Mapping Dreams/Dreaming Maps: Bridging Indigenous and Western Geographical Knowledge

HIRT, Irène

Abstract

Dreams and dreaming practices are integrated into knowledge-building processes in many Indigenous societies. Therefore, these practices may represent a source of geographical and cartographic information. This article addresses their incorporation into collaborative and cross-cultural research methods, especially in the framework of participatory mapping projects conducted with Indigenous communities or organizations. It is argued that dreams and dreaming practices enable the consideration of Indigenous territorial dimensions, such as the sacred and the spiritual, as well as the presence of non-human actors, that are more difficult to grasp through the social sciences or modern Western mapping methodologies. In addition, this approach invites geographers and cartographers to adopt a culturally de-centered concept of the notions of territory, mapping and participation that goes beyond the positivist premises of Western science and its research methodologies. This text draws from a Mapuche counter-mapping and participatory mapping experience that took place in southern Chile between 2004 and 2006 and in which the author [...]
Mapping Dreams/Dreaming Maps: Bridging Indigenous and Western Geographical Knowledge

Irène Hirt

Department of Geography and Environment / University of Geneva / Geneva / Switzerland
Department of Geography & Department of Geomatic Sciences / Université Laval / Québec / QC / Canada
Irene.hirt@unige.ch

Abstract:
Dreams and dreaming practices are integrated into knowledge-building processes in many Indigenous societies. Therefore, these practices may represent a source of geographical and cartographic information. This article addresses their incorporation into collaborative and cross-cultural research methods, especially in the framework of participatory mapping projects conducted with Indigenous communities or organizations. It is argued that dreams and dreaming practices enable the consideration of Indigenous territorial dimensions, such as the sacred and the spiritual, as well as the presence of non-human actors, that are more difficult to grasp through the social sciences or modern Western mapping methodologies. In addition, this approach invites geographers and cartographers to adopt a culturally de-centered concept of the notions of territory, mapping and participation that goes beyond the positivist premises of Western science and its research methodologies. This text draws from a Mapuche counter-mapping and participatory mapping experience that took place in southern Chile between 2004 and 2006 and in which the author took part as a cartographer.

Key words:
Indigenous mapping; counter-mapping; participatory mapping; decolonization; geographical and cartographic knowledge; territory; dreams; cross-cultural research; collaborative research; Mapuche, Chile

Resumé :
Dans de nombreuses sociétés autochtones, les rêves et les pratiques oniriques sont intégrés aux processus de construction des connaissances. De ce fait, ils peuvent constituer une source d'information géographique et cartographique. Cet article traite de leur incorporation dans des méthodes de recherche interculturelles et collaboratives, plus particulièrement dans le cadre de projets de cartographie participative réalisés avec des communautés ou des organisations autochtones. Les rêves et les pratiques oniriques permettent de prendre en compte des dimensions territoriales autochtones, telles que les sphères sacrées et spirituelles, ainsi que la présence d'acteurs non-humains, qui s'avèrent plus difficiles à saisir avec les méthodes des sciences sociales ou de la cartographie occidentale moderne. En outre, cette approche invite les géographes et les cartographes à adopter une conception culturellement décentrée des notions de territoire, de cartographie et de participation, allant au-delà des prémisses positivistes de la science occidentale et de ses méthodes de recherche. Ce texte se fonde sur une expérience de contre-cartographie et de cartographie participative mapuche qui s'est déroulée au Chili de 2004 à 2006 et dans laquelle l'auteure a participé en tant que cartographe.

Mots-clé:
Cartographie autochtone ; contre-cartographie ; cartographie participative ; décolonisation ; savoir géographique et cartographique ; territoire ; rêves ; recherche interculturelle ; recherche collaborative ; Mapuche ; Chili
Introduction

“Mapuche behavior and ways of being are necessary to carry out this work (mapping the territory). Our work has been guided by pewma (dreams), which are a Mapuche form of communication. We have spiritual norms that have to be respected. When I came for the first time to Chodoy, the pülli (spirits) of this territory did fortunately welcome me. They give me dreams about the way we have to work. They give me information about the different lof (territories) of the area. Often, in my pewma, the visits of the pülli are so numerous that I can’t rest. Because all these territories have problems …” (Chief A. Nahuelpán, Digital recording of community meeting in Chodoy lof mapu, 3 February 2006).

These are the words of Augusto Nahuelpán, chief of the Consejo de Logko del Pikunwijimapu (hereinafter the Consejo), a Mapuche-Williche organization in southern Chile. The comments are part of a long speech made by the Chief during one of his visits in Chodoy lof mapu, a small Mapuche territory of 83 km² located in the heart of the Mapuche historical region, between the cities of Temuco and Valdivia (see Figure 1).

With these words, Chief Nahuelpán was offering his support to the communities of Chodoy lof mapu in conducting a participatory mapping project. This project aimed to draw a cultural and political map of the ancestral territory of Chodoy lof mapu, which had been disarticulated by the Chilean conquest and colonization at the end of the nineteenth century. However, the project soon shifted to land claims. On that sunny summer afternoon in February 2006, participants were about to officially initiate land claim procedures and were meeting with representatives of the Corporación Nacional de Desarrollo Indígena–CONADI (National Corporation of Indigenous Development), the Chilean state agency responsible for implementing Indigenous land policies. I was also attending the gathering because I had been participating in the project as a cartographer and PhD student. Thus, I heard Chief Nahuelpán
explaining to state employees the importance of Indigenous forms of knowledge building, especially dreaming practices, and how such practices had been incorporated into the Chodoy lof mapu mapping project. A discourse that reveals the struggle of the Mapuche people for the re-appropriation and “reconstruction” of their historical territories also takes place on an epistemological and cultural ground.

Drawing from this Mapuche example, this article addresses the incorporation of dreams and dreaming practices as a source of geographical information into participatory mapping projects conducted in Indigenous contexts. Over the last decades, counter-mapping has become a decisive strategy for Indigenous communities and organizations around the world in their struggles for acknowledgment of their cultural, political and territorial rights. It has been an efficient tool to appropriate the state’s techniques and modes of representation and reinforce the legitimacy of Indigenous claims. However, this resistance and the struggle for emancipation have been primarily developed within the epistemological frameworks of Western mapping science and have lacked critical reflection about what Linda Tuhiwai Smith has described as the decolonization of Indigenous methodologies (Smith 2002). As noted by the Hawaiian cartographer Renee Pualani Louis, Indigenous peoples have often been silenced by the limitations of the tools provided by Western cartography, which were developed for empirical objectivity and therefore marginalize Indigenous expressions (Louis 2004, 11). It has thus been argued that counter-mapping in Indigenous contexts should question mainstream presuppositions or beliefs about knowledge and space and thereby lead to an epistemologically and ontologically re-defined conception of cartography itself. But rather than rejecting Western cartography and GIS (Geographical Information Systems), cartographers should use these as tools for cultural re-appropriation by addressing them critically and bridging them to Indigenous cartographic traditions (Johnson, Louis and Pramono 2005; Pearce and Louis 2008).

In this article, I first explore how Indigenous cartographic traditions have been taken into account in critical cartography, particularly in the subfield of Indigenous mapping. I then examine Indigenous perspectives on dreams and the social functions of dreaming practices in Indigenous societies. I argue that considering Indigenous forms of knowledge allows the inclusion of dimensions of Indigenous territorialities, such as the sacred or the spiritual, into the making of a map; these dimensions are usually more difficult to grasp through the social sciences or Western mapping methodologies. Next, I introduce the Chodoy lof mapu mapping project and situate it within the general context of the Mapuche territorial reconstruction movement in Chile that has been developing since the 1990s. Finally, in the last part of this article, I explore the importance of dreams to Mapuche society and the different ways that they were integrated into the Chodoy lof mapu mapping and re-territorialization project.

This text is written from my perspective as a non-Indigenous Swiss researcher. It is based on my ethnographic observations and the data collected during the collaborative research project that was implemented with the participation of the Chodoy lof mapu communities and representatives of the Consejo. All participants of the project, other than me, were Mapuche. At the time of my participation, I was a PhD candidate in human geography and was undertaking fieldwork in Chile. My primary objective was to work on the Mapuche territorial reconstruction movement. However, I soon came to question the usefulness of my research for the Mapuche people and became aware of the need to adopt collaborative research methods. Therefore, in 2003, I met with members of the Consejo, who asked me to support them in mapping their territories. This is how I came to train myself on participatory mapping and became a cartographer.
Dreams as a source of geographical and cartographic information in Indigenous societies

Indigenous cartographic traditions

During the last decades of the twentieth century, mapping projects in Indigenous contexts have spread throughout the world and developed into a specific research field within human geography and critical cartography. Indigenous organizations and communities, supported by non-governmental organization (NGO) activists and researchers, primarily geographers and anthropologists, have mapped their territories to prove the historical continuity of their land use and occupation, to maintain or reclaim their territorial rights and to strengthen their cultural identities (Chapin, Lamb and Threlkeld 2005). This appropriation of the state’s cartographic techniques and manner of representation to bolster the political legitimacy of Indigenous claims has been described as “counter-mapping” (Peluso 1995, 384).

However, critical perspectives on the production and use of Western maps or GIS in Indigenous contexts consider these instruments to be double-edged, working as tools both of political and territorial empowerment and of cultural and technical assimilation. Therefore, these tools can restructure colonial power relations by, for example, misinterpreting Indigenous world views, knowledge and territorial conceptions and thus contribute to increased Western cultural hegemony and greater state control of indigenous lands (Cultural Geographies 2009; Fox 1998; Fox and others 2005; Johnson, Louis and Pramono 2005; Nietschmann 1994; Rundstrom 1995; Spark 1998).

Native researchers, most of whom are North American, have argued that participatory mapping methodologies and GIS projects have been insufficiently aware of the cross-cultural “cartographic encounters” that happen in Indigenous contexts. Therefore, they have called on the need for Indigenous communities to develop a more critical and literate use of Western mapping and to decolonize their own knowledge and methodologies, especially their cartographic traditions (Johnson, Louis and Pramono 2005). Recently, such a tendency has also been emerging in Latin America under the label of “cartografía social” (Muñoz and Rodríguez 2010).

Indigenous cartographic traditions are orally or performance-based, and they privilege processes and actions rather than written evidence or material artifacts. These traditions are expressed through poetry, dance, songs, painting, and dreaming (Johnson, Louis and Pramono 2005; Louis 2004; Muñoz and Rodríguez 2010; Rundstrom 1991, 1995; Warhus 1997). In addition, they are related to a holistic conception of territory as composed of tangible and intangible spheres where the living and the dead, human and non-human beings, all interact and are given a similar agency (Poirier 2000, 149–50). According to this view, animals, plants, minerals, and spirits have the power to act on reality and are not mere objects under human control, as they are in the Cartesian dualistic world view conveyed by Western maps and GIS technologies (Rundstrom 1995, 36). Such “pictures of experience,” formed by human interaction with the land, fulfill all of the functions associated with conventional maps insofar as they offer evidence of extensive Indigenous geographical knowledge and the efficiency of their methods as applied to orientation and travel (Warhus 1997, 3).

The idea that Indigenous cartographic traditions are as legitimate as Western mapping traditions has been reinforced by recent developments in the field of the sociology of
scientific knowledge, especially in the work of David Turnbull regarding cross-cultural comparisons of knowledge traditions. Since the Enlightenment, what counts as knowledge had been defined by rationality and objectivity, which are the epistemological standards of Western science. Knowledge sources such as dreams have thus typically been disqualified because they are deemed as non-rational and subjective. Yet according to Turnbull, the common element in all knowledge systems is their localness, whereas their differentiation lies in the way in which they are locally assembled through social strategies and technical devices. Western techno-sciences, rather than being taken as universal, should therefore be treated as one among many knowledge traditions that can be distinguished only by the element of power. Western science has, indeed, succeeded in moving beyond the site of its production and in expanding through time and space as no other system has (Turnbull 2000, 38). Authors such as Linda Tuhiwai Smith, with her book about the decolonization of research and Indigenous methodologies, have also greatly contributed to questioning the “great divide” between Western science and Indigenous knowledge (Smith 2002).

The progressive acknowledgment by Western science of Indigenous cartographic traditions has also come hand-in-hand with the trend of re-defining map-making and maps within the fields of critical cartography and GIS. For example, Rob Kitchin and Martin Dodge have pleaded for the re-conceptualization of cartography as a set of spatial practices rather than as an end product, including gestural and performative mappings, and as a process of constant re-territorialization aimed at solving spatial problems (Kitchin and Dodge 2007). Furthermore, Margaret Pearce and Michael Hermann, who have worked on cartographic depictions of the journeys of European explorers and colonizers in North America, have questioned the presuppositions of rationality and objectivity of conventional Western cartographic representations by experimenting with new narrative and graphic techniques that enable the inclusion of emotional geographies and multiple experiences of place (rather than space) in maps. This approach is innovative in two dimensions because it contributes to the decolonization of historical cartography by giving voice to Indigenous narratives that have traditionally been silenced in Western mapping while opening new research avenues for cartographers to map emotions and affects (Pearce 2008; Pearce and Hermann 2010).

**The social uses of dreams in Indigenous societies**

The arguments outlined above indicate that dreams and dreaming in most Indigenous knowledge systems may be considered as a source of geographical and cartographic information. We now need to define the theoretical approach to dreams that prevails in this text.

Since the beginning of the 20th century, anthropologists have gathered great quantities of data about dreams and dreaming in Indigenous societies. In those early years, however, studies were imbued with Freudian psychoanalytical approaches and tended to limit dreaming to a private activity (Charuty 1996, 6). It was not until the 1980s that researchers began to value the social dimensions of dreams, thereby taking into account Indigenous perspectives about dreaming (Poirier 1994a, 5; 1994b, 105).

For Indigenous peoples, dreaming is a social act of communication that depends on a nexus of culturally shared beliefs. Dreams, like visions, intuitions, unusual events and the intrusion of higher powers, are forms of spiritual revelation that, together with traditional teachings and empirical observation, are among the sources of knowledge that are valued in Indigenous societies (Brant Castellano 2000, 23–4; Deloria 2006, xxv). Because spiritual revelation
provides people with information that they are not able to derive from observation alone, they have no doubt about the validity of these sources of knowledge (Deloria 2006, xxv). Neither subjective nor objective, a revelation is quite simply a true experience, an integral part of the real (Poirier 1994, 105). This differentiates the Indigenous perspective radically from Western traditions, which associate dreams with the subjective, the imagination, fancy, and illusions, all which are considered to be separate from “reality.”

Dreams and dreaming have manifold social uses in Indigenous societies. They are mobilized for directing collective action, healing, facilitating communication between the living and the dead or the spirits, and predicting events. It is beyond the scope of this research to provide a thorough overview of the inclusion in the anthropological literature of the geographical dimensions or functions of dreams. However, I will present a few examples in addition to the case of the Mapuche of South America, which I will develop later.

For example, there is an extensive body of literature about the hunter and fisher societies of North America, especially Canada. Hugh Brody, in his now seminal ethnographic narrative, *Maps and Dreams* (Brody 1981 [2002]), which inspired the title of this article, reports on the relationship between dreams and the cartographic traditions of the Dunne-za (Beaver) hunters, gatherers, fishes and trappers with whom he worked in British Columbia in the 1970s. The Dunne-za used dreams to locate and kill game and to identify places to establish the group. These people also used dreams to make maps of the trails leading to heaven. The maps were sometimes drawn on paper and then buried with a hunter. A similar example is found in the work of Franck Speck, who studied the Naskapi of Labrador during the first decades of the 20th century. He describes Naskapi dreams of fishing places or of sites where caribou could be found (Speck 1977 [1935], 194–6). Furthermore, Marie-France Guédon reports that the Nabesna people living in Yukon and Alaska, in addition to locating game, used dreams to travel through time and space to find lost objects and people or places where people had had unpleasant encounters (Guédon 2005).

The aboriginal peoples of Australia are another good example of a society that strongly links dreams with territorial knowledge (Chatwin 1988; Poirier 1994b; Turnbull 2000, 32-8). For these people, maps are among the most common form of representation and can be drawn on bark, sand, rocks or bodies. The daily lives of these people are full of spatial references, and dreams and narratives are cast in a framework of spatial coordinates (Turnbull 2000, 34). Past dreams (“Dreamtime,” or the time of origins, when the ancestors moved across the landscape to create everything) are remembered in songs that help aboriginal Australians find their way across the land by following invisible pathways (“dreaming tracks”) left by the ancestors.

**Grasping “Indigenous depth of place”**

If we assume, following the example of David Turnbull, that all knowledge traditions are legitimate, differing only in the ways they are assembled, then we can accept the idea that a dream can work together with a GPS (Global Positioning System), a topographic map, a satellite image or an in-depth interview. In this article, I argue that Indigenous knowledge, rather than being merely an object of study for Western science, can be part of a cross-cultural kit of research devices, that is, a part of the diverse knowledge-building tools mobilized for a research project. These tools enable the gathering of culturally specific knowledge, which would be difficult to acquire using only Western classical research methods, positivist mapping methodologies or techno-scientific devices. During the Chodoy lof mapu project described in this article, the dreams of some of the participants presented the opportunity to
consider the holistic and spiritual dimensions of Mapuche territoriality. In other words, dreams allowed a deeper and more comprehensive insight into what Margaret Pearce and Renee Louis call the “Indigenous depth of place” (Pearce, Louis 2008). If we return to the definition of Kitchin and Dodge, this bridge between Mapuche and Western cartographic traditions characterizes the map in a broad sense, as a set of practices and a process of re-territorialization rather than in a narrow sense, that is, the end result. For the project, the final paper map was, indeed, produced following the epistemological codes and traditions of a conventional Western map because the Mapuche wanted it to be understandable to the Chilean government so that it could be used to make land claims (see Figure 4 below).

### Mapping Mapuche territories

*The Mapuche movement of territorial re-appropriation*

In Mapudungun, Mapu-che means people (che) of the land (mapu). Some authors also understand mapu as meaning the universe (Quidel cited by Marimán and others 2006, 31). The Mapuche people live on both sides of the Andes cordillera, in Chile and Argentina. Some of these people resisted the invasion of their territories for more than three hundred years, first against the Spanish and then against the Chilean and Argentinean. During the eighteenth century, the Mapuche were living in one of the largest Indigenous territories in South America, which extended from the Pacific (between Concepción and Chiloe Island) to the Atlantic oceans (from Río de la Plata to Río Negro). At the end of the nineteenth century, the Chilean and Argentinean armies undertook an extremely brutal extermination war against the Mapuche (officially called the “Pacification of the Araucanía”). The Mapuche were incorporated into each country as a political and demographic minority, and from that time on, they experienced a separate political destiny. Only recently, in the 1990s, have Mapuche intellectuals and leaders tried to reactivate links between Chilean and Argentinean Mapuche people.

In Chile, conquest and colonization have severely disrupted the Mapuche political and territorial system. Only the lof or lof mapu, the broad family space, could survive the imposition of the Chilean order. Surrounded by colonists, the Mapuche were forced to settle on small, widely scattered pieces of land, granted with collective property titles (títulos de merced) that represented only approximately 5% of the historical Mapuche territories. Throughout the 20th century, these titles were divided into individually owned parcels that have continuously decreased in size because of the growth of the Mapuche population and the ongoing land encroachments by white settlers. The former cattle breeders, who traded prosperously with the Spaniards, were thus transformed into poor farmers. Today, they live on subsistence farming and small cattle breeding (in the plains and pre-cordillera) or fishing (on the Pacific coast). Many rural families survive through financial help from their relatives, who have migrated to urban areas and represent about 80% of the global Mapuche population. This vulnerability has been further deepened by the neoliberal economic policies that have been implemented by the military regime of Augusto Pinochet (1973–1990) and that have been continued by “post-dictatorship” governments, particularly by the development of forestry lumbering and private and state investments (hydroelectric dams, salmon farms, etc.).

Since the 1990s, Mapuche intellectuals and political leaders have been claiming autonomy and a plurinational state, denouncing the situation of “internal colonialism” suffered by the Mapuche and the insufficiencies of the Indigenous law 19.253 that has been implemented in
1993. Although this law has, for the first time in Chilean history, acknowledged the country’s cultural and ethnic diversity, it recognizes neither the ancestral territories of Indigenous peoples nor their claim to be recognized as nations (the law refers only to tierras and etnias). In addition, many of the resisting rural Mapuche communities struggling for their political and territorial rights have suffered violent repression by police and armed forces (Amnesty 2010).

Within this context, a Mapuche movement of “territorial reconstruction” has emerged in southern Chile. The so-called “identidades territoriales” (lit. territorial identities) have been trying to re-appropriate their territories on both a symbolic (that is, culture, knowledge, identity, self-government, etc.) and a material level (that is, attempts to get back part of the land lost through colonization). The Consejo, the Mapuche-Williche regional organization that supported the Chodoy lof mapu mapping project, is one of the numerous “identidades territoriales” that is active primarily in the region of Valdivia.

The Chodoy lof mapu project: a pioneering experience in Chile

Throughout the mapping project, it has been estimated that the ancestral territory of Chodoy lof mapu, before its disarticulation by conquest and colonization, extended over 83 km$^2$. Such a large territory represents an important portion of three current Chilean districts: Lanco, Panguipulli and Loncoche (provinces of Valdivia and Cautín). At present, the Mapuche own only 15% of the territory (1,251 hectares), the rest being held in non-Mapuche hands. Approximately one hundred Mapuche families are living on these lands, with a stable resident population of four to five hundred. These figures do not include migrant family members living in urban areas, who number approximately twice the population of the permanent inhabitants. Chodoy lof mapu is made up of two communities (Chodoy and Quemchue) that have been physically separated by land encroachments. Both entities share common lineages and are part of the same ritual congregation, despite being divided in most public and political matters, as well as in other relationships with state agencies.

The mapping project of Chodoy lof mapu was conducted from October 2004 to February 2006. The project followed on from an exploratory activity conducted in 2003 within the framework of the Comisión Verdad Histórica y Nuevo Trato (Commission for Historical Truth and New Treatment) by researchers from the Corporación de Promoción y Defensa de los Derechos del Pueblo (Corporation of Promotion and Defense of the People’s Rights), a human rights organization, and the Consejo. Several workshops were aimed at the identification, on topographic maps, of those lof still existing in the regions of los Lagos and los Ríos (Codepu, Gvbam Logko Pikunwiyimapu, 2003). After 2003, Augusto Nahuelpán, ñizol logko (principal chief) of the Consejo, wanted to pursue this cartographic work at the local scale of each lof. Chodoy lof mapu was chosen as a pilot experiment because of the enthusiasm of its ancestral authorities, in particular, the ngenpin (Mapuche religious officiant, lit. “master of the word”) Efrain Cheuquefilo, and also because Chodoy was considered to have well-maintained Mapuche culture and traditions.

Unlike the first mapping activities of 2003, the Chodoy lof mapu project was meant to be politically and economically autonomous, in other words, free from the interference of state agencies, political parties or other non-Indigenous institutions. The project was first centered on ethnic revival concerns and was involved in trying to recover local identity and history as well as the people’s spiritual relationship to the territory. In doing so, the native authorities were concerned with strengthening their power because it had been severely challenged by
other Mapuche leadership (the so-called comunidades indígenas of the Indigenous law 19.253). As noted above, all participants were Mapuche, with the exception of the author. A team of voluntary Mapuche researchers collaborated occasionally; they consisted of two journalists (Jorge Abello and Eva Barriga), a bilingual/cross-cultural education teacher (Mapudungun and Spanish) (Victorino Antilef) and a forestry engineer student (Richard Hueitra). Abello and Antilef were also werkén (spokesmen) of the Consejo.

In practice, it appeared to be quite difficult to rally inhabitants around concerns that were merely cultural. People were accustomed to government or NGO projects bringing them material advantages (seeds, barbed wire, greenhouses, etc.). In addition, many Mapuche reject their own knowledge traditions, having internalized the dominant prejudices about their culture. As for young people, very few were involved, mostly because they were living outside of Chodoy lof mapu but also because the project was an initiative of older people. Eventually, the project was not able to become free from community divisions and internal power struggles. The most enthusiastic and regular participants were the family members of the ngenpin, especially during the fieldwork sessions. They not only supported their relatives against community tensions but were also connected to those community members who remain familiar with Mapuche culture.

As the initial objectives were progressively replaced by the determination to make land claims, more participants joined the project, particularly the people of Quemchue. The communities of Chodoy and Quemchue had made several attempts to have their land returned during the 20th century, for example, during the agrarian land reforms of the 1960s. However, these attempts had been largely unsuccessful. Therefore, participants perceived the production of a map as an alternative and peaceful way to prove their ancestral rights, and, beginning in November 2005, their efforts were dedicated to meeting state agency employees to officially register their land claims. The strategy proved to be successful, and in November 2007, the government acknowledged these demands, in part on the basis of the participatory mapping project results.

By 2010, however, the beneficiaries had not succeeded in actually getting their land returned because of slow administrative procedures. In addition, for internal reasons, the community of Quemchue withdrew from the demands. However, in the Chilean context of this time, the experience was a pioneering counter-mapping project, insofar as the ancestral Mapuche territories had previously neither been represented on official Chilean maps produced by the Instituto Geográfico Militar (Geographical Military Institute) nor taken into account in land and country planning policies. The only Mapuche land claims acknowledged by the State as legitimate had been those regarding encroached títulos de merced. By that time, the communities of Chodoy lof mapu had retained most of those property titles and thus were claiming mainly ancestral lands to which they had never been given title by the State. Therefore, the map was intended to serve as evidence of oral collective memory and customary rights.

Four community mapping workshops were held from November 2004 to October 2005. The participation was always approximately 30 to 50 people, that is, approximately 10% of the permanent population (Figures 2 and 3). Fieldwork with a GPS was conducted with smaller groups of 3 to 5 participants during the same period (see figures 6 and 8 below). Eva Barriga and I also collected oral histories (founding narratives, lineages, etc.) with the elders and conducted archival research on the local land history in Temuco and Valdivia, especially on land encroachment processes and the development of Mapuche and non-Mapuche estates.
The mapped items were the ancestral boundaries, the land still owned by the Mapuche at the time and that mainly corresponded to the títulos de merced, and the sacred sites and those of cultural and historical significance. Of the seven identified sites, four were located within non-Indigenous properties. However, the map presented in this article (see Figure 4) is not the original. It is an updated version that does not include the identified sites. When the map was finished in 2006 and handed over to the government to support the land claims, it was of utmost importance for the people of Chodoy lof mapu to publicize the sites because they served as evidence of the historical continuity of their land occupation and of the cultural and spiritual dimensions of their territoriality. However, a few years later, the context, and thus the people’s perception of the map, had changed. In 2010, as they were thinking about producing their own book on the territorial reconstruction process of Chodoy lof mapu, they became aware that although they wanted to tell their story, they were also anxious to limit the access by their non-Mapuche neighbors to information related to the precise location of the sites. Therefore, they made a new map that did not show the sacred sites, even though the original version had already been widely disseminated.
Figure 4

Map version, actualized in 2010, without sacred, cultural and historical sites.

Figure 5

Items of the legend (sacred, historical and cultural sites) that were removed in the revised map
Mapping Dreams/Dreaming maps

The importance of pewma in Mapuche culture

The Mapuche word for dream is *pewma*. However, *pewma* are not simply dreams, but those with individual and/or collective significance through which *kimün* (knowledge and wisdom) is transmitted and received. Only chosen people who have a spiritual, political or cultural role are gifted with such dreams (Marimán and others 2006, 34, 276). Pewma are ways of communication with the spirits and with *Wenu Mapu Ñuke* and *Wenu Mapu Chaõ* (the Mother and Father of above). The messages received from the spirits help the dreamer to predict, reveal or confirm events; show the healing properties of plants (proportions, geographical location, etc.); and give helpful advice regarding political decisions, in addition to other functions. Dreaming is closely linked with an intense everyday spiritual work, which involves not only the dreamer but also other people with whom dreams are shared and interpreted.

Anyone can dream, but only wise people or the *epu rume che*, that is, those with a superior *küpal* (lineage) who are destined to assume social, religious and political functions within Mapuche society (Marimán and others 2006, 273), are gifted with such a capacity; these wise people include the *logko* (chiefs), the *ngenpin* and the *machi* (shamans). Among the central actors of the Chodoy lof mapu mapping project, two of them are great dreamers: Chief Augusto Nahuelpan of the *Consejo* and Efrain Cheuquefilo, native authority and *ngenpin* of Chodoy. *Ngenpin* are known to be especially strong dreamers. In earlier times, they were not only religious officiants but also soothsayers; they could predict events of the coming year, such as plagues, by means of dreams or visions informed by the ancestors (Kuramochi and Nass 1991, 148; Latcham 1924, 235-6). According to Ricardo Latcham, a pioneer of Mapuche ethnography, *ngenpin* was the generic name given by the Mapuche to all of the people who had mysterious powers over the forces of nature and over all living non-human beings (Latcham 1924, 235). Although *ngenpin* are mostly men, Kuramochi and Nass note the existence of some women (Kuramochi and Nass 1991, 195).

Because Mapuche dreamers are said to be connected with beings inhabiting other places or spheres of the universe, they have a privileged access to geographical information. Dreams or visions inform the dreamer about the characteristics of other places or about what is happening elsewhere, either by communicating with spirits or by travelling virtually through different spaces. In Chodoy lof mapu, people associate the practice of dreaming with telekinesis. According to Yosuke Kuramochi and Juan Luis Nass, who performed fieldwork in Chodoy in the 1980s, in earlier times, when faith and spirituality where still strong, *ngenpin* could travel from one place to another and communicate with other beings by means of dreaming and the mediation of their spirits (Kuramochi and Nass 1991, 148; 159-160). These authors report that Mariano Cheuquefilo Nahuelcura, the *ngenpin* who preceded Efrain Cheuquefilo, before his death in 1991, said that he got his knowledge of particular places by moving to another places in his dreams (Kuramochi and Nass 1991, 119-120); he also claimed that he knows the land on both sides of the cordillera, because he travelled in his dreams on the top of a big mountain and from there, he could see both oceans (Kuramochi and Nass 1991, 180). Similarly, Efrain Cheuquefilo says that when he began to have the dreams that prepared him to be a *ngenpin*, he travelled throughout many spaces, which were not limited to *nagmapu*, the surface of the earth where human beings live but included nearly all of the spheres of the Mapuche universe. Efrain Cheuquefilo was thus able to travel to the *küla ñom*, one of the highest spheres of the Mapuche cosmic universe, which gave him special spiritual privileges and entitled him to pray for the ancestors (field notes, 3 February 2006).
As shown by the quotation that introduces this article, through his dreams, Chief Nahuelpán is also able to be informed about what is happening elsewhere. His dreams allow him to draw a mental map of the territories that are within his jurisdiction and to be informed about the problems in those territories. Because of this virtual travelling capacity, the Mapuche have the potential to locate places of cultural and spiritual importance, which are never chosen by chance. As stated by Efrain Cheuquefilo, “We do not decide this kind of thing; they are shown to us by the dream” (field notes, 10 December 2005). This explains why the Chilean anthropologist Roberto Morales asked me, as we were talking about the Chodoy lof mapu mapping project, “Actually, isn’t dreaming a sort of GPS for the Mapuche?” He was, of course, not suggesting a strict analogy, as dreaming is much more than a mere positioning and wayfinding technology for the Mapuche. It is a physically and socially engaging experience of the world and its inhabitants.

Why include dreams in a mapping project?

When possible during the mapping project, Mapuche forms of knowledge building were preferred to other methods. For example, the elaboration of a historical narrative on territory was initiated by conducting a nütram (a Mapuche form of collective conversation and knowledge sharing) with elderly people. However, the approach proved to be ineffective because no one was able to lead the exchange and only incomplete stories could be collected. The research team thus resorted to traditional interview methods from the social sciences. This cross-cultural option was quite innovative because in Chile, research on Indigenous realities is still done mostly by non-Indigenous researchers. Research often lacks the true participation of the Indigenous communities and the inclusion of their knowledge protocols. Therefore, the Consejo’s desire to favor Mapuche methodologies was an act of epistemological and cultural resistance toward the continuing colonial order that dictates the social sciences in Chile.

The most decisive factor favoring the inclusion of dreams into the mapping process was the participation of several people who shared the same vision of their culture. Because one of the main actors in the territorial reconstruction process, Efrain Cheuquefilo, was a spiritual leader, the reference to dreamlike dimensions came spontaneously along with the development of the project. Furthermore, the integration of dreams was taken seriously by Augusto Nahuelpán of the Consejo. The Mapuche chief had been advocating for many years for the recovery of dreaming practices among the chiefs of the Pikunwijimapu territory. He was concerned that most Mapuche chiefs had lost the power of dreaming and were no longer including dreaming in their daily practices, as they became less concerned with Mapuche spirituality and culture. The chief suggested that Jorge Abello and Eva Barriga, spokesman and member of the Consejo, respectively, write their dissertations in social communication on the topic of dreaming as a communication process among the Mapuche chiefs of Pikunwijimapu (Abello and Barriga 2005). When both researchers came to be involved in the Chodoy lof mapu mapping project, they also actively encouraged the inclusion of dreams in the research and mapping methodologies. The spokesman was especially enthusiastic about this development and stated, “Dreams are law for us.” In his opinion, territory first had to be recovered by mental and symbolic means such as dreams and only then on a material level (field notes, 14 February 2006).
Two ways of mobilizing dreams during the mapping process

During the mapping process, dreams were assumed to help in locating and relocating sacred sites and in communicating with the spirits of the territory. In Western language, the primary function of dreams could be described as a “locating system,” that is, a type of Mapuche GPS, as suggested previously. This type of information was systematic only in terms of places because the ngenpin dreamed about boundaries only once, which corroborated a limit between the lof mapu of Chodoy and the neighboring one of Antilhue. Information about the locations of two ancient sacred sites could be obtained through dreamlike means: the kamarikuwe (place of religious ceremonies performed in open fields) called Wingkulpülli and one called Zeumenpülli. Although both sites remained significant for the inhabitants of Chodoy, neither was still in use. Memories about the sites were thus quite fragmented.

Wingkulpülli was located on the Fundo Pichipon, a non-Mapuche property of 900 hectares. According to the family of the ngenpin, Pichipon was the first land of their ancestors that was encroached upon by white settlers during the nineteenth century. Efrain Cheuquefilo claimed his father never took him there: “We always [only] came near. I don’t know why; probably out of respect” (field notes, 2 February 2006). During one of our walks, aimed at georeferencing boundaries and places, we went to this Fundo. Although the ngenpin could identify the sacred site from the information passed on to him by his father, he needed confirmation of its exact location. Weeks after our visit to Wingkulpülli, the ngenpin was told about it by the means of a dream.

The kamarikuwe called Zeumenpülli had been deserted a long time after an earthquake split the ground open (Figure 6). Located on a piece of land owned by a Mapuche family, there was confusion about where to situate its center within the open field. In this case, the ngenpin was again provided with pieces of information through a dream.

Figure 6

Ngenpin Efrain Cheuquefilo, his wife Carmen Reuque and the author walking in search of kamarikuwe Zeumenpülli

Once, the ngenpin dreamed about an old cemetery that had disappeared. But we had to abandon this track because he was not provided with more details in his further dreams. Some participants mentioned how fundamental the re-discovery of an old burial site would have been for the record of their history.
The continuous consultation of the participants with non-human beings during the mapping process made the spirits actors in the full sense of the word, involving them in the project in the same way as their human peers. Dreamers would get in touch with the *ngen* (spirits) or *newen* (powers) of the territory. Guardians and protectors of all living beings (plants, rivers, trees, persons, hills, etc.), these spirits or powers are especially present in sacred spaces such as mountains, volcanoes, marshes, forests, and lakes (Marimán and others 2006, 24, 274).

Non-human beings manifested themselves in two ways. First, spirits and powers were placed in a paramount position and considered as the instigators and leaders of the re-territorialization process. For the *ngenpin* Cheuquefilo, the reconstruction of Chodoy lof mapu had clearly been required by the *newen* of the territory. He said, “As a *ngenpin*, as a native authority, the *newen* of this place are requiring from me, by the means of my dreams, to make everything possible to recover the sacred sites” (field notes, 29 January 2006). Therefore, it was also his duty to continually seek the instruction of the spirits about the way the territory had to be re-appropriated and mapped, in order to have their blessing and avoid annoying them. This is why, during our walks around the ancestral territory, we always had to ask for the permission of the spirits before entering a sacred site and georeferencing it. This was generally done by means of a short prayer. “Nobody stopped us,” said the *ngenpin*, referring to one of our long walks, “Absolutely nobody! Nothing! The *pewma* and the *piuke* [the heart] are looking at us, how we are working. For that reason, I say, maybe there are spirits over there. They were pleased about what we have done” (E. Cheuquefilo, interview by E. Barriga and I. Hirt, 12 March 2005).

In Quemchue, however, some chiefs did not support the mapping project. Quemchue had always been spiritually and politically subordinated to Chodoy, which was a frequent source of conflict between both communities. Therefore, Chief Nahuelpán thought it was dangerous to interfere, given that Mapuche communities are always sovereign in their own territory, even when the territory belongs to a superior entity. He was convinced that spirits could turn hostile and that people could manipulate evil powers to harm us. Therefore, he asked us to abandon georeferencing of the sacred sites in Quemchue, with the exception of the cemetery which was a public site (Figure 7) (field notes, 15 October 2005).

![Figure 7](image)

*Eltuwe* (cemetery) of Quemchue (photo by author, Dec. 2005)
The second intervention of spirits and powers happened in relation with the community’s participation in the project. During a dreamlike conversation, the ngenpin was told that the involvement of his people as well as his own work as a ngenpin were insufficient. However, in the same dream, he received positive signs: he was shown a piece of land that had been recovered during the administration of Salvador Allende and was told by a woman not to worry, “everything will turn well.” A few weeks later, he had further encouraging dreams in which he was shown how members of the community were establishing themselves on this land. “In the first dream,” he said, “they were building houses in Chodoy. An amazing number of houses!” And he saw his own house constructed near the current kamarikuwe of Chodoy, on a property owned by a non-Mapuche (field notes, 10 December 2005).

Because young people were poorly involved in the process of territorial reconstruction, they were also reminded of their responsibilities toward the spirits of the community. During the workshops, Jorge Abello, the spokesman of the Consejo, insisted several times on the involvement of the young people:

“[The elders] have to tell young people: ‘this work … is tricky, tricky, work’. … When we began this work, we woke up our pülli, the ngen of this territory; they are delighted, they woke up. And for this reason, it is very dangerous when young people are not aware of it. This could harm the whole community” (J. Abello, digital recording of mapping workshop in Chodoy lof mapu, 26 February 2005).

For the spokesman, it was important not only to please the spirits but also to include all of them within the boundaries of the territory that was being mapped. According to him, drawing lines on a map was a highly sensitive task because it affected all beings living in the territory, both human and non-human:

“There is a thing we paid careful attention to and for which we had a lot of respect, and that is precisely not to leave anything outside. That’s why we insisted so much on ancestral boundaries being as accurate as possible. Because, as we all know, in every place there are newen, there are pülli. In each area, in each place, there are menoko (sacred swamps), different [sacred] things; if we neglect them, if we don’t take them into account, it will harm our work” (J. Abello, digital recording of mapping workshop in Chodoy lof mapu, 26 February 2005).

Given those concerns, it was all the more critical to ensure that the mapping project was progressing well. The following dream described by the ngenpin is related to our visit to the ceremonial site of Wingkulpülli and to an old cemetery called Kawemayin located in the Fundo Málaga, a non-Mapuche property:

“In Kawemayin, there were only ancient people, but more women than men. And they made room for me to enter. We entered. And there, in the kamarikuwe, inside, in Pichiponhui, there was a house in my dreams. And that house was dirty and full of people. A multitude of policemen came when I arrived, and they threw them all out. They threw all the people out. All of them. ‘We are going to empty the house in order for you to enter.’ And they emptied it. They cleaned everything there. The policemen were in a hurry. And suddenly, they beckoned me in: ‘Enter now, please.’ And I entered. I went to the hill. But I only went there to have a look. That’s all. … That’s why I believe that this [mapping project] can continue. And afterwards, I dreamt there were people in the houses, only Mapuche, only women, all dressed with silver. But so much silver! … I dreamt that they showed me a silver sword, scepter, knife—that big!—spoons with silver handles. I had these kinds of dreams with this work” (E. Cheuquefilo, interview by E. Barriga and I. Hirt, 12 March 2005).

The presence of abundant clothing and silver implements as well as the intervention of benevolent policemen were interpreted by Efrain Cheuquefilo and other participants as many positive signs for the work to proceed. These types of dreams helped the ngenpin and his brother, José, to remain confident and feel strong insofar as they perceived that the mapping of their territory was, after all, a subversive act. In this specific area of southern Chile (district of Lanco), relations between Indigenous and non-Indigenous landowners are relatively
peaceful. The Mapuche are generally allowed to take shortcuts through non-Indigenous properties to avoid travelling longer distances along the public paths (Figure 8), whereas this is highly problematic in other areas of Southern Chile.

Figure 8

Walking through the lof with a GPS (here on land owned by a non-Mapuche) (photo by E. Barriga, Dec. 2004)

Access to sacred sites located within non-Mapuche properties depends on the tolerance of the landowner. Significant conflicts about these types of matters had never been reported in Chodoy lof mapu. In fact, participants were deeply concerned about staying on good terms with their non-Mapuche neighbors. However, although they wanted to get their land back peacefully, it was rumored that they were contemplating conducting a “tomas de tierras,” that is, to occupy land de facto. Mapuche communities generally resort to tomas when they believe that there is no other way out of the situation (often after having vainly fought for their rights by legal means, that is, by applying to the land fund of the CONADI). Such land occupations are generally violently repressed by the police. Therefore, we never felt completely at ease entering the non-Mapuche properties during the mapping process, and it was probably not a coincidence that the ngenpin dreamed of the presence of benevolent policemen who helped him enter the sacred places. Symbolically, this meant that the people of Chodoy were not breaking the law.

Finally, during the mapping process, dreams turned out to be a form of knowledge space in which humans and non-humans met to share and gather information about territory, in a type of cartographic laboratory. On the one hand, the people of Chodoy lof mapu were mapping dreams by incorporating onto the paper map information given to them by their spirits through dreamlike conversations; on the other hand, they were dreaming maps by envisioning, together with the spirits, the social dream of reconstructing their territory.

Conclusion

The mapping experience of Chodoy lof mapu offers a concrete example of bridging Western mapping and Indigenous cartographic traditions. For the Mapuche participants in the project, dreams were part of the cross-cultural toolbox that enabled them to reconstruct and map their ancestral territory, along with other means such as GPS or topographic maps. The continued references to dreams during the mapping project showed that Indigenous cartographic and geographical knowledge are not necessarily condemned as being ethnographic or “exotic”
subjects of study. On the contrary, they may be incorporated into cross-cultural mapping methodologies, in combination with Western knowledge devices. Several questions might, however, be raised; first, regarding the social potential of such an approach within contemporary Mapuche society and, second, regarding the methodological and conceptual implications of the approach for geographers and cartographers. We may, indeed, ask ourselves to what extent an experience such as that of Chodoy lof mapu is likely to happen elsewhere, in other Mapuche territories. In present-day Mapuche society, few peoples have enough cultural and spiritual knowledge, as well as a sufficient command of the mapudungun (native language), to have significant dreams. Even among the logko, ngenpin and machi, good dreamers have turned out to be exceptions. Moreover, dreams are often not supported and understood even among their own people because many Mapuche have turned away from their own cultural and spiritual practices. Poverty and political marginalization have undermined Mapuche spiritual practices. Dreaming is a holistic activity that depends on the relatedness among all beings inhabiting the territory and all spheres of the universe. Today, territorial dislocation and the disruption of the overall cohesion of Mapuche society have deeply altered this relatedness and thereby the capacity of humans to dream. “How can we communicate with our spirits if most of our sacred sites are located within non-Mapuche properties?” asks Chief Nahuelpán. However, the loss of cultural knowledge is balanced by a strong Mapuche cultural revival movement, which reaffirms the continuing need to implement cross-cultural research methodologies. Furthermore, this is without a doubt both a scientific opportunity—enriching our world vision with different cultural perspectives—and an ethical issue—encouraging us to respect epistemological diversity and Indigenous self-determination in the broad sense of the word by recognizing the right of Indigenous groups to choose their own knowledge systems.

The Chodoy lof mapu mapping experience also enables us to outline some methodological and conceptual lessons. First, dreams are not a means to acquire any type of territorial knowledge in an arbitrary way. In the case described in this article, dreams allowed people to take into account the sacred and the spiritual, which are like many geographical dimensions that are difficult to grasp through the social sciences or Western mapping tools because they are rooted in culturally, epistemologically and ontologically different conceptions of the world. It is obvious that dreams would have been totally unsuited for compiling, for example, statistical information or geographic coordinates. The difference between a GPS and a dream is that the first gives quantitative and measurable indications about the location of a place, whereas the second provides qualitative information about it. This echoes with a quite different yet powerful example offered by Claudio Aporta and Eric Higgs regarding the use of GPS among the Inuit of the Igloolik region in Nunavut. They found that young hunters often become lost when their GPS stops working. Although GPS is a remarkable device for locating specific sites, recording travel routes or finding a route home, it neither provides instruction in how to travel safely nor replaces Inuit wayfinding methods and geographical knowledge accumulated for millennia (Aporta and Higgs 2005). Nevertheless, the fact remains that a technical device such as a GPS and Indigenous knowledge can complement each other and enrich our understanding of the world. As asserted by David Turnbull, some traditions assemble knowledge through art, spiritual means and rituals, whereas Western science uses building instruments and standardizing techniques (Turnbull 2000, 8). However, the two diverse approaches do not need to be mutually exclusive.

The second reason that dreams should not be incorporated blindly into a research process is suggested by a simple equation: if dreams are knowledge, knowledge is power. Dreams are not disembodied but are bound to material and earthly concerns. As with any other type of
knowledge, dreams are likely to be controlled and manipulated to serve specific political interests or social positions within a group. Consequently, they should always be critically examined and put into perspective within the social environment and the rules that institutionalize them and should be challenged with other types of information or methodologies. In Chodoy lof mapu, dreams neither happened by chance nor were ever taken out of the general context that helped to confirm and validate them.

Third, if we consider the graphic map of Chodoy lof mapu, mapping dreams may be considered as a cross-cultural translation from one cartographic tradition (dreaming in Indigenous societies) into another (Western cartographic representation). However, this translation turned out to be poor, if not nonexistent. Because the participants of the project wanted to make land claims in a language that could be understood by the Chilean state, they had to resort to Western cartographic techniques and manners of representation. As a result, all of the information about relatedness, including connections with other beings or with other geographical spheres, as well as the narratives of dreams, was lost in the final graphic representation. Even when dreamed places were illustrated on the map, they were transformed into mere geographical objects. Meaning and depth of place remained external to the map, to be found, for example, in the transcriptions of the interviews. We could thus reflect on how we might have created an improved map that would have better incorporated dreams and dreaming practices. A possible avenue for research might be that suggested by Margaret Pearce and Michael Hermann, that is, to create new narrative and graphic techniques for incorporating Mapuche spiritual and cultural experiences of place into a conventional Western map (Pearce 2008; Pearce and Hermann 2010).

Finally, the example of this Mapuche mapping project invites geographers and cartographers to adopt a culturally de-centered concept of territory and participation that goes beyond the positivist premises and techniques of GIS and Western cartography. For the people of Chodoy lof mapu, participatory mapping went beyond representing the terrestrial surface of territory. Moreover, participation was not limited to the people of the community. Spirits and powers inhabiting the intangible spheres of the territory actively supported their human peers in making decisions or directing collective actions related to the destiny of the community. In such a world vision, non-human beings, higher powers and the dead had also their say in matters such as what should be mapped and how it should be done.

Acknowledgments

This research was supported by the Swiss National Science Foundation (SNF) and the Boninchi Foundation. Part of the writing of this article was also supported by a Marie Curie International Outgoing Fellowship within the 7th European Community Framework Programme (Project Indimap 251885).

Special thanks are owed to the people of the communities of Chodoy lof mapu, who gave me the opportunity to share their lives, and to Estelle Sohier for her friendship and critical reading. I am also grateful to the participants of the AAG meeting 2010, who helped me refine my analysis.
References


Marimán, Pablo, Sergio Caniukqueo, José Millalén, and Rodrigo Levil. 2006. *¡...Escucha, winka...! Cuatro ensayos de Historia Nacional Mapuche y un epílogo sobre el futuro.* Santiago de Chile: LOM.


For the original interview extracts in Spanish, see Hirt (2008). The words in Mapudungun (the Mapuche native language) have been maintained in the text, followed by an English translation in brackets when they appear for the first time. Note that the plural form of Mapudungun words does not take an “s.”

1 *Consejo de Logko del Pikanwíjímapu* (Spanish and Mapudungun): “Counsel of the traditional chiefs of the Pikunwijimapu.” Pikunwijimapu refers to the northern part of the Williche territory, the Williche being a regional subgroup of the Mapuche people who live between the Tolété River and Chiloe Island.

2 I use the terms “Western” and “Indigenous” for the sake of convenience and to take into account the categories of political and cultural self-identification and distinction used by Indigenous peoples. However, I am well aware of the conceptual and ideological debates surrounding such terms, which highlight the danger of essentializing cultural identities and practices that are factually hybrid.

3 This research is based on seventeen months of field work in 2003 and 2004–2006. In addition to my personal field notes, I draw on the archival research, interviews and recordings of community meetings that I conducted jointly with other researchers of the *Consejo*. The analysis presented in this text is, however, my own responsibility.

4 These developments have been uneven in terms of linguistic contexts: in Anglophone geography, special journal issues (cf. *Human Organization*, 2003, and *Cultural Geography*, 2009) and an increasing number of articles give accounts of a flourishing production. In Francophone geography, this evolution is more marginal (see Hirt 2009).

5 Participatory mapping projects in Latin America have existed since the end of the 1980s (see special issue of *Human Organization*, 2003). However, publications have been dominated by North American academics who participated in the projects as cartographers. A Spanish and Portuguese literature, written by Latino-American researchers, has only recently emerged (cf. Ascelrad 2010; Muñoz and Rodríguez 2010).

6 Western perspectives from the social sciences, such as the sociology of scientific knowledge, have also questioned the nature/society distinction and investigated non-human agency. However, developing this aspect would go beyond the scope of this article.

7 The social uses of dreams were also valued by Western societies during Antiquity. However, from the Early Middle Ages on, while Christianity became the official religion in Europe, the value of dreams was progressively dismissed (Poirier 1994a, 7).

8 During the last decades of the 20th century, the development of the geographies of representations and, later, of geographical imaginations, have also contributed to the value of Indigenous forms of knowledge such as dreams. However, Indigenous views are different from Western disciplinary perspectives in that they do not make a dualistic and hierarchic separation between the “real” and the “imagined.”

9 It is interesting to note that a GPS was no “strange thing” for the participants of the project; linking together sky and earth, it appeared to be consistent with their holistic world vision and connections with non-terrestrial spheres and non-human beings.