15 years.[4] The mapping project, then, was not intended to serve any political purpose, such as land titling, and would not bring financial or material rewards to participants. The fishermen's work would merely serve to illuminate local land use and document local toponyms for the benefit of an eager graduate student.

Why, then, apart from a sense of goodwill, and perhaps to take advantage of the opportunity to lime about a landscape produced and embodied by their experiences and their memories, did these fishermen participate in these time-consuming mapping workshops? I came to realize that their participation—their multiple performances of place and people—made sense in the social and political context of the time, which was characterized by both a contentious national debate

about the meaning and future of the Nariva and a localized conflict about alternative methods of catching cascadu. It appeared that, in the words of Taylor (2003, 245), through "the arts of memory and narrative performance," the fishermen were (re)producing village identity to "make sense of their own presents."

The fishing conflict revolved around the use of cascadu traps, and the main protagonists were a group of about a half-dozen young, unmarried men who had settled in the village in the early 1990s and the dozen fishermen born and raised in Kernahan who participated in the mapping project. The fishermen native to Kernahan did not use cascadu traps, claiming that they led to overfishing and financial losses for those who use castnets or hook and line. The trappers, meanwhile, maintained that they were not harming the fish stock or threatening the livelihoods of other fishermen. I soon found myself positioned on the side of the original fishermen in this contest over resource access, in part by my personal association with the oldest settler families, that is, those opposed to trapping. These families were Hindu traditionalists, and in a community sharply divided over religion—about half the village had joined two Evangelical churches—I was identified as a supporter of Hindu perspectives on ecology and resource use. Members of Hindu families often suggested to me that their spirituality prohibited them from doing the landscape any harm; in other words, their "spiritual belonging" supported their claim for "deep belonging" to the Nariva Swamp (Trigger and Mulcock 2005, 307). To further exacerbate the division between the two groups, the more recently arrived fishermen belonged to a kin group different from that of the original settlers. Men who had been identified to me as "trappers" therefore avoided the mapping workshops and spoke with me infrequently and with caution.

From the half-dozen interviews I held with trappers, I learned that cascadu traps are set when water levels in the swamp are rapidly changing and the fish are on the move. This occurs at the onset of the dry season in December, when the fish leave the marshes to find refuge in deeper parts of perennial rivers, and during the first torrential rains in June, when the fish disperse into the marshes and swamps. One well-made trap can catch hundreds or even thousands of fish. Nevertheless, trappers argued, the fish stock was not threatened by their use of the cascadu traps. Also, because of the depressed domestic rice market at the time, it was necessary to sell more cascadu to make ends meet, hence the traps. Such arguments held little sway with older fishermen. They needed to adjust to lower rice prices, too, but they still cared about the environment and did not want to overfish the swamp.

These positionings are more illuminating when interpreted within the political-economic context of the late 1990s. At the time, a national park was being planned for this area, and fishermen often discussed with me the possibility of obtaining jobs as game wardens or tour guides. As Michael Cecil, the elder cascadu fisherman who led the mapping workshops once told me,

4. I digitized these sketch maps, using the GIS program ArcView; the original sketch maps, which were not scanned, were returned to the community.

If these traps continue this way, my children will wonder what a cascadu is. I could make a trap, I could set a trap, but I don't want to. Because I want the cascadu to be here tomorrow and the next day and the next year. . . . If I was a game warden, I would check every day, and make sure there were no traps.

Thus, by voicing their opposition to the practice of trapping, villagers not only contended for access to resources but also presented an image as the swamp's protectors. The mapping workshop became an opportunity for some fishermen to represent *their* local knowledge as most appropriate for the proper management of fish resources. In fact, as some of the fishermen told me on various occasions, they participated in the workshops from a sense of responsibility to report "accurately" what they knew about fishing in the Nariva Swamp.

At this stage, then, it became necessary to draw a distinction between intention and use of these maps—not just from the perspective of the participants, but also from my perspective as a geographer (Morphy 1994). My presence and initiative had provoked not simply a collaborative process to document local knowledge but the telling of stories to effect relations of power (Taylor 2003, 256). The mapping project had become a theater for the public performance of prototypical traditional fishermen. Those who associated themselves with this identity formation—that is, the "original" settlers who adhered to what they saw as environmentally sound practices—claimed to be the "natural" stewards of the Nariva Swamp and therefore claimed the right to determine the rules of the cascadu fishery. The mapping project thus provided a stage for the "authentication of their experience" in front of a sympathetic audience of friends and an activist researcher (Myers 1994, 694). This is partly why the toponyms included on the final maps reflect the histories of the original settler families and even the personal histories of some of the older fishermen (figs. 1, 2). Gold Teeth Corner, for example, is named in memory of one of the fishermen's former girlfriends; Breakass Hill marks a particularly steep and slippery hill. Two rivers are named in honor of retired fishermen—Pedro Stream and Malik River—because these fishermen were the first (in the memory of Kernahan's elders) to fish and "clean" these rivers.
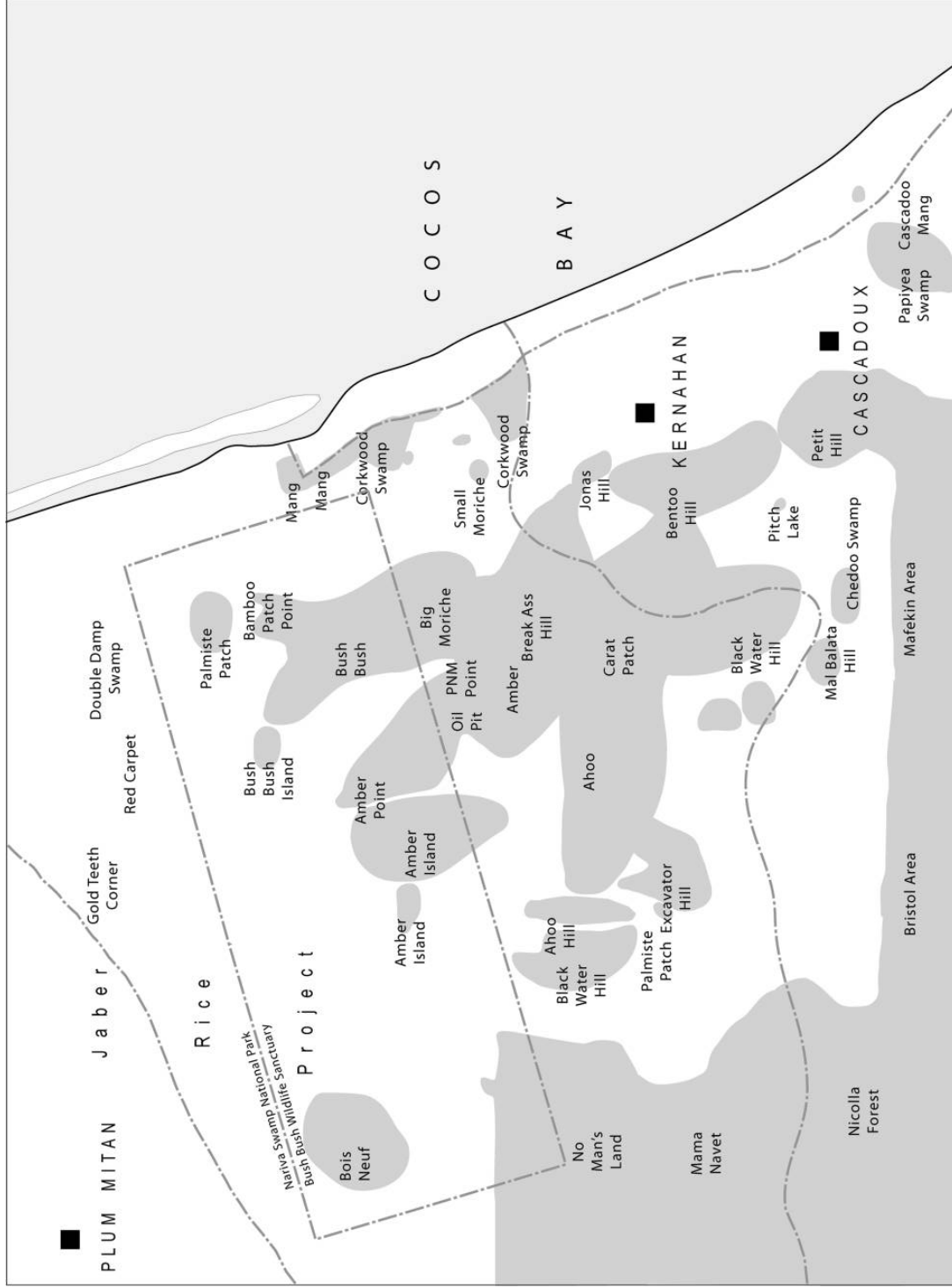
However, these performances of authenticity were not informed only by the contest for local fish resources. In the late 1990s, the Nariva Swamp was threatened by an increase in commercial rice production, prompted in part by greater state support for the rice industry. Trinidadian environmentalists—mostly well-connected, wealthy residents of the capital, Port of Spain—mounted a campaign against the commercial rice producers, representing their large-scale clearing of swamp forests as the antithesis of the time-honored, sustainable practices of the "local" fishermen. They constructed Kerhanan as a "typical" Indo-Trinidadian village where people had developed intimate ties with their characteristic environment. The fact that the village owed its existence to economic and po-

litical marginalization and that residents were still economically beholden to descendants of European plantation owners was left out of these narratives (Brereton 1974, 1981, 1993; Clarke 1993; Henry 1993; Singh 1974; Vertovec 1990, 1992; Weller 1968). Instead, this construction of Kernahan as a bounded, "indigenous" locality provided the impetus for conservation interventions and greater state control over village life. Land tenancy is being regularized, leading to concerns that properties will fall under the control of wealthier villagers, and the state wildlife section is increasing its monitoring of the swamp, potentially limiting villagers' access to resources (Sletto 2002, 2005).

Thus, the performances in the participatory-mapping project not only were informed by a local contest surrounding knowledge and authenticities but also reflected regional and state political economies and contested constructions of nature, place, and people. Even though the "Battle of Nariva" was largely fought in the remote spaces of national media and academia, it was becoming apparent to villagers that the Nariva Swamp was being "discovered" and reconfigured into a conservation space. Claiming to be a traditional, authentic fisherman would be strategically useful in encounters with external agents, who more often than not would be concerned with environmental conservation rather than economic development (see Baptiste 2008 for more on villagers' environmental concerns). The participatory-mapping project, then, became a space for articulating the past in the context of the present, for seizing "hold of a memory as it flashes up in a moment of danger" (Benjamin 1968, 255). Talking about the landscape meant talking about history and rights and belonging but also about the threat of commercial rice growers, "intruders" who threatened the cascadu stock, and the increasing presence of state agents. Thus, the mapping project became a means to imagine futures desired and futures feared.

Making Maps: Positionality, Method, and Conflict

While the Indo-Trinidadians in Kernahan live in a marginalized rural community with little resort to claims of indigeneity, the Pemon, one of the Carib group of indigenous peoples, have inhabited the Gran Sabana since before the arrival of Europeans in the New World (Huber 1995, 54–55) and have been vocal in expressing their indigenous identity. They number today about 20,000 and live throughout the southeastern corner of Venezuela, in southern Guyana, and in western Brazil (see Cousins 1991; Mansutti 1981; Thomas 1982; and Urbina 1979; see also De Armellada 1943 and Koch-Grunberg 1981). The Pemon are undergoing complex, uneven processes of social change, depending to a large degree on their location within the savanna landscape. In communities located along the Pan-American Highway between Puerto Ordaz and Boa Vista, the capital of the Brazilian state of Roraima, residents are increasingly dependent on a cash economy based almost exclusively on tourism, while in more re-

Kernahan
Fishing Zone:
Place Names

Elevated areas or
swamp forest

Marsh

Administrative
boundaries

Amber   Place names

Towns and
villages

0   500   1000 m

Coastline, coastal road, and
administrative boundaries are
derived from Trinidad topographic
map series, sheet 46, Lands and
Survey Division, 1977. All other
information is based on conceptual
mapping in the communities of
Cascadoux and Kernahan,
September and October, 1997.

Cartography 1999 by Bjorn Sletto

C O C O S

B A Y

PLUM MITAN   Jaber

Gold Teeth
Corner

Red Carpet

Double Damp
Swamp

Rice

P r o j e c t

Nariva Swamp National Park
Bush Bush Wildlife Sanctuary

Bois
Neuf

No
Man's
Land

Mama
Navet

Nicolla
Forest

Bristol Area

Mafekin Area

Amber
Island

Amber
Island

Bush
Bush
Island

Amber
Point

Palmiste
Patch

Bamboo
Patch
Point

Bush
Bush

Black
Water
Hill

Ahoo
Hill

Palmiste
Patch

Excavator
Hill

Ahoo

Big
Moriche

Oil PNM
Pit Point

Amber

Carat
Patch

Break Ass
Hill

Small
Moriche

Corkwood
Swamp

Corkwood
Swamp

Mang
Mang

Jonas
Hill

Bentoo
Hill

KERNAHAN

Pitch
Lake

Black
Water
Hill

Mal Balata
Hill

Chedoo Swamp

Petit
Hill

CASCADOUX

Papiyea
Swamp

Cascadoo
Mang

Figure 1. Mental map with place names, drawn by fishermen of Kernahan, Trinidad, fall 1998.

Kernahan Fishing Zone: Waterways

Elevated areas or swamp forest

Marsh

Perennial streams and canals

Watercourses

Village canals

Administrative boundaries

0   500   1000 m

Coastline, coastal road, and administrative boundaries are derived from Trinidad topographic map series, sheet 46, Lands and Survey Division, 1977. All other information is based on conceptual mapping in the communities of Cascadoux and Kernahan, September and October, 1997.

Cartography 1999 by Bjorn Sletto

C O C O S   B A Y

Nariva River

Sand River

Bush Bush

Big Bush

Bush Bush

Moxie River

Amber River

Amber River

Ahoo River

Black Water

Malik River

Pedro Stream

Black Water River

Chedoo

KERNAHAN

CASCADOUX

Panirea

Ramsey

PLUM MITAN

Nariva Swamp National Park

Bush Bush Wildlife Sanctuary

Pear

Figure 2. Mental map of streams and waterways, drawn by fishermen of Kernahan, Trinidad, fall 1998.

mote communities, Pemon still subsist through traditional practices such as fishing, hunting, gardening, and gathering (Butt-Colson 1985; Kingsbury 1999).

My primary research interest in the Gran Sabana was the cultural and political-economic causes and consequences of a conflict between the Pemon and state agencies regarding grasslands fire management. The parastatal Electrificación del Caroní (EDELCA) is the principal state agency charged with fire management within the boundaries of Canaima National Park, which covers most of the Pemon ancestral lands in the Gran Sabana. In part, I sought to assess dominant narratives about indigenous burning practices, specifically, claims by EDELCA fire managers that indigenous fire use was causing loss of gallery forests. As I eventually came to realize during my four years of living in the two communities of Kumarakapay and Monte Bello, these claims were too simplistic. Instead, forest loss through indigenous burning is contingent on geographical realities and social change. Fire suppression appears to be leading to increased fuel loads and more extensive fires. Indigenous burning appears to reduce fuel loads in forest-savanna boundaries, preventing fire encroachment in forest patches (Sletto 2006, 2008; see also Rodríguez 2004, 2007).

Shortly before my arrival in the Gran Sabana for the first time in summer 2001, a new Venezuelan constitution appeared to create an increasing role for civil society in national governance and to provide indigenous people with limited territorial rights to so-called habitats. A subsequent demarcation law provided a more explicit definition of what constituted "habitat" (places of cultural, historic, and economic significance for the sustenance of traditional culture) and thus provided a legal framework for the participatory-mapping project.[5] Although progress has been slow in the actual granting of indigenous habitats under the demarcation law, the constitutional guarantee was a milestone for indigenous rights in Venezuela, and a number of new mapping projects have been implemented in its wake.[6]

Before arriving in the Gran Sabana, then, I was aware of the political potential of the new constitution, and I saw the opportunity to conduct a research project that incorporated an activist dimension drawing on my academic training in GIS and cartography. From the outset, however, I was concerned about the many technical, logistical, and social limitations and implications of such participatory-mapping projects as well as the unpredictable political consequences of my

engagement. As I became more visible in the Pemon communities through my work, teenagers, women, and elder Pemon became increasingly enthusiastic and supportive: young people and women in part because of the opportunities afforded to participate and elders because of the privileging of their knowledge.

However, some Pemon, in particular a small group of elite young political leaders, began to increasingly distance themselves from me. Toward the end of my four years in the Gran Sabana, I was indirectly informed of their complaints that I had assumed too much control of the project. Through subsequent conversations with these political leaders, who held elected offices or were appointed to regional or national institutions, I learned that although the project was successful in one aspect (my collaborators and I had produced a map of Pemon sector 5, as promised), they felt that I had failed to sufficiently train Pemon in GIS or to leave behind any computer equipment for them to continue mapping other sectors of Pemon territory. The project had been part of a trade from the outset: community leaders had given me permission to conduct my research of fire management in return for leading the mapping project, and no mention had been made about furnishing computers or GIS training. But despite my self-righteous frustration with what I felt were unreasonable complaints, I realized that these national and regional leaders, who rarely had time to visit remote villages and to whom I had little access because of their location in large urban centers far from the Gran Sabana, had felt marginalized. Although the map was completed, they were not pleased with how I had unwittingly sidelined them during the project.

These were not the only community factions leery of my work. A few community members in Kumarakapay—especially members of families who had little or no engagement with outsiders, had been marginalized in the increasingly divisive competition for access to the tourism industry, and had no relatives on the mapping team—occasionally voiced fears that I was serving corporate or state interests. Such claims—which became more and more infrequent and, as I later learned, were always adamantly contradicted by other community members—made sense, given the history of the Gran Sabana—not just the colonial experience but also the more recent history of encroaching mining companies, the establishment of the national park, and the settlement of the border city of Santa Elena, where nonindigenous operators largely control the tourism industry and Pemon are increasingly becoming a marginalized underclass. Making indigenous landscapes visible in new material forms, such as maps, is a move fraught with risks, raising complex questions about representation, appropriation, and dissemination. As in the case of other indigenous art, it is important to consider structures and the rules of ownership of such maps (Myers 2004). Although the *capitanes* in sector 5 had given me formal written permission to publish these maps both in digital and printed form for educational purposes, these conversations were im-

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5. Ley de Demarcación y Garantía del Hábitat y Tierras de los Pueblos Indígenas (Gaceta Oficial no. 37.118, January 12, 2001).

6. The legislation also established a government commission for the demarcation of indigenous "habitats," but its work has been stymied by procedural conflicts, and the actual demarcation of indigenous lands has been stalled. Pemon leaders are also increasingly frustrated by the tightening of the requirements for adequate documentation of indigenous occupancy of traditional lands. In January 2007, a new Ministerio de los Pueblos Indígenas was established, and it is now overseeing the demarcation process (Gaceta Oficial no. 38.599, 8 January 2007, http://minpi.gob.ve/minpi/content/view/61/1/).

portant reminders of the need to reflect on the unknowable consequences of such global dissemination (Myers 2004).[7]

The ethnocartographers, project coordinators, and I were also surprised during two mapping workshops when a few community members adamantly refused to work with us because of fears that I *and* my collaborators had arrived in the village to "take land away from them," either to "sell" or to incorporate in the greater land-use area of Kumarakapay, which is the largest and most acculturated community in the Gran Sabana, the home of my collaborators, and also where I spent most of my time. We came to realize that in both cases the complaints were informed by animosities between some community members and the *capitan* of Kumarakapay. These animosities stemmed in part from what was seen as Kumarakapay's betrayal during a conflict in the late 1990s concerning the construction of a high-voltage power line through Pemon lands. While I was waiting for a resolution to these conflicts, which in both cases lasted for an entire day, my collaborators repeatedly explained the purpose of the mapping project—to produce a map of the entire sector 5 to be used in subsequent negotiations for land rights—and we were eventually welcomed in all 12 communities in sector 5.

The collaborators I have been referring to were 12 graduates of two one-month training programs I held in the spring of 2002 and 2003 in Kumarakapay. Developed and taught with the collaboration and assistance of the *capitan* at the time, Juvencio Gómez, and the coordinator of the mapping project, Claudio Gómez, the two courses were intended to instruct students in basic cartographic techniques and to share experiences with participatory mapping in other indigenous landscapes. The 12 graduates from these courses self-identified as "ethnocartographers" and organized and led all the subsequent mapping workshops, working directly with elders to draw maps based on landmarks they had previously traced from remote-sensing images. Although I was present in most of these workshops, my input was limited to a personal introduction, occasional consultations with ethnocartographers about technical questions, and day-long hikes to record geographic coordinates with global positioning system (GPS) receivers. The ethnocartographers also participated in digitizing the sketch maps, editing the GIS, and designing the final map,

which I completed in its entirety with my laptop while I was living in Kumarakapay.[8]

My relationship with the ethnocartographers (10 males and two women aged 17–28) and the dynamics within the group deserve a much deeper exposition than is possible here. The group was far from homogenous, and they initially became embroiled in conflict related to gender relations and hierarchical family relationships. Although Cristina Rossi and Brenda Fernández eventually emerged as popular leaders of the group, in part through my encouragement, they initially met resistance from male ethnocartographers. Also, graduates from the first course in spring 2002 were members of wealthier families more closely connected with the tourism industry. The second cohort, who graduated in spring 2003, were members of less well-off families who enjoyed fewer benefits from the tourism industry, and most of them had less formal education and spoke Spanish with some difficulty. After a few months, however, the ethnocartography team developed into a cohesive group to the point of exclusion, organizing social events, communicating independently with *capitanes* and elders from throughout the Gran Sabana, wearing T-shirts and carrying business cards with the project logo they designed, and enjoying their status as "los etnocartógrafos."

As in the case of Kernahan, then, the mapping workshops in the Gran Sabana provided a forum for the contested reproduction of identities, spatialities, and indigeneity through performativity and storytelling. However, the political stakes were higher (the future demarcation of indigenous territory), and more diverse groups of mapmakers were involved: members of a dozen communities, each experiencing different rates of acculturation and exposure to state agents and tourists; teenagers and elders; women and men; local *capitanes* and national leaders; ethnocartographers from different social and economic backgrounds; and, of course, my own white male person, embodying complex memories of domination, promises made and broken, and hopes of future monetary benefits and social status. Also, two versions of the Pemon language are spoken in the Gran Sabana: Arekuna in the north and Taurepan in the south. Although the two languages are mu-

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7. An example of unintended consequences of such mapping projects is the work now conducted by the Venezuelan branch of the Nature Conservancy (TNC) in other Pemon sectors. Although some ethnocartographers are assisting TNC, they are split in their view of the organization's intent. Some are displeased with the more limited participation and cartographic training in other sectors. Some are also concerned that the mapping project carried out by TNC (initiated immediately after the termination of the project in sector 5 and without consultation with project participants in sector 5) is conducted primarily to benefit conservation interests. Pemon leaders have not permitted TNC to work in sector 5.

8. Before the start of the project, village *capitanes* in sector 5 and I (as "principal investigator and cartographer") signed a formal agreement giving me permission to bring all hand-drawn maps temporarily to Kumarakapay, Caracas, and Cornell University for scanning and laminating. They also gave me permission to use data from the mapping workshops in my maps illustrating indigenous and state fire management approaches (Sletto 2006). During presentation of the final printed map in February 2004, my collaborators and I returned all the now-laminated original sketch maps to the appropriate communities and also provided *capitanes* from all communities with 2 × 2-meter color printouts of the final map and CDs that included the digital GIS map and all photographs and video footage recorded in the respective communities. The final maps were produced in their entirety in Kumarakapay on my own laptop with the GIS program ArcView 3.2 and were printed on archival photographic paper, courtesy of the Unidad de Información Geográfica of the Centro de Ecología, Instituto Venezolano de Investigaciones Científicas (IVIC), and the Centro Internacional de Ecología Tropical at IVIC.

tually intelligible, intermarriage is not common between the two linguistic groups, and *capitanes* tend to divide along linguistic lines in elections for *capitan general* (the mostly symbolic head of sector 5). In what remains of this article, then, I will consider how these social relations were negotiated and (re)produced through memories and knowledge of place and landscape as Pemon "culture" was taking on "new and varied forms of materiality" (Myers 2004, 6) in the form of maps.

Talking Landscapes: Memory, Authority, and What It Means to Be Pemon

Among the once seminomadic Pemon, elders (*abuelos* and *abuelas*) are considered the bearers of genuine indigeneity. Elders are the privileged purveyors of traditional environmental and spatial knowledge, respected for their insights into the mystical realm and the *pantons* of the ancestors. As the elder Antonio Gonzalez once said to me, "It is I who know." This claim to authority is based on movement and *seeing*, that is, on the number of years spent walking, observing, and producing the landscape through their presence. Most of my elder informants preferred talking about fire management while walking or resting on special spots (*pata eredok*) on the top of high hills with sweeping views of savanna grasses in shades of green punctuated by dark splashes of forest groves, great sweeps of rivers, and wispy plumes of smoke. However, since the 1950s, the development of the highway to the Brazilian border, coupled with a national strategy to form permanent agricultural nuclei, has led to the formation of large villages such as Kumarakapay. Extensive areas once populated, especially near the borders with Guyana and Brazil, are now visited only during hunting and fishing expeditions. Elders who were born in nomadic settlements and who still walk the old trails thus embody nostalgia for these remote landscapes.

In the mapping workshops, elders quickly took the lead in drawing the more sophisticated second-stage maps, working with the trained ethnocartographers to demarcate natural and cultural features and locations of land-use activities.[9] This was unremarkable, given the respect for elders and their knowledge; in addition, Pemon leaders had also asked me to prioritize the participation of elders in the mapping workshops. However, elders' hegemony has been increasingly challenged by younger community members, especially in acculturated communities where *capitanes* are young and unaccustomed to traditional

9. Pemon workshop participants (children, women, and men) initially drew sketch ("mental") maps on empty sheets of paper, working in groups based on age and gender. In the following days, self-selected local experts (mainly elder men) worked with the ethnocartographers to systematically draw natural features and locations of land-use activities and sites of cultural significance on large sheets with predrawn visual guides. Workshops were held in 10 different communities in Pemon sector 5 with the participation of about 300 people, resulting in 12 different maps of village territories. The 12 separate maps were digitized in ArcView 3.2 to form a single map of sector 5 using georeferenced satellite imagery and about 2,000 GPS points as additional reference.

land-use practices. Conversely, elders are often frustrated with younger Pemon because of their lack of "indigenous knowledge." The mapping project brought this criticism of the miseducation of younger Pemon to the fore, partly because it made visible their lack of traditional knowledge and partly because the spatialities of younger Pemon often reflected the influence of modernity on youth culture. Elders therefore used the public stage afforded by the workshops to tell stories of landscape, identity, and belonging, thus reproducing what they saw as the meaning of Pemon indigeneity.

In a mapping workshop held March 4, 2002, in Kumarakapay, Laurencio, a young man in his early 20s, recently married, was working with Rafael, one of the most respected elders and also one of the founders of this modern village, having been born at a time when the Pemon were still seminomadic. Laurencio was drawing rivers on the map per Rafael's instructions, and this conversation ensued:[10]

> *Rafael:* This place called Apak is where I lived before with my parents. It's north of the Kukenan River. Wuararita was also one of our places [*pata*, land] when we were children.
> Pause.
> *Rafael (exclaiming):* You young people don't know anything! Because those who know, are we, the grandfathers. But you don't. This is because the grandfathers have been moving back and forth from one place to the next. Because of this we know everything up to the corners. After we do all this, all who come after us will know. They will see all the places, the rivers, the hills.
> *Laurencio (in a mollifying tone):* Yes, that's why we are doing this work. Thinking about our children.
> *Rafael:* We need to put down everything, because in the future, if we leave spaces open, the people who work in tourism might take them from us.

In this conversation, Rafael is expressing the superiority of his knowledge based on his lifelong experience and is adamant in his attempt to educate Laurencio. His claims to uniqueness, then, are associated with persistence: Rafael continues to walk the same distant trails that he walked as a young man. Time is articulated with place through his embodiment of the landscape. However, his stories are performed in the context of discontinuity (young Laurencio has never walked some of these trails), reflecting the paradoxes of indigenous activism, which exhibit characteristics of both continuity and discontinuity with the past (Haley and Wilcoxon 1997). Also important is his emphasis on movement. Rafael is a member of the first generation of permanently settled Pemon, and he still sees walking as a virtue and, most importantly, as a means to *see* and thus to learn. Even though elders have very little formal education, they have little difficulty drawing pano-

10. Informal conversations during mapping workshops were recorded with the permission of participants and later translated by Anibal Herrera and me.

ramic maps to a relatively high degree of accuracy, using ordering techniques to bestow control of the landscape on the viewer (Cosgrove 1984).

Another important point is Rafael's reference to "corners." Pemon visualize their landscape as both finite and infinite: infinite in the sense that one can always move from one place to the next and finite in the sense that a group of families have usufruct to a certain territory and that villages are separated by fluctuating but nevertheless meaningful boundaries. Rafael's use of the term *corners* alludes to the necessity of knowing not only the stories and meanings of the landscape but also the spatial extent of your space, your *kowantok*, which roughly translates to "homeland" but also means "life." In a broader sense, his comment implicitly links indigenous knowledge, indigenous land rights, and cultural survival, a rhetorical strategy commonly used among indigenous organizations (Haley and Wilcoxon 1997; Kirsch 2007). To Rafael, the map is not simply a representation of a land claim but a material object that embodies indigenous identity. Blank spaces on the map would suggest that Pemon are not fulfilling their responsibility to the landscape handed down by their ancestors. (The spiritual connection elder Pemon feel for the Gran Sabana, which is related through *pantons*, precludes academic deconstruction [see Brosius 1999]; it is also beyond the scope of this paper.)

From a perspective of indigenous resistance, however, the concept of "filling in" empty spaces illustrates the role of mapmaking as art and thus as a social activity intended to effect relations of power (Gell 1998). Any white space on the map would serve as an admission that the space is not used or inhabited. In the words of Antonio Pérez, another elder (speaking on October 12, 2003, at the start of the week-long revision of the draft map),

> The *tuponken*[11] [outsiders, "people who wear clothes"] have forced indigenous people to live in small sites, very closed in, and sure, when they then see all that empty space (where indigenous people don't live), they say, "Why do the indigenous people need these lands, since they don't live in these empty spaces?"

This is also what Rosa Emilia means when she says that "much is missing still": the women's map needs to be filled in by the elder men. Through their embodiment in and of the landscape, elder men are best suited to manage this translation of culture into new material forms, in part because they know what place-names are "safe" representations of their landscape (Geismar and Tilley 2003, 179).

However, the elders' performance of indigenous identity did not always pass uncontested. Younger or female Pemon

express conflicting desires for tradition and modernity and tend to defy elders, just as they voice criticism of state agencies. This is a segment of the conversation among the women drawing their sketch map in the workshop on February 24, 2002, in Kumarakapay; as discussed above, the protagonists are Cristina Rossi (in her late teens at the time), Rosa Emilia Fernández (in her early 40s), and Leticia Fernández (a grandmother in her 50s and also Cristina's mother).

> *Rosa Emilia:* Kadawata River empties into Chirimota River.
> *Leticia:* Chirimota River starts at Akurimota.
> *Rosa Emilia:* No, Kurui River starts at Akurimota! Pause.
> *Rosa Emilia:* Claudio knows everything!
> *Cristina:* Sure. Because he travels in helicopters.
> *Rosa Emilia:* We are taking an exam in geography!
> *Rosa Emilia:* After Karawata comes Arapota.
> *Cristina:* Really?
> *Rosa Emilia:* Kamaiwa is a mining area.
> *Leticia:* We ourselves are making our map. Why? It's because we are from here.

I suggest that this passage illustrates the articulations between identity formation, gender relations, and spatialities that characterized the mapping workshops. After a brief argument about what river starts at Akurimota, Rosa Emilia exclaims that "Claudio knows everything." Claudio, the coordinator for the mapping project, has long been employed by EDELCA and is occasionally flown in the company helicopter to locations throughout the Gran Sabana. Although many villagers resent EDELCA for the domination the company represents, they also grudgingly respect Claudio for his opportunities to enjoy a visual perspective superior to the view from the top of a hill. Cristina, who was still in high school at the time, offers the opinion that of course Claudio knows the landscape better than the elders because his knowledge is derived from modern technology.

Rosa Emilia then suggests that they are "taking an exam." Implied in her statement is the notion that the women are being tested and must live up to standards set by elder men. However, Leticia marvels at the fact that they (or rather "we," meaning the women) are actually making their own map. That is because they "are from here," she says; that is, the women's local knowledge is validated by their birth and lifelong presence within the embrace of their *kowantok*. In her subtle way, Leticia appears to be countering Cristina's suggestion that Claudio knows better because of his scientific knowledge; at the very least, she suggests that they, the women, have as much right to make their own map because they are also "from here." The mapping workshop, then, became a stage for women to perform their own stories of place and landscape. By employing traditional structures—privileging elders' knowledge, foregrounding the significance of embodied experience—they were able to cross established social boundaries (see, e.g., Okafor 1994).

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11. There are three different forms of Pemon—Taurepan, Arekuna, and Kamarakoto—which differ in both pronunciation and vocabulary. I derive my spellings here from De Armellada (1943). Few texts are published in Pemon, and spelling and orthography are inconsistent, depending in part on what form of Pemon is spoken by the author and/or the translator.

Ultimately, the conversation illustrates several axes of tension associated with the reproduction of "genuine" indigenous knowledge and hence "proper" indigenous identity: strongly cemented gender relationships were both reaffirmed and challenged, knowledge claims were contested, and generational conflicts simmered beneath the surface. About two weeks later, these contests intensified in another workshop, where Cristina—now a graduate of the ethnocartography course with a developing identity as an "expert" in a field of modern science—had the following conversation with Rosa Emilia and Antonio Pérez, an elder respected for his physical strength, endurance, and knowledge:

Rosa Emilia: Look, is "Monte Bello" the name [of the village] in Pemon or does it have another name?

Antonio (annoyed): No, sure it has its own name. It's called Panaimota.

Cristina (frustrated): What's with all these details!? Do we have to correct this? Write the name in Pemon?

Rosa Emilia: So now what's missing is fixing all these mistakes.

Cristina (sarcasm in her voice): So, now, is there anything else missing that we need to put on this map?

Antonio (exclaiming): Yes, yes! What's missing is changing all the names into Pemon!

Ironically, Antonio's emphasis on writing place-names in Pemon rather than in Spanish did not simply originate locally. In the beginning of the project, the ethnocartographers and elders occasionally wrote or told us place-names in Spanish, and Pemon leaders would encourage them to provide the toponym in Pemon, thus contributing to the (re)production of a Pemon identity that privileges traditionalists (see, e.g., Haley and Wilcoxon 1997; Hornborg 1994). In fact, in the Gran Sabana, some Spanish place-names created by nonindigenous state officials are more commonly used than Pemon toponyms. For instance, even when speaking in Taurepan, villagers typically refer to Kumarakapay as "San Francisco," which was its name at its founding in the 1940s. Only in the late 1990s did the village chief at the time, an activist leader with experience in national politics, lobby to change the name to Kumarakapay after the creek located at the site of the original settlement.

Other linguistic inconsistencies abounded. Villagers commonly used the Pemon words *paru* or *dapö* to label creeks and intermittent waterways but used the Spanish word *río* (river) instead of *tanno tuna* to indicate rivers. They labeled hills sometimes with the Pemon word *tüpü* and other times with the Spanish word *cerro*. On the same map, a natural feature might be given both its Pemon and Spanish toponyms. The community of Agua Fría, for instance, is named after the river with the same name, in Spanish. In Pemon, the name of the community and the river is Kuy Yeremepö. On the map drawn by adult men during a mapping workshop in this community, participants used the Pemon name to refer to the upper part of the river—located at the greatest remove

from the highway, in a landscape more exclusively embodied by the experiences of Pemon hunters and fishermen—and the Spanish toponym to label the lower part of the river where it crosses the Pan-American Highway.

The ironies continue. Antonio was wrong when he identified Monte Bello as Panaimota, because the name of the village is, in fact, Itewata. This is not to say that Antonio did not know the proper name; this is a short segment of a longer, animated conversation, and Rosa Emilia and Antonio simply miscommunicated. The point is that Rosa Emilia (a politically savvy and "radical" woman chafing at the gender politics that preclude her from leadership in the village) did not know the name of the village in Pemon but sensed the political value of writing the name in Pemon. After she made this point to Antonio, he then rebuffed the unusual challenge from Cristina (who was emboldened by her participation in the ethnocartography course) and again assumed authority because of his "traditional" knowledge. In this way, the significance and form of this particular spatiality was debated, and a *decision* was made. It became clear that it was necessary to represent the indigenous identity of the community of Monte Bello through words as well as images and that this would show the occupation of space not only by Pemon, but by "genuine" Pemon well versed in their identity.

Grounds for Resistance: Entanglements of the Material and the Symbolic

I have revealed some of the ways in which landscape and identities were mutually constituted through processes of social change. The mapping workshops became a stage for younger people to reveal their ambivalent embrace of the modern and for elders to perform their desires for an indigenous identity derived from historical narratives. However, a political-economic reading of these maps also reveals different perspectives on the *materialities* produced through these processes of social change. While the contests between elders and teenagers drew on specific knowledge formations and conceptions of indigeneity, the maps also reflected the complex positions of different social groups within broader political-economic structures. The following conversation took place among teenagers drawing their sketch (mental) map in the mapping workshops in Kumarakapay on February 24, 2002:

Anel: We are drawing the *tepuyes* [flat-topped mountains].

Lino (exclaiming): You're drawing your map as if you're painting a car! Why didn't you draw the power line?

Roger: Yes, we're missing the posts and the wires.

Lino: So after this, are they going to give us the land?

Anel: No, first Bjørn is going to bring the maps to the United States.

Lino: Where is the cattle [grazing] area?

Roger: We're missing the forest.

Anel: We need to draw the rivers with blue color, and
   the forests with green.
Leonel: We're missing Taren Ken.
Tony: This is the river Woi.

These five teenagers were working together to draw a map of
the territory of Kumarakapay at the same time that elders
and women were drawing their own maps of the same area,
but before they arrived at their final product, this group of
teenagers went through an impromptu process of negotiation,
as suggested by this slice of their conversation. Unlike the
elders, who started drawing their final map directly on the
1 × 1-meter paper I had supplied, the teenagers decided to
each draw his own map on letter-sized paper and then join
the different representations into one map. It was through
this contested merging of representations that some spatial-
ities were dismissed and others were foregrounded and
adopted as the group's official rendering of Kumarakapay
territory to be presented to village leaders and elders. Not
surprisingly, this process of negotiation revealed that Pemon
teenagers form and re-form their identities in different ways,
depending on their relationships with political-economic
structures both within *and* outside the community.

To begin, Anel and Lino are members of relatively poor
families who make their living mainly through subsistence
practices. They were also active in the demonstrations against
the power line that was being built by EDELCA through Pe-
mon lands in the late 1990s. The most radical of the protesters,
among them Lino and Anel, tore down the high-voltage tow-
ers as soon as they were erected, blocked the Pan-American
Highway, and faced the tear gas of the National Guard. By
the time of the mapping workshops, a compromise had been
reached, and the power line had been constructed, but the
conflict had influenced Lino and Anel to the extent that their
personal maps present Kumarakapay village territory as a bat-
tleground: Anel identifies Kumarakapay as a *Zona de Guerra*
(war zone; fig. 3), and Lino labels his map *No al Tendido
Electrico* ("No to the electric line," the political slogan of the
movement against the electric line; fig. 4). This is one of the
reasons why Lino asks whether making the map means the
villagers will "get their land." Anel, on the other hand, foresees
a slightly longer process, including a temporary removal of
the maps to the United States.

The other participants in the working group were Roger,
Leonel, and Tony, whose maps display a perspective on Ku-
marakapay somewhat different from those of Anel and Lino
(figs. 5–7). Roger, Leonel, and Tony are members of large,
prominent families engaged in tourism and the growing service
economy in the village, and Tony was the natural spokesperson
for the group. He was around 20 at the time (the oldest in the
group), one of the most fluent speakers and writers of Spanish
in the community, and a student in a teacher's college. More
(self-identified) radical young people like Lino and Anel see
Tony, Leonel, and Roger as prey to external influences. Tony,
however, argues that the Pemon should negotiate with state

agencies with the support of scientific knowledge and verbal
eloquence rather than pursue confrontational politics. This is
why he pointedly ignored Lino's suggestions to draw the power
line on their map and why the teenagers' joint map resembles
more his own representation and those of Roger and Leonel
(fig. 8). As Tony said when he presented the map on behalf of
the group of teenagers,

> We made our map like a city map. We think you will un-
> derstand it well because we made a legend. The green and
> yellow symbol means it is an indigenous community. And
> these symbols in blue are the most important tourism sites.
> And here we have the agricultural zone.

He then proceeded to point out the location of the power
plant, which was built in the 1970s to bring electricity to San
Ignacio, a nearby community where EDELCA offices are lo-
cated. The power plant also serves Kumarakapay because of
its location only 8 km from San Ignacio. In the question-and-
answer session that followed his presentation, I asked him
why they included the power plant on their map. "It's because
it's important for San Ignacio and Kumarakapay," he an-
swered. "This is where we get our electricity from."

At that point, Antonio Pérez abruptly rose and said about
the elders' map (fig. 9),

> The mental map we made is in accordance with our grand-
> fathers, who lived in this area. And now you [the teenagers]
> need to learn [the extent of this area], because those who
> come after us are going to need more land than we have
> now. Because we elders are not going to live much longer.

Then Antonio proceeded to recite the place-names that tra-
ditionally have marked the boundaries of Kumarakapay vil-
lage territory, all the while pointing to the horizon. His per-
formance was a form of social action with great awareness of
the audience (Myers 1994), drawing on words, gestures, and
his own embodiment of histories and landscape in his effort
to be persuasive (Stoller 1994*a*). By reproducing the ritual of
pointing into the distance and speaking the names and his-
tories of places from the top of a high hill, Antonio was also
illustrating the significance of temporalities for making land-
scapes meaningful (Tilley 1996).

From the group of teenagers, Anel responded plaintively
to Antonio's recital,

> We have made our map but it is very narrow [covering a
> smaller area than the elders' map]. But we have drawn all
> of what we have lived. For example, when Christmas comes,
> some of us go hunting. And we have included this distance
> on our map.

Finally, Laurencio, the young adult who sketched the elders'
map following their directions, stood up and said,

> As Antonio said, the teenagers have made a map only to
> serve the interests of tourism. They have drawn the waterfalls
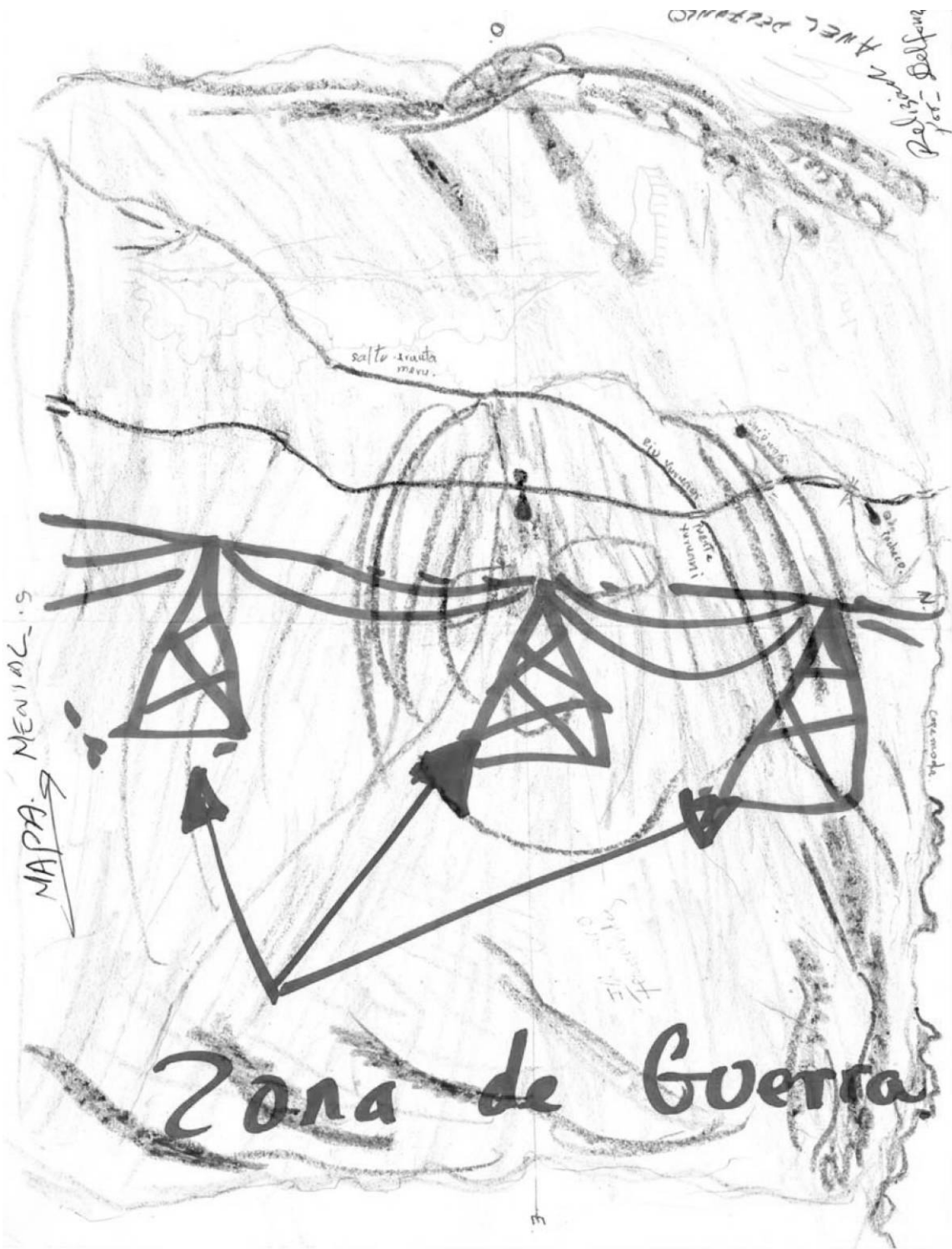> and the power plant and the *tepuyes*, but we have drawn

Figure 3. Mental map drawn by Anel Delfranco in a mapping workshop,
Kumarakapay, Venezuela, February 24, 2002. A color version of this figure
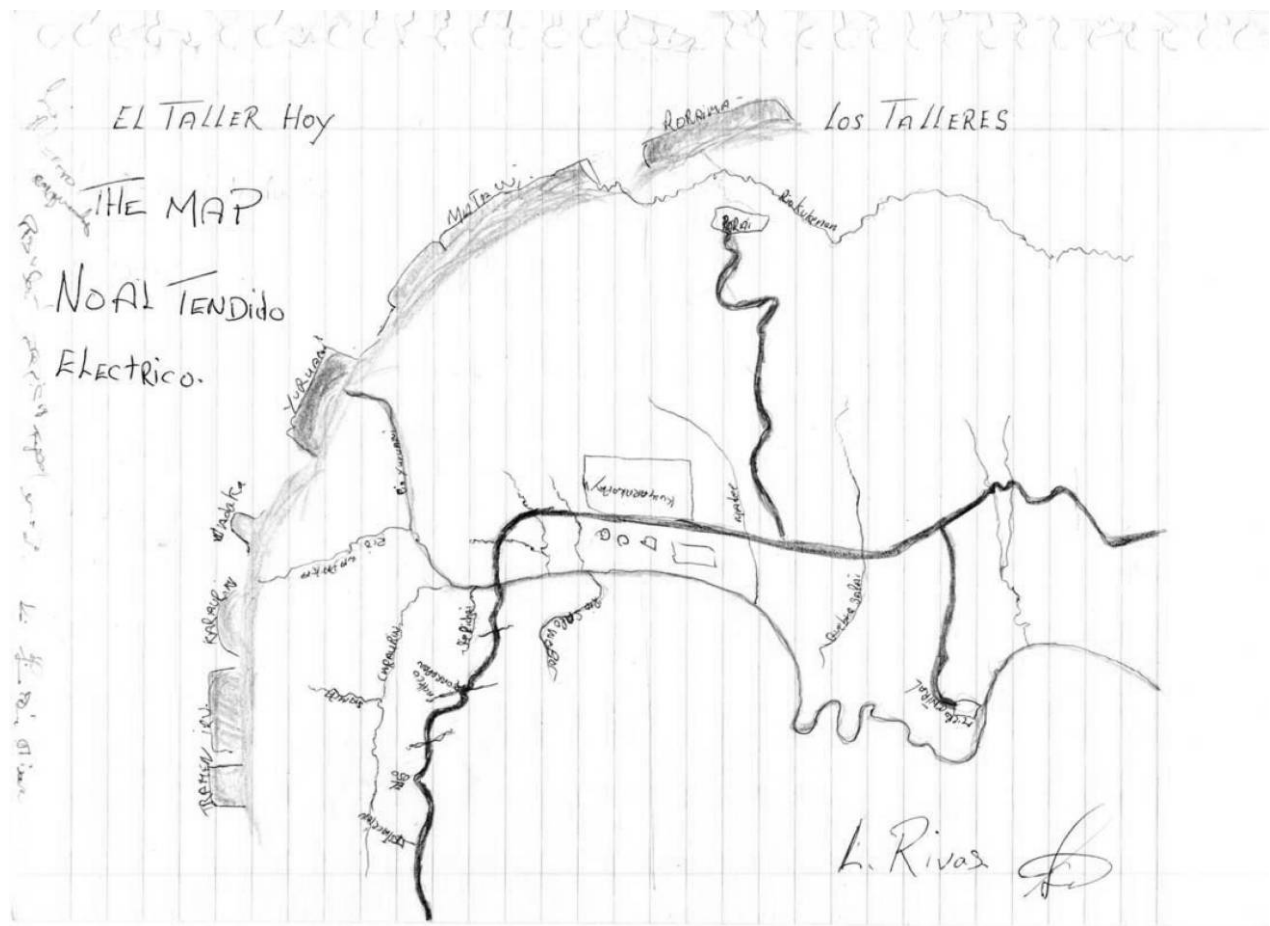is available in the online edition.

Figure 4. Mental map drawn by Lino Rivas in a mapping workshop, Kumarakapay, Venezuela, February 24, 2002. A color version of this figure is available in the online edition.

different things. Because what we have drawn in our map are the old settlements of the grandfathers and gardens and other things.

By charging the teenagers with lower authenticity (Hornborg 1994, 255), Laurencio effectively foreclosed any further debate.

An obvious but not particularly useful observation, then, is that teenagers' conceptualizations of the landscape differ from those of elders. This could partly be explained by some teenagers' desire to impress the foreign visitor with his cartography skills. The point, however, is that these teenagers could not have drawn a "traditional" map such as that of the elders even if they had wanted to, simply because they lacked the necessary knowledge of histories, place-names, and land-use localities and boundaries. Instead, I suggest that the final map jointly produced by this group of teenagers was the result of negotiations implicated in contested reproductions of indigenous identities. Through these contests, one representation (that of the more formally educated and outspoken Tony)

held sway over that of the more rebellious and locally disadvantaged Lino and Anel.

To elaborate, the main point here is that the position of Kumarakapay within the regional, national, and international political economy is conceptualized differently by different social groups and that these conceptualizations are made visible in their maps and revealed in their conversations. While teenagers discussed the conflict over the power line, elders recalled *pantons* and the places where ancestors lived, walked, and hunted. While elders exclusively drew place-names with historical significance, the teenagers, under the influence of Tony, prominently displayed the power station but left out the power line (which to many Pemon is a complex symbol of domination but also of indigenous resistance). The teenagers represented scattered gardens as an "agricultural area," in keeping with the rhetoric of generations of state development projects; for much the same reason, they sketched "grazing areas" even though the "cattle industry" consists of a few underfed heads of cattle owned by one family; and they
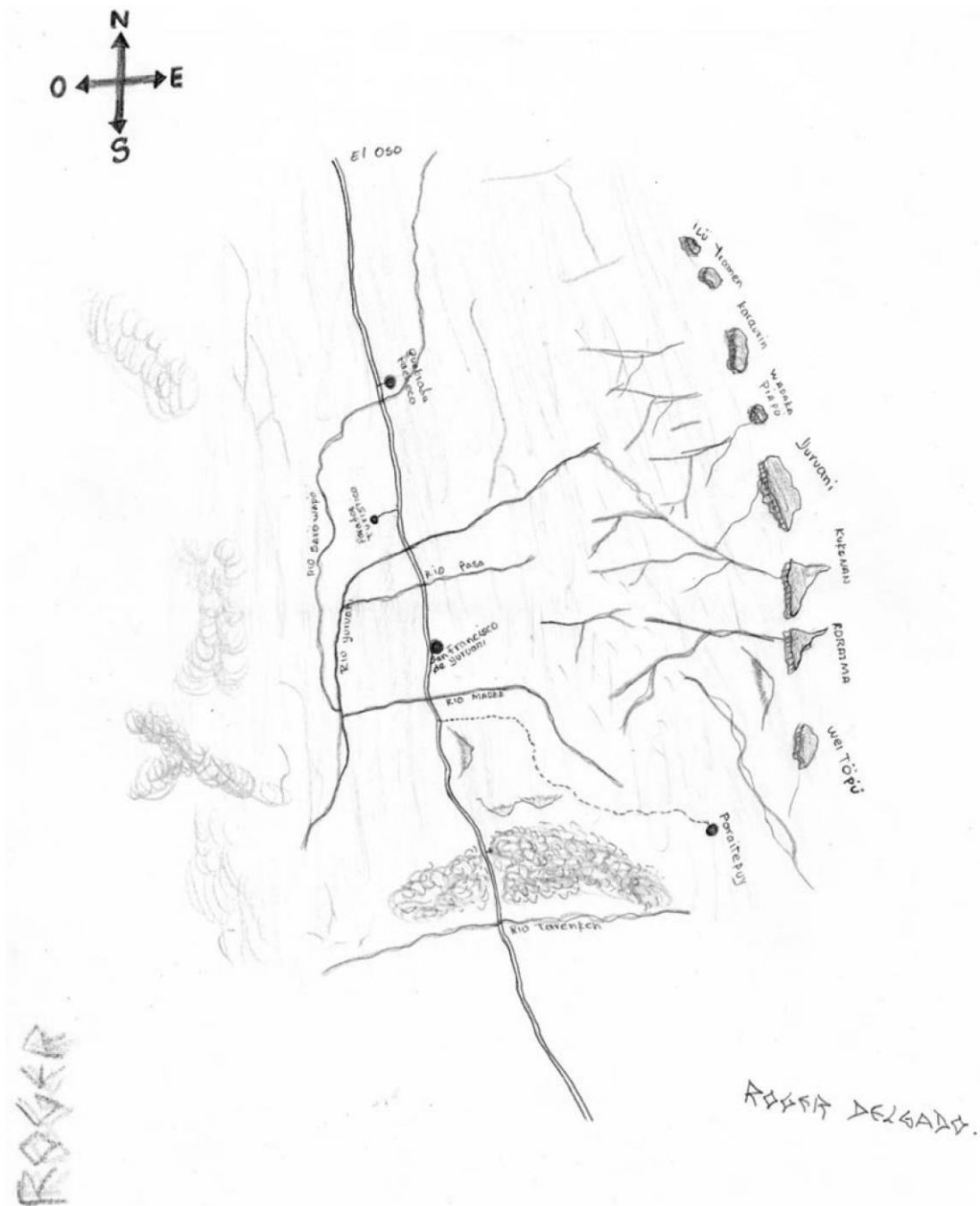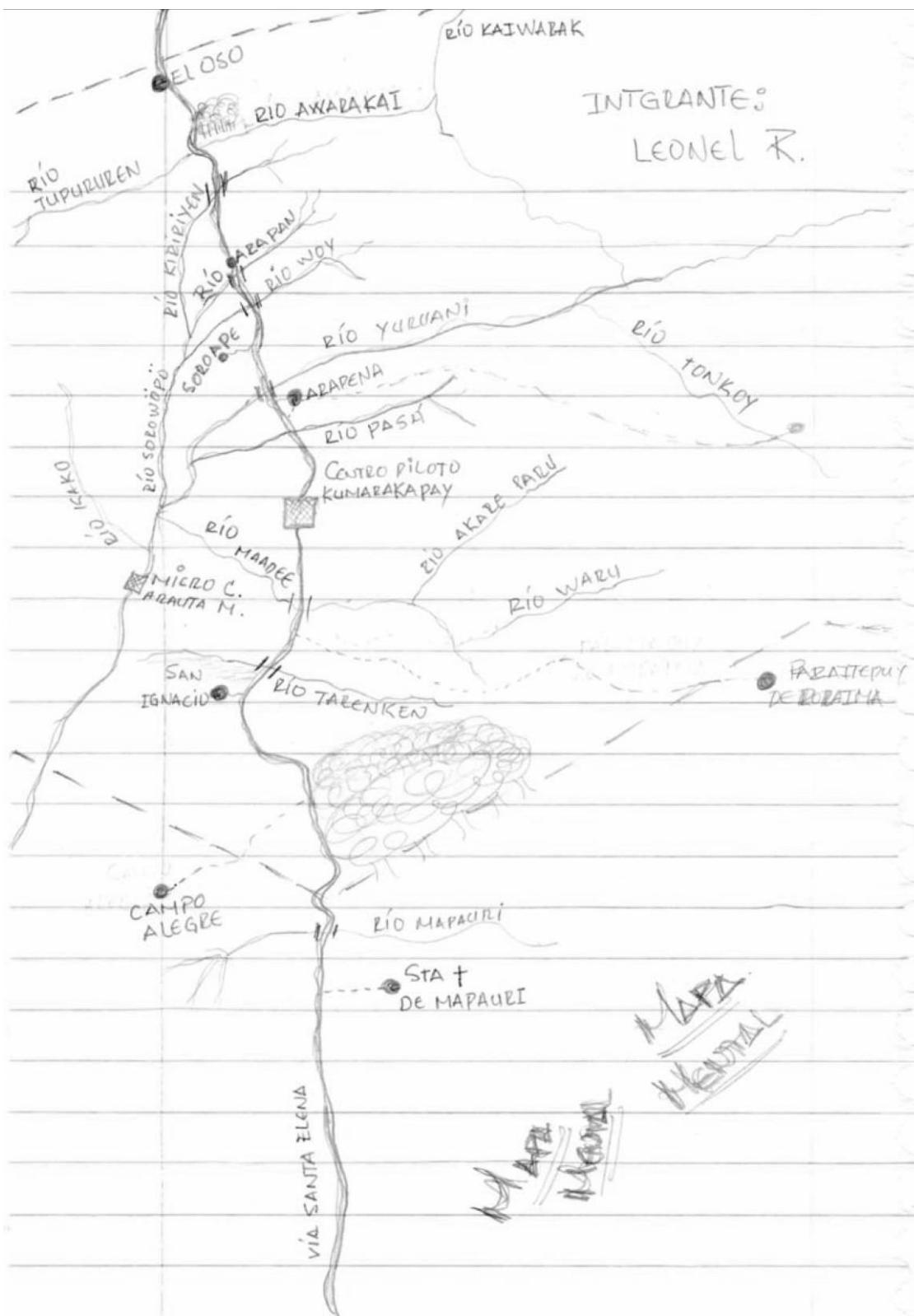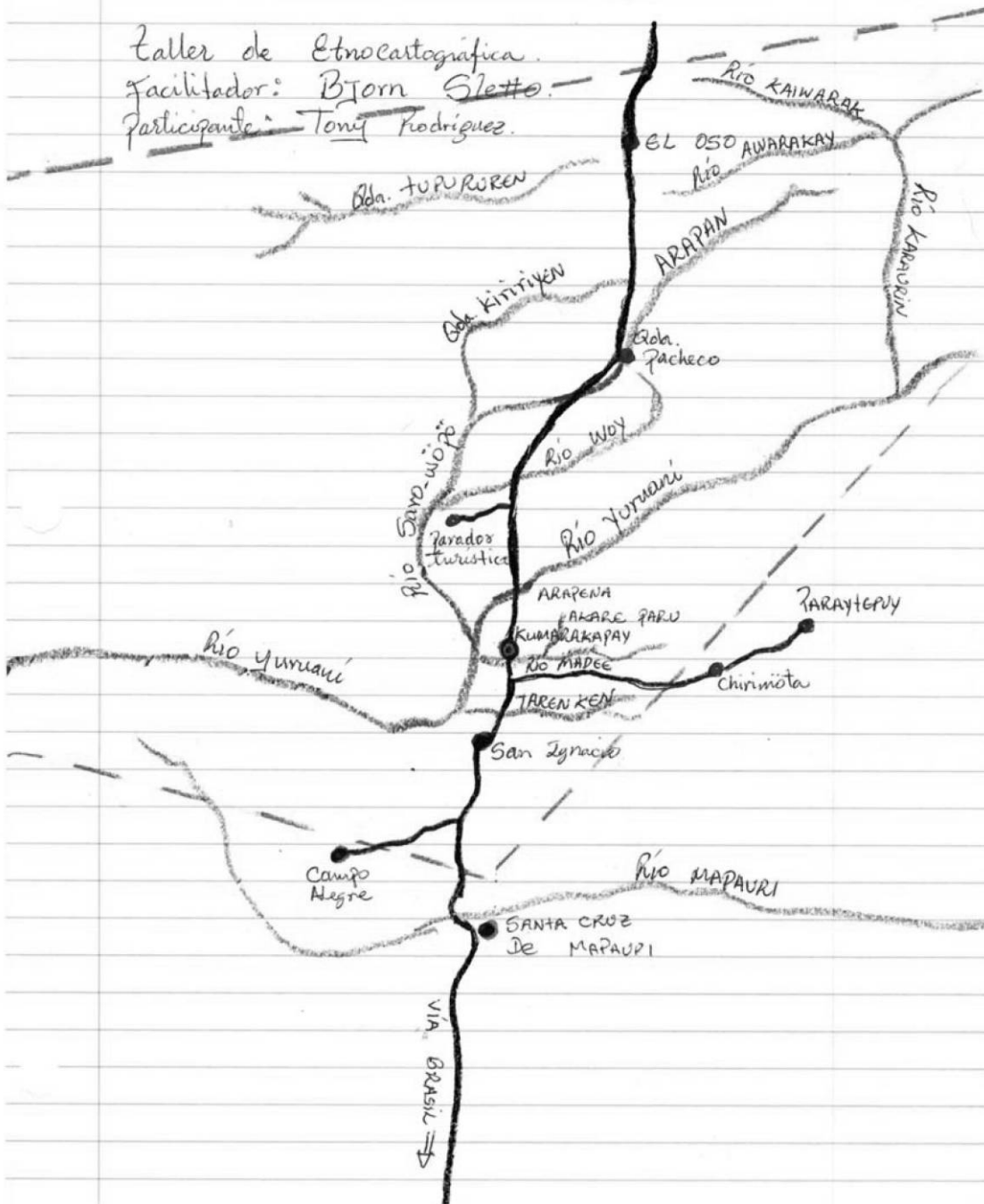
Figure 5. Mental map drawn by Roger Delgado in a mapping workshop,
Kumarakapay, Venezuela, February 24, 2002. A color version of this figure
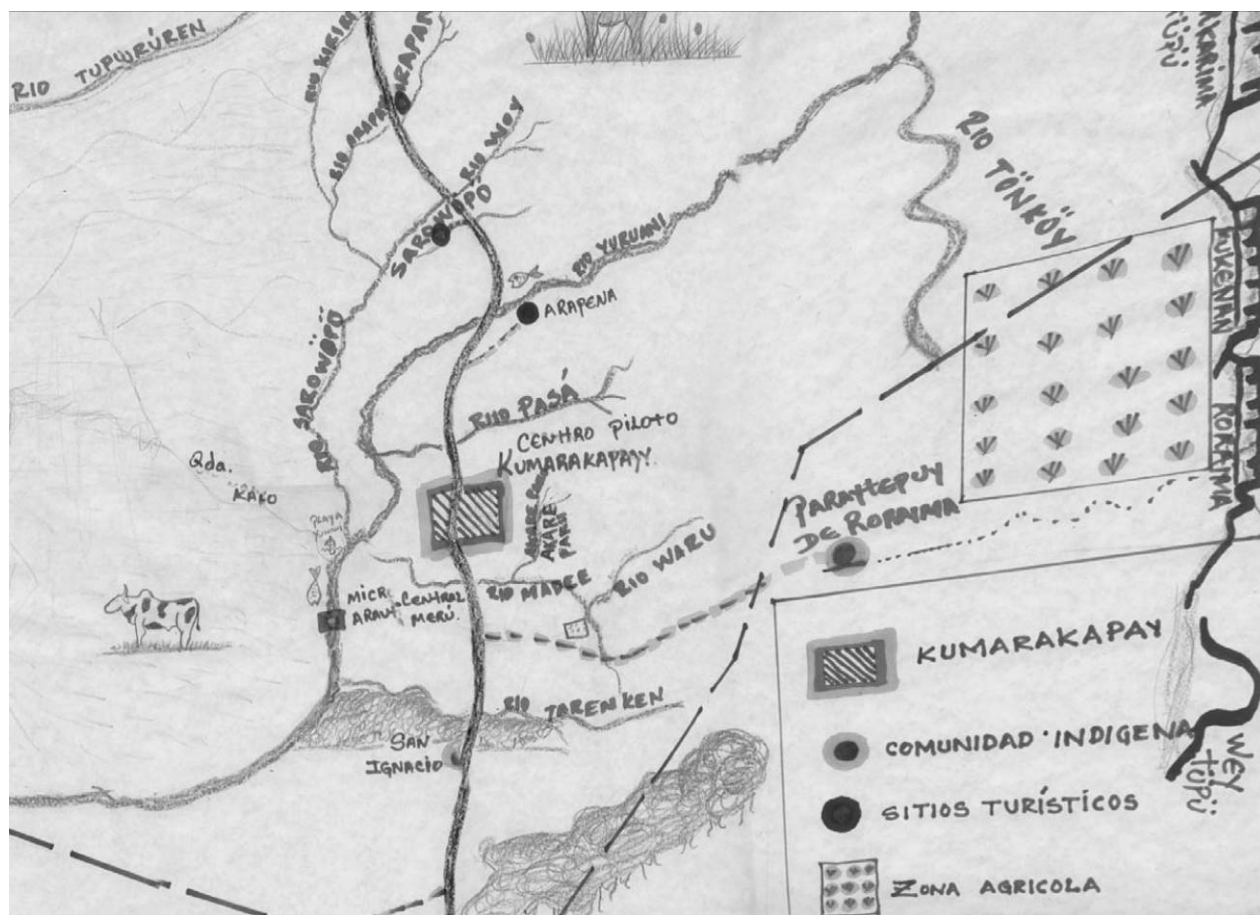is available in the online edition.

located "tourist sites" rather than more "typically indigenous" recreation sites, sacred sites, or historical settlements. The elders' map, meanwhile, makes no reference to this material evidence of state incursion in their territory but instead emphasizes the vastness of the space claimed by Kumarakapay all the way to "the corners" of their land-use area.

Eventually, the elders' spatiality won out as the official representation of Pemon sector 5, as it had to because of the priorities expressed by indigenous leaders. The second-stage, "intermediary" map of Kumarakapay (which served as the basis for the final, printed map) came to include "gardens" (locations of slash-and-burn agriculture) instead of "agricultural zones"

Figure 6. Mental map drawn by Leonel Rossi in a mapping workshop,
Kumarakapay, Venezuela, February 24, 2002. A color version of this figure
is available in the online edition.

Figure 7. Mental map drawn by Tony Rodríguez in a mapping workshop, Kumarakapay, Venezuela, February 24, 2002. A color version of this figure is available in the online edition.

Figure 8. Section of mental map drawn by youths in a mapping work-
shop, Kumarakapay, Venezuela, February 24, 2002. A color version of
this figure is available in the online edition.

and "bathing places" and "scenic views" instead of "tourist sites." No material evidence of state incursion (except for the Pan-American Highway) was included (fig. 10). Except for the highway and the Venezuelan border city of Santa Elena, the final map excludes the power plant, EDELCA installations, National Guard posts, park service structures, and other signs of state interventions in the area (fig. 11).

Even the title of the final map, "Makunaimö Kowamupö Dapon," reflects the significance of continuity in Pemon representation of self and the conscious process of eliminating what were considered nonindigenous spatialities. What to name the map was an important topic of discussion during the week-long sectoral workshop to edit the draft map in fall 2003. The workshop participants, about 70 elders and *capitanes* from all the principal communities in the sector, proposed a variety of titles that were put to a vote by the entire assembly. The winning title—which roughly translates as "The flat surface that shows where Makunaimö lived and walked"—reflects a complex articulation of symbolism, materiality, and embodiment: the Gran Sabana is alive with stories about Makunaimö, the mythical

predecessor of the Pemon, who conquered this landscape from the supernatural beings who still inhabit its hills and rivers. To many Pemon, the spirit of Makunaimö is embodied by the elders, who have walked the same trails and have *seen* the places where Makunaimö lived and therefore *know* what others do not. Thus, the Pemon in sector 5—in collusion with their collaborator, the foreign-trained geographer—employed technologies of concealment and exhibition to convert culture into a new material form (Tilley 1996).

Discussion: Performance, Spatialities (and Resistance?)

I have explored how performances of histories and knowledges were implicated in the production of spatialities and the ways in which the mapping process reflected complex power plays *within* the communities in Venezuela and in Trinidad. The workshops provided a space for different identities to be performed but also to be contested. Fishermen in Trinidad performed stories of belonging and persistence to claim
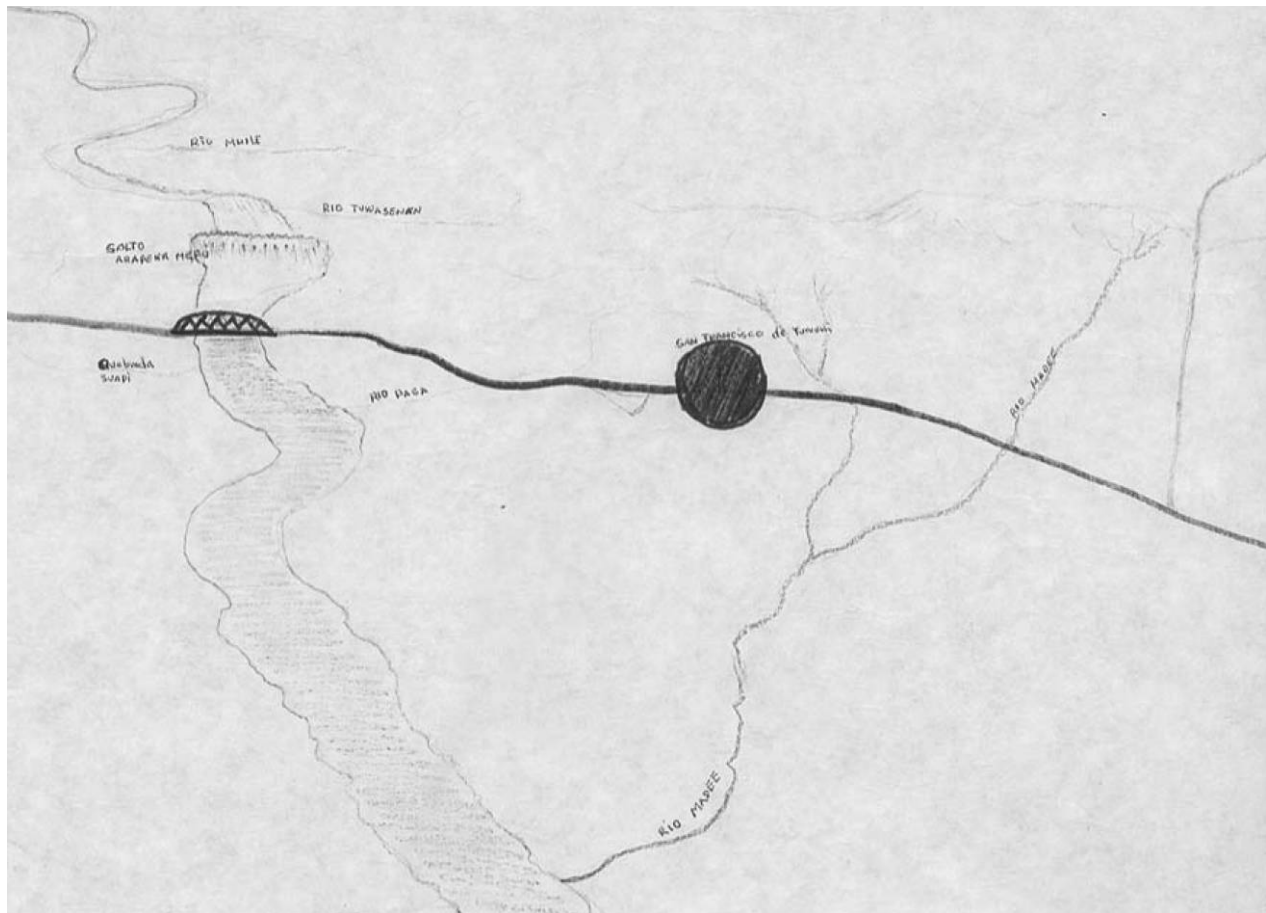
Figure 9. Section of mental map drawn by elders in a mapping workshop, Kumarakapay, Venezuela, February 24, 2002. A color version of this figure is available in the online edition.

rights to fishing grounds and to associate themselves with a winning discourse of environmentalism. Elder Pemon performed in accordance with their memories and embodiment of a landscape free of the burdens of state interventions, while (some) teenagers performed from a script written by modernity. In so doing, these teenagers made visible the material manifestations of political-economic structures while exposing their conflicting desires for modernity and for an idealized indigenous past. So although the teenagers produced maps that celebrated state interventions because of the central role they play in their lives, their map promptly generated a debate informed by the contested knowledges and imaginaries of different social groups.

In Rosa Emilia's words, the women in Kumarakapay had drawn their map to the limit of their knowledge. In fact, they had moved beyond firsthand knowledge. They had drawn places they had seen only in their imaginations, because stories told of experiences in these places had created what Tilley (1996) calls "structures of expectation." This suggests that cartography is intimately connected with power and not sim-

ply in the sense that some mapmakers have greater means of producing a "professional" map with the rhetorical stamp of authority and making it readily available and seemingly important. Instead, cartography as art (Gell 1998) reflects the ways in which mapmaking facilitates performances and hence action: stories told of landscapes, embodying different temporalities and knowledges, both reproduce and create new forms of indigeneity and social relations.

We must also consider the importance of *knowing* how to draw a map. Despite the very different political-economic, social, and historical contexts of the Nariva Swamp and the Gran Sabana, both fishermen in Kerhanan and elders in Kumarakapay wanted a map of their own, and my intervention made the map production possible (although only limited knowledge of mapmaking remained within the communities). Only in the Gran Sabana did the ethnocartographers learn how to lead mapping workshops and how to construct mental maps, but the lack of time, funds, and existing infrastructure made it impossible to provide software, computer equipment, or much GIS training. Only recently have the Pemon begun
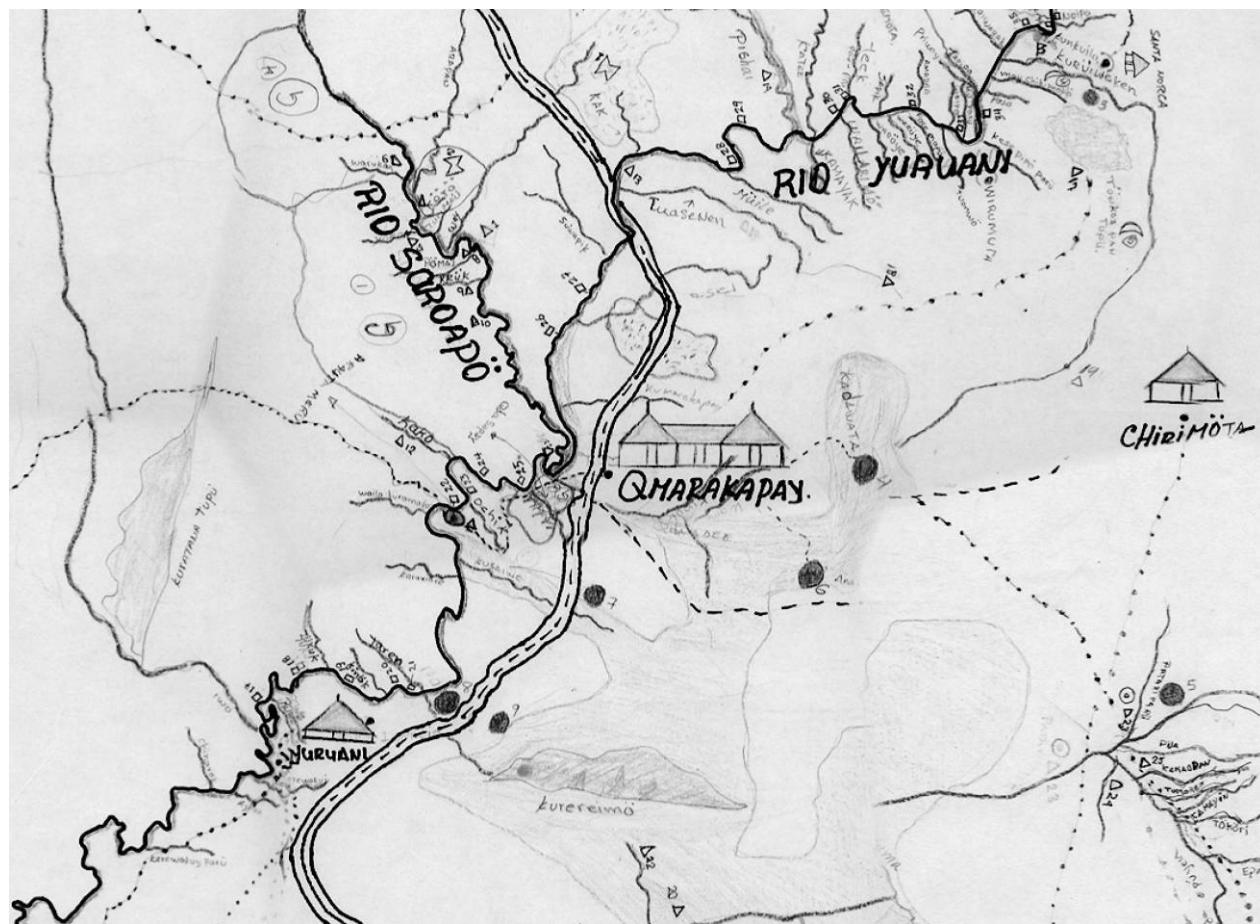
Figure 10. Section of intermediary map drawn by ethnocartographers after the instruction of elders in mapping workshops, Kumarakapay, Venezuela, February 2002. A color version of this figure is available in the online edition.

using the map in their negotiations for land rights and to produce a more detailed historical map of Kumarakapay. This is the promise and pitfall of participatory mapping. Mapping practitioners will dub their projects "participatory" (in the sense that these maps are not solely the product of an outside researcher but the result of a group activity of some sort), but when these maps enter the global flow of ideas and knowledges, they often move beyond the control and even grasp of many marginalized peoples.

The two case studies presented here suggest that although specific political-economic contexts and processes are important in forming everyday spatial practices, participatory mapping is a performative practice that strives to effect social relations in ways that transcend regional specificities. The mapping projects with both the diasporic South Asians in Trinidad and the indigenous Carib in South America involved performances of histories and landscapes embodied by the activities of humans and spirits, positionings and productions of narratives of belonging and exclusion, and contested visions

of indigeneity and the proper ordering of people, things, and activities. Although the local, regional, and national governments were quite different in Trinidad and Venezuela (i.e., the authorities confronted and the organizing strategies were different), the maps ended up looking quite similar. This is partly because the professional cartographer was the same individual in both cases, but also, I would argue, because the maps reflect performances of place, people, and genuineness and therefore converge in style, scale, and the details that are included: place names that reflect local histories, locations of land-use activities within an area easily traversed by foot, places of "cultural" significance.

The convergences we observe between these two sets of maps (and with other community-based, ethnographic, participatory maps) also suggest another influence at work. Participatory mapping remains, in large part, a globalized practice situated within rigid, unequal structures of power and knowledge. Very few mapping projects originate from the margins, and even fewer are conducted exclusively by the local peoples
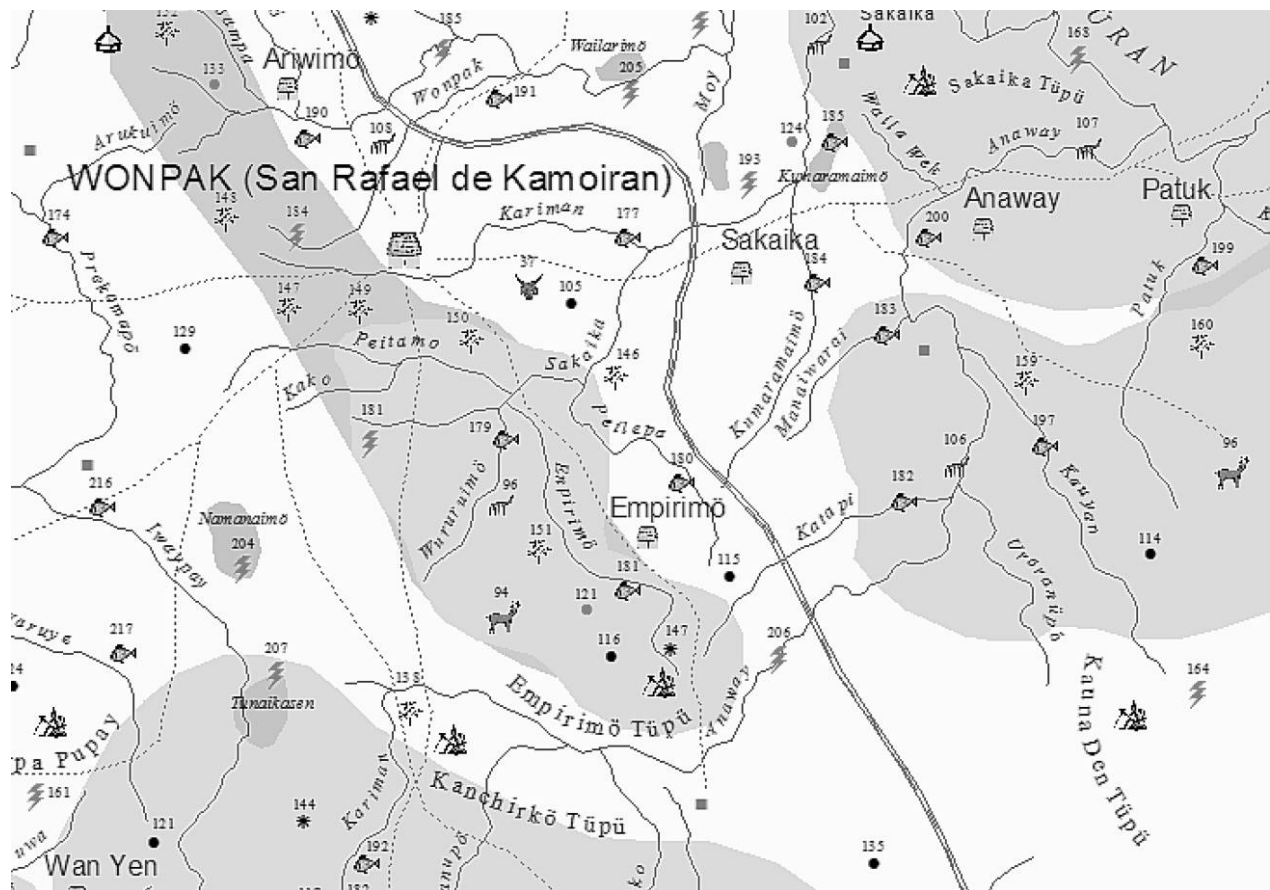
Figure 11. Section of final map presented to community leaders, Kumarakapay, Venezuela, February 2003. A color version of this figure is available in the online edition.

whom this methodology is intended to serve. Rather, projects originate in global arenas and are conducted under the guidance (and often in accordance with the interests of) national or local elites. This does not deny the potential of this methodology to further territorial-rights claims or more genuine, participatory approaches to conservation, community development, and other forms of community-based planning. But it behooves practitioners to consider the ways in which participatory mapping is situated within local-global flows of technology, identities, and imaginaries; how participatory maps reflect the imprint of local-global relations of power; and how such mapping projects produce spatialities that reflect both the material and the cultural constructed dimensions of postcolonial landscapes.

Ultimately, participatory mapping becomes something far more complicated than a rational coming together of minds to produce the "best" of all possible maps. Instead, because maps are such desired objects, mapping workshops become theaters for the performances of identities, the reading and interpretation of histories, and the production of material and imaginary landscapes that participants consider "theirs."

Mapping is a performative practice in which individuals speak and act their histories of landscapes and belonging, and through these performances, they negotiate their relationships with each other, with space, and with power. Ultimately, participatory mapping as performative practice provides a space where political-economic structures and controls can be unmasked and participants may be enabled to exert a measure of control over the multiple, contested meanings of indigeneity and authenticity.

Acknowledgments

Comments

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Bjørn Sletto's article identifies and grapples with what could be considered the next frontier in the interdisciplinary area of scholarship known as "participatory mapping." His argument also applies to the broader realm of methodological innovation—known by various terms such as "activist," "collaborative," and "participatory-action" scholarship—to which participatory mapping belongs. Now that we have cleared some ground—challenging the hierarchies and ingrained inequities in conventional research methods, developing alternative practices that emphasize collaboration, dialogue, and horizontal relations with the people who are the subjects of our research—it is time to turn the lens inward, to scrutinize the complexities and contradictions embedded in the new methods we have developed. I use "we" advisedly here in that I have been engaged in participatory-mapping projects for some time, and I also see a great need for this kind of process-oriented internal critique of these efforts. In this spirit of applauding Sletto's work and using it as inspiration to forge a parallel path for my own, I raise four points of critical reflection.

First, I note a faint implicit "loss of innocence" trope, which gets in the way of the article's broader objectives. For example, Sletto states that "participatory mapping becomes something far more complicated than a rational coming together of minds to produce the 'best' of all possible maps." Who would have thought otherwise, given that these maps are by design interventions in power-laden fields and given that subordinated communities that make and deploy countermaps are always shot through with multiple divisions, which at best they manage to mediate in the interest of a provisional unity in struggle? The challenging edge in Sletto's argument, in my reading, is not to have discovered these fault lines but to have insisted on narrating them, striking the delicate balance between an ethical-political commitment to the community's struggle and a thoroughgoing internal critique of their efforts. Sletto has done an impressive job of doing both, but it would have been more convincing still had he replaced the loss-of-innocence trope with more explicit reflection on how he reconciled these two partially contradictory goals.

Second, one element in this delicate balance not well represented here is countermapping as, in Sletto's words, "a space where political-economic structures and controls can be unmasked." I agree completely with his focus on internal process, both how counterclaims for territory are constructed and how constitutive inequities, such as gender, age, and economic position, shape this process. Yet one way to make sure that this emphasis does not descend into self-referential cultural critique is to keep the broader contours of the struggle front and center. These are present as the backdrop of Sletto's article, and such articles work better when they do not try to accomplish too much. Still, especially given his goal of advancing a programmatic statement on the future of participatory mapping, I worry that Sletto has let the pendulum swing to the other extreme, where the only power inequities being unmasked are those within the community in struggle.

Third, given this sharp focus on internal inequities and conflicts, I would have liked to hear more about how Sletto himself enacted his role as activist geographer. The conflict in the first case is less problematic: he was aligned from the start with the traditional fisher folk, in tension with the trappers, and the resulting map reflected this positionality. But in the second process, involving the Pemon, Sletto engaged gender and age hierarchies in more complex ways, as evidenced by his choice to highlight these facets in his ethnography. However, he does not fully explain how his own countermapping methodology influenced these unfolding relations. For example, Sletto actively created spaces for Pemon women and radicalized youth to participate in the mapmaking; but he also eventually decided to back off, so that the maps that ultimately result reflect mainly the perspectives of male elders. Greater (auto)ethnography of this dimension would have furthered his basic goals of process-oriented analysis and, more important, would have allowed him to address a common objection to this kind of activist research. Given the pervasive internal inequities within "communities in struggle," the critics object, how can the activist scholar avoid taking sides, which thereby elides these inequities? Sletto's experience seems to contain a convincing response to this critique, but he does not fully share it with us.

Finally, in order to achieve even provisional closure, this analysis of internal process needed to address the "afterlife" question more directly. Once a countermap is produced, it generally plays some role in the community's struggle to achieve territorial rights, and by extension, it also plays an ongoing role in the internal relations of power and performance that Sletto narrates. This raises a pointed question: if, for example, women or radicalized youth have a lesser voice in the *production* of the countermap, does it follow that such

inequities will be reinforced as that map is put to use? A fuller statement of Sletto's programmatic vision for participatory-mapping research would consider this question, balancing his salutary call for attention to the process of mapmaking with greater emphasis on what happens "after the map."

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Critical cartographers (e.g., Chambers 2006; Pickles 1995) have long been encouraging reflexivity in participatory mapping. Sletto now calls on cartographers to develop this reflexivity *specifically* by devoting ethnographic attention to "participatory-mapping workshops as theaters for the performance and negotiation of identities." Focusing his ethnographic lens on the scale of the family and the community, Sletto describes participatory mapping itself as "a performative practice in which individuals speak and act their histories of landscapes and belonging, and through these performances, they negotiate their relationships with each other, with space, and with power."

What new insights are gained from this designation of participatory mapping as "performative"? Like Tania Li (2000), in her work on Lauje and Lindu identities in Indonesia, Sletto examines the ways in which Pemon foreground indigeneity to gain a particular type of legitimacy. However, while Sletto looks at performativity in mapping, Li conceptualizes political deployments of indigeneity as "positioning." How does performativity as a concept productively differ from positioning in the context of indigenous movements?

Sletto's detailed descriptions of intra- and extravillage dynamics highlight the ways in which the different positionalities of Pemon community members are embodied in the diversity of Pemon maps. Focusing on the performance of mapping as an important process *within* the Pemon community, Sletto describes the ways in which women place elder men's personal interactions with the entire landscape above their own experiences, for example, and the ways youth see the land as a hotly contested zone rather than as territory composed of a series of traditional relationships. Sletto finds the process of mapping vital for "what it had revealed about the entanglements of identities, social relations, landscape, and power in places on the margins." He seems most struck by the importance of this process for the researcher developing reflexivity in participatory mapping. I am left wondering how this process affects social relations in the locality over time and the ways the maps are ultimately used.

Like other critical cartographers (such as Wainwright and Bryan 2009), Sletto is attentive to the influence of his own presence. He writes, "As a social scientist, I was concerned about reproducing the essentializing dichotomy between in-digenous tradition and modernity; as an activist scholar, I was aware that indigenous movements often obtain more influence when they employ primitivist imagery." As a participatory cartographer, I take issue both with this point and with Sletto's use of the term "primitivist." Rather than calling for "primitivism," the growing international environmental-justice audience, for example, is attentive to indigenous people whose livelihoods and identities are threatened by corporate expansion. Cartographers need show not primitivism but an ongoing history of struggle to maintain community and identity in the face of coloniality. Sletto's juxtaposition of "indigenous tradition and modernity" is essentializing in itself and denies the essential *modernity* of indigenous people advocating for traditional lands and recognition.

The risks of mapping are well known to participatory cartographers, so Sletto may be preaching to the choir with his warning that "Making indigenous landscapes visible in new material forms, such as maps, is a move fraught with risks, raising complex questions about representation, appropriation, and dissemination." This is particularly salient in 2009, given the tone of emerging concerns over the *México Indígena* project (Araujo 2009) and the responses to these concerns (Dobson and Bird 2009). Perhaps the most impressive part of Sletto's article for the activist cartographer is his description of having trained a dozen indigenous "ethnocartographers" who were empowered by their new knowledge. Looking at the ways in which these newly trained cartographers negotiate "social relations" on the "new . . . materiality" of the map offers a ripe opportunity to examine the researcher's effect on the community.

Using ethnographic methods enables Sletto to investigate the diversity of spatial and cultural perceptions within Pemon country and the structures of possibility that Pemon operate within. Sletto shows convincingly that participatory mapping is a process through which individual Pemon ethnocartographers "perform" place and culture. By including no fewer than nine different versions of Pemon territory in the maps throughout the article, Sletto does not allow one representation of Pemon space to dominate. Is including all of these different Pemon maps convincingly antiessentialist? How does it affect the struggle for territory that the Pemon are facing? I am straying from Sletto's focus on process rather than outcomes, but there would not be a process without a possibility of an outcome. Sletto may need to martial more evidence to convince critical, participatory, activist cartographers of the value of understanding mapmaking as performative.

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Bjørn Sletto's analysis of the meanings and interpretations involved in the events of participatory mapping as theaters

for the performance and negotiation of identities provides an ethnographically rich and theoretically inspiring examination of the struggles over knowledge and power occurring in participatory workshops. Sletto's case studies of the participatory-mapping workshops in Trinidad and Venezuela offer highly convincing examples of how categorical distinctions between global forces and local resistance are too simple to illustrate the hybridity of meanings and contestations involved in participatory processes. This subject has rarely been tackled in discussions on participatory approaches and thus warrants a careful analysis.

Sletto's call for a greater reflectiveness in the application of participatory approaches is both relevant and challenging. First, critical reflection is necessary for the theoretical revision of the often taken-for-granted assumptions involved in participatory approaches to the harmonic dialogue between the researcher and "those to be researched." Second, careful reflection is necessary for the unveiling of the powerful policy implications often embedded in participatory exercises. Sletto's thorough analysis of his own contradictory roles during participatory mapping provides an important reminder of the ambiguous relations of knowledge and power involved in any research project or human capacity–building program, no matter how participatory their agendas might be.

Sletto's analysis provides a sophisticated examination of the multifaceted negotiations and contestations among the local people on the "right" interpretation of the local landscape. Sletto's examples of gendered conceptions of the environment provide important insights into the socially differentiated environmental knowledges within a society where "vision and walking are privileged ways of knowing." Equally interesting are Sletto's examples of how the Pemon elders challenged the younger generations' right to talk about and interpret the local landscape. These examples clearly demonstrate how landscapes are always imbued with the histories, cultural rules, and social relationships of the people living within them.

That said, Sletto's analysis of the political economy of participatory processes could have been stronger. Although in the beginning of the essay Sletto briefly observes that participatory approaches have been criticized for their dualistic approach to culture, power, and the locality, it would have been interesting if he had analyzed these issues more carefully in the light of his own ethnographic material. I strongly agree with Sletto that the processes of talking about and drawing landscapes can offer important forums for the revelation of the uneven structures and relations of power that shape places on the margins. However, the unveiling of such structures does not yet mean that these structures will be changed.

In this respect, Sletto's claims that participatory workshops act as counterhegemonic activities or arenas for social agency and political assessment for marginalized people might be exaggerated. Although marginality does not eliminate social agency, poor people's lack of material resources and their deeply felt experiences of marginalization constrain the forms of agency available to them in multifaceted processes of negotiation (Bähre 2007; Cleaver 2005; Nygren 2004; Walsh 2005). Even after Sletto's analysis, the reader is left in doubt as to whether the Pemon performers themselves sincerely felt that the participatory-mapping workshops provided them with chances for actions "intended to change the world" or whether this idea of participatory mapping as emancipatory politics was instead one that the activist scholars themselves wanted to believe in. The fact that all evidence of state intervention was ignored in the map selected as the official representation of the Pemon landscape does not yet imply that the state interventions in the locality will be eliminated or decreased. As pointed out by Nygren and Rikoon (2008), the changes in people's environmental conceptions and in their ways of interpreting the landscape do not automatically lead to material changes in the landscapes or in the power structures involved in the use and control of them.

Unfortunately, Sletto raises this issue only in the conclusion of his essay, where he cleverly points out that the mapping projects often originate in global arenas and are conducted under the guidance and control of national or local elites, thus reflecting the imprint of neocolonial power relations and representations of landscapes. The constraints involved in the participatory approaches' efforts to increase the ability of marginalized people to reshape their lives and to reformulate their living conditions deserved to be explored in greater detail in Sletto's otherwise brilliant analysis.

I completely agree with Sletto that participatory-mapping workshops are "something far more complicated than a coming together of minds to produce the 'best' of all possible maps." By providing a careful analysis of the negotiations and contestations involved in participatory-mapping workshops as theaters for the performances of identities and interpretations of material and imaginary landscapes, Sletto provides a significant theoretical and public policy contribution to anthropology and other disciplines interested in participatory approaches.

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Participatory mapping is commonly used in Latin America for the recognition of territorial rights, planning natural resource use, and analyzing/resolving land use conflicts. Despite its increasing popularity, there is scant discussion about the complexity of the mapping process. In this article, Sletto makes an opportune contribution to this necessary discussion. His work demonstrates that despite our good intentions to strengthen, empower, or emancipate local communities in their struggle for land, natural resource use, and cultural identity rights through self-demarcation projects, community mapping projects are difficult to carry out, not so much because of resistance from the state, as is commonly the case

in our region, but because of the complex play of power within communities.

The more novel aspect to Sletto's account is not so much the intricacies of community power relations but the few revealing confessions he makes about how awkward, frustrated, and bewildered he felt with the level of local complexity that he experienced in his mapping projects, particularly in the Venezuelan one. I pick on this because I think that a greater reflexivity in the application of participatory-mapping projects, as urged by Sletto, also requires that we discuss how demanding it can actually be for us as mapping practitioners, activists, and researchers to work in these types of participatory encounters. Are we prepared to deal with local complexity? What type of researchers or mapping practitioners does it take to be able to endure all the community tensions, divisions, mistrust, misinterpretation, gossip, and occasionally bad intentions that form part of these processes? This is something we seldom talk about, but it also requires close attention if we want to be more realistic about community mapping.

I have known Sletto for about 10 years through our respective work in Venezuela with the Pemon, and I have known about the mapping project he helped develop in the Gran Sabana since its very beginnings. Despite all the difficulties encountered and also some of the failures honestly acknowledged by Sletto, this is one of the most thorough and complete experiences of land demarcation by indigenous people in Venezuela. But the project was finished at a great cost for Sletto. Four years of his life were devoted to this project, requiring all his patience, physical endurance, creativity, and dialogue/ negotiation skills. Not everybody has these skills, and this is perhaps also a reason why not all community mapping projects succeed in helping local communities advance toward self-determination.

This suggests that we ought to be thinking of acquiring skills in addition to those received in conventional academic training when deciding to undertake this type of endeavor. I am thinking specifically of a minimal knowledge of conflict resolution and customary forms of conflict management in order to be able to deal with the tensions that arise when facilitating participatory processes. No matter how respectful and cautious one may be, conflicts will always arise in these types of processes because that is what happens when people's views, interests, and values are negotiated. Thus, apart from accepting the fact that conflicts are normal, we need to be able to work through them without feeling frustrated or overwhelmed by local dissidence. Particularly if the mapping process is viewed as playing a role in shifting power relations, it requires great commitment from external facilitators to help the community overcome mistrust and engage in thorny discussions about identity, tradition, modernity, and the land.

Complexity itself is not as much of a problem as the fact that it often takes us by surprise, hence the importance of being prepared to deal with it. A change of focus in the objective of participatory mapping could also help with this. Rather than viewing participatory mapping mostly as a tool

to empower indigenous peoples and local communities in their struggle for the land with "outside" actors, we should start viewing it more seriously as a tool for internal deliberation and the clarification of local views. If we make this a starting point instead of an accidental finishing point, we will be able to play a better role in facilitating dialogue and deliberation when local dissidence arises. Having greater clarity about their internal differences and their desired future will also help indigenous people be in a stronger position to debate development and territorial rights with the state and other national elites.

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Bjørn Sletto's analysis of two participatory-mapping exercises he led in Trinidad and Venezuela sheds fresh light on a set of practices that have become increasingly widespread within development circles over the past couple of decades. The cases he describes originated in very different circumstances. The first was launched, in Sletto's own terms, with seemingly little purpose other than to assist "an eager graduate student" in his quest for a better understanding of the changing spatiality of fishing and rice-growing practices in Trinidad's Nariva Swamp. The second, by contrast, was more explicitly "activist" in its orientation. After recognition of indigenous land rights in the new Venezuelan constitution, Sletto helped demarcate the territories of several indigenous communities along the Venezuela-Brazil border.

Sletto shares with his readers his surprise at the fact that there seemed to be almost as much at stake for participants in the more sterile academic exercise of mapping Nariva Swamp as there was in the overtly political project of claiming indigenous land rights in Venezuela. Despite their different purposes, he found that each of his workshops was actually used by his informants in very similar ways. Unbeknown to Sletto at the time, the Nariva Swamp was home to a simmering controversy between different factions using widely divergent techniques for capturing fish in the swamp. It was also the subject of escalating concern by environmentalists opposed to large-scale commercial rice plantations being established there. In effect, both the Trinidadian and the Venezuelan workshops Sletto ran were converted by his research informants into venues for the performance and assertion of identity and authenticity claims.

I would like to raise just two brief points in response to Sletto's thoughtful and provocative essay. The fact that mapping workshops should be manipulated by locals for political purposes is not at all surprising to me. In my own experience as a development worker before entering the academy, I found myself constantly in play by opposing factions engaged in per-

formances analogous to those described by Sletto. The same was true when I eventually took to the field as a researcher. Despite my careful disclaimers, informants often seemed to harbor sneaking suspicions that I was somehow hiding what was *really* at stake in my research that there were unacknowledged benefits to be had, provided that informants played along with my requests for seemingly esoteric information. The proliferation of community-based mapping exercises and other forms of rapid and participatory rural appraisal has meant that locals have become increasingly shrewd and skilled in shaping development agendas to suit their own purposes, hence, the performative nature of their involvement.

Sletto does a nice job of demonstrating that the mapping workshops constitute an important step in the "process of place making." He also reminds us, however, that the workshops themselves cannot fully realize the political goals of participants. One of the teenage mapmakers in Venezuela frames the issue succinctly: "So after this," he asks, "are they going to give us the land?" His friend replies vaguely: "No, first Bjørn is going to bring the maps to the United States." And then? Sletto's analysis makes clear that while the workshop may be a venue for the performance of identity and authenticity, the political goals and aspirations motivating such performances require second acts. It is not enough to make sure that the map is filled all the way to the "corners." If the broader aims of workshop participants are to be met, the territories represented on the map must be filled with acts of tree cutting and planting, cattle grazing, and fishing. In order for the visions and imagination reflected in the maps to gain political currency, then, they must be combined with deliberate political and legal strategies. These acts of map *realization* warrant further attention.

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Community-based mapping has been analyzed in its different political uses and as recognition of the collective territorial rights of indigenous peoples. In the past few decades, indigenous mapping has also been part of the reconfiguration of the national territories of Latin American countries that has allowed new ideas of territory, identities, rights, and concepts to emerge that are related to national and local management of symbolic and physical space (Ariza, Chavarro, and Vargas 1999; Offen 2006). Sletto's article is an important contribution to the discussion of participatory mapping, and he proposes new insights in the way it can be used. He points out that the process of making maps is related to inner expressions and cultural representations of the landscape related to dreams, fears, desires, and fantasies, which allow the construction of individual or collective identities. Sletto also argues that participatory mapping is related to performances

of spatial appropriations that connect the past, present, and future and evoke cultural referents that go beyond the known territory. Finally, Sletto proposes participatory mapping as a generator and propagator of spatialities related to memory that has the potential of reinforcing emancipatory politics.

Sletto's perspective is very interesting. However, as he notes, maps not only are tools but also are related to symbolism and processes that most of the time make sense only for the people who are involved. Since the seventies, social cartography, as it is called in Latin America, has been used as part of participatory-action research, and it has been very important for indigenous peoples' demands related to their collective rights, but it does not appear in the genealogies of participatory mapping or in academic reports. I want to highlight the case of the so-called talking maps (*mapas parlantes*). These maps are big representations (murals) of Nasa people's territory in Cauca, Colombia. Six in total, they represent the historical transformations of specific places and the impact of colonial, republican, and modern state policies in the Nasa's territory. They also represent the resistance and the territorial politics of the Nasa people. These maps were made in the seventies by Victor Daniel Bonilla, the Nasa people, and intellectuals who were involved with indigenous resistance movements (Bonilla and Fidji 1986). The *mapas parlantes* have been used in collective processes of memory recovery because they enable the flow of memories, experiences, and processes that articulate territorial dimensions concerning physical, historical, socioeconomic, political, and cultural practices embodied in specific places. They also facilitate the comparative analysis of local transformations over time. Sletto's article goes in this direction but does not fully develop the role of representations in collective processes. Talking maps put into circulation thoughts, ideas, and historical processes that are tied to specific locations. These maps are still used in educational processes to analyze the current problems of the Nasa people's territorial management. A look at the role of these maps would be useful for the discussion presented by Sletto, and, similarly, it would allow him to trace the genealogy of participatory mapping in Latin America.

Another approach that Sletto proposes with maps is their relationship with art, which he unfortunately does not explore enough. I believe that the maps are linked to intricate aesthetic dimensions because the systems of representation—especially interwoven indigenous knowledges, practices, and concepts—establish a dialogue with their environment in specific moments and places. When indigenous peoples represent their territory, they participate in the construction of their world perspectives and ways of conceiving different notions of space. In this process, they overlay different images (sounds, graphics, movements, and tastes) that collectively feed and interact with local-global cultural representations. Alternative ways of representing the cultural and territorial space (e.g., the body as territory or basketry as articulator of memory processes) that are very common among indigenous peoples have to be explored in order to locate new notions of spatialities. How-

ever, Sletto takes up the conventions and forms of formal mapping (which considers a space of representation in two dimensions), through a process of teaching and training ethnocartographers, without discussing their cultural implications.

Nevertheless, Sletto rethinks social mapping by connecting space with identity and with the circulation of meaning that is generated when maps are constructed, as in the cases of Trinidad and the indigenous Pemon of Venezuela; this work integrates social mapping and reshapes the role of maps. The interesting thing about Sletto's article is that he is not trying to argue the role of maps as a political strategy in itself (land recovery, environmental management, resolution of territorial conflicts, or representing inequalities). On the contrary, he perceives participatory maps as generators of spatial dynamics, which may be a strategy of resistance, in the sense of allowing a group to rework their identities and experiences embedded in both individual and collective practices that inhabit specific places.

Reply

I much appreciate the thorough readings and thoughtful reflections by Hale, Middleton, Nygren, Rodríguez, Schroeder, and Ulloa, who have called for further "autoethnography" and discussions of the outcomes and consequences of the mapping projects—the "second acts," to paraphrase Schroeder—both within the communities and from the perspective of broader relations of power in which these communities are situated. Perhaps the way to start is to consider Middleton's question whether what is going on in these participatory-mapping workshops would be better understood as "positioning" rather than "performativity." This question lies at the very heart of the argument being made here, that is, that it behooves practitioners of "participatory mapping" and other "social mappings" to reflect more critically on the social processes that inform and are constituted by such mapmaking processes. The concept of "performativity," I would argue, more accurately captures the ways in which the interests of different community members are wrapped up in, even subsumed within, culturally and geographically contingent practices of storytelling. By contrast with the more instrumentalist concept of "positioning" (to achieve certain ends), "performativity" allows us to unpack the ways in which the expression of interests is beholden to different rights to speak of landscapes and histories, the ways in which this "speaking-of" is associated with the speaker's embodiment in and of landscapes, and the ways in which this embodiment is entangled in complex, multidimensional ways of representing time and place, that is, what Ulloa refers to as the "body as territory or basketry as articulator of memory processes." As I understand and use the term, "performativity," coupled with

the concept of maps as art, offers a productive metaphor for such process analysis, especially because I have argued (perhaps not convincingly) that *process* is also action (in the sense that art and speaking also are "action"). Hence, the process of participatory mapping in and by itself leads to and is shaped by multiple strategies of resistance "in the sense of allowing a group to rework their identities and experiences embedded in both individual and collective practices that inhabit specific places" (Ulloa).

Of course, this does not adequately answer the question of what happened next, especially regarding the Pemon in Venezuela. Many of the complexities of meanings of landscapes, time, and identities were lost as these performances were reduced to two-dimensional cartographic products. The dilemmas I faced as I alternatively led and was pulled along by this reductionist process have been the focus of my essay. What I have not made clear are the numerous decisions I made every day as I was alternatively manipulated (Schroeder), cajoled, prompted, and otherwise influenced—not only by community members, it is important to note, but also by multiple actors in government, NGOs, and the Venezuelan and U.S. academies. As Rodríguez observes, critical cartographers may consider participatory mapping more seriously as a tool for internal deliberation and the clarification of local views.

Especially significant, as Hale points out, was the balancing act I followed to meet my activist commitment to the community while still pursuing what he refers to as my "internal critique." Perhaps the best (but nonetheless unsatisfactory) comment I can make here is that I came to believe that critical reflection of process, baring the complex articulations between shifting meanings of place, time, and indigeneity that characterize the "essential *modernity* of indigenous people advocating for traditional lands and recognition" (Middleton), would take us away from the trap of essentializing indigenous peoples through our representations of indigenous cartographies. The more my Pemon colleagues and confidants themselves reflected openly on their complex productions of identities and meanings of place and time, the more apparent it became to me that the mapping process was informed by a broader struggle, that their agency was exercised in multiple ways—not merely through the mapping project—and that this agency deserved further analysis.

Not that this observation obviates further discussion about the consequences and outcomes of the mapping project—as Hale remarks, "if, for example, women or radicalized youth have a lesser voice in the *production* of the countermap, does it follow that such inequities will be reinforced as that map is put to use?" (Hale). Middleton similarly asks how the training of the "ethnocartographers" might have changed power relations in the communities. Such questions are indeed essential for critical geographers; given the limited space here, another short and limited answer is that for the Pemon, the mapping project was, as I alluded to above, one of multiple, ongoing, more or less consequential engagements with Venezuelan modernity, Western technologies, and non-Pemon

authorities, and that as such, the mapping process represented one of many ways in which they could articulate their claims to land and rights to cultural particularity within the Venezuelan state formation. These are communities defined in part by their complex appropriations of modernity, and as such, the social processes surrounding the mapping project became part and parcel of these ongoing social changes.

So did the "Pemon performers themselves sincerely [feel] that the participatory-mapping workshops provided them with chances for actions 'intended to change the world'" (Nygren)? There is no yes-or-no answer to this question, of course, but Nygren's observation points to the need for critical, participatory cartographers to combine such projects with deliberate political and legal strategies, to use Schroeder's words. As I discuss in the article, the mapping project began shortly after the passage of the new Venezuelan constitution, which explicitly and for the first time provided for indigenous collective land rights, and the mapping methodology was designed to meet the requirements and language of the subsequent law of indigenous territorial demarcation. Of course, some of the optimism we felt during the project has now waned; since the mapping project concluded in 2004, Pemon leaders have been stymied in their attempts to claim their land rights because of the inconsistent and shifting requirements for land legalization emerging from the national commission for indigenous land demarcation.

At the risk of glib oversimplification, perhaps this delay in securing land rights ultimately underscores the importance of carefully designing and critiquing *process* in order to ensure that such mapping projects contribute to ongoing struggles, whether or not immediate political gains are achieved. In the case of the Gran Sabana, the ethnocartographers and other community members closely involved with the mapping project have continued, in a variety of ways, to work on mapmaking in Pemon communities and to press their claims with the demarcation commission, drawing on both the technical *and* the deliberative lessons learned from the mapping project. Terms such as "capacity building" and "empowerment" do not fit easily in the vocabulary of critical cartographers, but by all appearances, action in the form of performances of place, time, and identities are continuing in the Gran Sabana, drawing on the agency that shaped the mapping project from the beginning but also informed by new representational tools and strategies introduced via the mapping project.

—Bjørn Ingmunn Sletto

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