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From Terra Nullius to Terra Cognita: Mappings as Land Rights Claims

3.1 Mapping discourses in representational politics

So far we have learned about the relationships between indigenous peoples and lands or territories in Taiwan's historical and geographical contexts. I have concluded that there are basically three ideal types of relationships, which I would describe as: in situ, hybrid and diaspora. As is the case in the Taroko area, very few people still live on the territories in the mountains that they claim as their traditional territories. Rather, most now live on lands on the plains designated by the Japanese or the Nationalist government as areas of collective or forced migration. The majority of the Taroko people who used to live in the mountains were moved to the plains to live with people from other tribes forming hybrid communities. Thus, from about 1920 onwards, most Taroko people have experiences of diaspora or hybridity, which more or less disconnected them from their original homes and lands. Among the one hundred other tribal communities in the Taroko mountain area, almost all of them were moved down to the plains during the Japanese time (Iwaki 1936a; Yamamoto 1929; Yamakuchi 1999). Two communities were exempted from the initial plans to move indigenous people down to the plains – the Skadang and the Hohos. Both these tribes maintained direct connections with their homelands until the setting up of the Taroko National Park in 1986 when they too were moved down to the plains. However, both the Skadang and the Hohos still have reservation lands in the mountain area, (about a three hour hike from where they now live on the plains), which they are legally entitled to live on.

Relatively speaking, the Skadang and Hohos people have more in situ relations with their lands than other Taroko people, who have very few legalized lands in the mountain areas. But the Alang (settlement or tribe) Skadang and Hohos villages are also special because they are the only indigenous areas that are included inside Taroko National Park, which is subject to restrictions and different laws and rules than regular indigenous areas.

8 The term ‘Taroko people’ means peoples living in the Taroko area and includes the Truku, Toda and Tgdaya people.
Since the establishment of the Taroko National Park in 1986, the Taroko area has been famous for the conflicts that have occurred between the National Park headquarters and the indigenous people (not only those living inside the park, but also those in the neighboring areas). These disputes concern a series of land and natural resources issues. Indeed, land rights and land use conflicts have been the major dramas played out in the Taroko area in the past two decades (Zhang, Zhi-sheng 1998; Yang, Lin-hue 1996; Zheng 1996; Chen, Zhu-shang 2000; Chang, Dai-pin 2000; Song 1999; 2001). The responses from the National Park headquarters and other concerned authorities reflect the efforts they have made to dissolve the tensions and to foster more mutual understanding and cooperation. Mapping is a typical device used by the park headquarters to bring third parties on board to help build forums on the land-resources-human-resources issue. There have been at least three waves of mapping activities in these two small communities. However, I have found that these mapping efforts can be contentious. Mapping raises a number of issues, such as who in these two communities has what authority to report to a third party (which, in turn, would report to the National Park headquarters) about the human-land relations in the area? And what results of the mapping exercise should be revealed, and to whom? Why mapping exercises should be sponsored by any party and what are their purposes? I call these issues the ‘representational politics’ of mapping. These issues relate to the subjectivity of information providers and the objectification of the information that many studies on indigenous mapping have shown in Taiwan and all over the world (Guo 2003; Kuan 2008; Fox 1998; 2002; Escoba 1997; Chapin and Threlkeld et al. 2001).

3.1.1 Public Participatory Geographic Information System Mapping (PPGIS)

Generally speaking, the mapping projects in the Skadang and Hohos communities revealed, and were entangled with, a wide range of power relations in a historical and political context. Both critics and proponents of the mapping processes and their results formed discourses and plans to work with different purposes or interests among different stakeholders inside and outside the communities. We can see that the five-year-long national Indigenous Traditional Territorial and Land Survey (ITTLS), which I worked on as project manager, also adjusted its methodologies and focus in the light of these discourses (Chang et al. 2004). In the scoping and implementation of the national mapping project, it was suggested that territorial information be recorded using GIS technology. This national cadastre paradigm is rather unsuitable or incommensurable to the indigenous ways of looking at land use and territories, in particular in situations where indigenous people are making claims on the land and there are disputes about boundaries and ownership. In addition, given what I have differentiated broadly as in situ, diaspora and hybrid contexts, past tenure could be interrupted without taking the emic perspective into consideration; indeed, it may be partly forgotten or mixed with different regimes.
The initiation and implementation of a more bottom up approach, which takes into account local visions, was encouraged in local communities (Chang, C.Y. et al. 2004). Thus, it was suggested that a Public Participatory GIS mapping approach (hereafter PPGIS) should be adopted, i.e. a series of methodologies that included ethnography and focus group discussions in order to evaluate the extent of any mirroring between social structure, land and environment. This approach insisted on paying more attention to the process, rather than an inscriptive model that could be accused of seeing indigenous ‘landscape as a pictorial way of representing or symbolizing surroundings as the materialization of memory’ (Guo 2003). A quick appeal to use the cadastre method or land registration system would possibly distort the indigenous contexts. The reason why this system is seen as ‘pictorial or inscriptive’ is because the initial mapping project results only showed places names and did not detail the many stories or local processes that could provide rationale or evidence to support land claims. Worse still, we do not have clear ideas to help us determine the extent to which some rationales or evidence are strong enough to support land claims, especially in terms of legal process. In spite of this, the implementation of a national mapping project was still encouraged among indigenous participants as a way of evidencing and proving their land rights (Chang, C.Y. et al. 2004). The desire for a stronger *emic* perspective to the project, however, appears to have been overshadowed by the *etic* focus of the cadastre system employed. This means that local participation in the project was very limited or even manipulated by local elites. Therefore, it appears that such mapping efforts do not encourage the empowerment of indigenous people (Wang 2003).

PPGIS methodology is advocated in order to deliver a more bottom-up strategy, which would encourage locals to undertake mapping based on their social, epistemological and political processes, and which would tell the stories or the processes of land and human relations. Such stories would provide an opportunity to reconsider the human-land relations and the documenting of human-land relations would be based more on local knowledge. This local knowledge would provide evidence for indigenous land claims. PPGIS also encourages the establishment of an equal forum for local people to discuss human-land relationships and to bring more consensus in terms of ideas about tenures. As Pasuya Poiconu, the former deputy minister of the Indigenous Council said:

> Indigenous Traditional Territorial and Land Survey (ITTLS) is the first step to establishing self-government. Maybe people will ask me why the government does not set up laws directly to make it happen as soon as possible. It is because, first, we (indigenous people) have to persuade mainstream society and to produce consensus in each indigenous group (Poiconu 2004).

The ITTLS has been conducting a survey to try to establish what land there is and who owns it, and also to empower indigenous people to coordinate their actions on land rights claims, and to pursue the possibility of future autonomy or co-management of indigenous land and natural resources. The ITTLS is more
than an ambition to encourage indigenous movements initiated and sponsored by the central government; it is also a survey that can provide a legal foundation for the resolution of all kinds of land or natural resource conflicts. The ITTLS is trying to encourage indigenous people to achieve an internal consensus on land claims and to persuade the mainstream society of their legal status.

3.1.2 Logistic problems and more

As mentioned above, progress is being blocked by political obstacles. These government initiated mapping projects are often filtered by local politicians who invite certain participants and silence certain opinions. In order to know more about local processes in terms of the mapping actions and beyond, the ITTLS academic team focused on land claims and tried to form close relations and long term cooperation with certain local teams. We lobbied the Indigenous Council for support for these local teams in order to deliver more promising results that would generate some good models and examples for the mapping projects. This is a clear effort to cooperate with the locals and to get them more involved in mapping at the local level. The then Minister of the Indigenous Council promised to support this action and adopt the idea of empowering local teams, providing them with funds and skills. Each scholar in the team committed to long term cooperation with the local team he had been working with. Eventually, with some help, each team produced a proposal for the implementation and funding of PPGIS mappings in a local context. Despite the promises from the minister and the commitment from the teams to make progress, there were problems with the administration staff at the Indigenous Council who could not provide expenses for traveling and meals for the workshops. This funding failure resulted in less local teams than expected being established (Wang, Ming-hui 2004). There appeared to be a lack of trust between the mappers and the sponsors.

During my research over the past few decades, I discovered that major indigenous movements have been focusing on land issues. Indeed, to date there have been at least three big waves on a national scale of ‘return my lands movements’ initiated by indigenous people. If central government support for mapping was welcomed by indigenous peoples, and much of the existing energy on land claims diverted into a national mapping project, it could bring a fourth wave of ‘return my lands’ movements. However, so far, this has never been realized.

Despite the funding problems at the Indigenous Council, we still tried to cooperate with local indigenous teams to bring more bottom-up, participatory mapping. Time and budget constraints meant that from 2005 onwards, the maximum support available was for ten candidate ‘communities’ every year for the national mapping project. Announcements about which communities had been recruited to join the PPGIS project were published by the central government through local indigenous institutions and NGOs. Communities who hoped to map their traditional territories, based on their own interests and scopes and with the help of academic skills and methodologies, were invited to apply. Suc-
cessful candidates were provided with training and support and the promise of at least one year of partnership with a group of scholars.

_Alang_ Skadang and Hohos were among the candidates that applied to join the national PPGIS mapping project. Some criticized the way indigenous tribes were invited to join the project, the method for announcing successful candidates and the involvement of geography or anthropology scholars as being top-down. But the ethnographical methodology was also an attempt to encourage and implement an approach with more local vision and subjectivity. Two anthropology PhD students (including me) and a geography master's student joined the project to undertake ethnographical fieldwork and to observe the local context, paying more attention to the 'politics or contexts' behind mapping activities. These activities followed PPGIS procedure in order to integrate more local concepts and ideas on the relationships between people and land. In addition, a group of four professors and students joined local people on the mapping activities every couple of months to observe and aid the processes of mapping in an _in situ_ scenario where indigenous people have increased relationships and interactions with the land (Tsai et al. 2006). From 2005-2006, the PPGIS projects among the Skadang and the Hohos were implemented as experiments to see how mapping could empower indigenous people to meet their needs through mapping based on their own endeavors and visions. The needs that motivate local indigenous people to struggle against repressive politics and to provide evidence or discourses to bring to the forum devised by PPGIS will be discussed later in relation to the mapping processes in Skadang and Hohos.

### 3.2 _In situ_: examples from Skadang and Hohos

#### 3.2.1 Sensitive local topographies

After eighteen months of implementing the PPGIS project in _Alang_ Skadang and Hohos, indigenous participants from these two tribes had described and marked 286 place names on Google Earth. The academic team has promised to keep this information for these two communities and not to reveal the results and some sensitive information to outsiders. Consequently, I cannot reveal all the information here in this academic report. Instead, I can present a less detailed map that indicates the diversity of information and adopt Liu’s (the master’s student appointed in the field) preliminary analysis to show some basic categories of the mapping results related to these 286 place names (Liu, D-K 2008). The categories include:

- **Topologies**: 9 gorge names, 10 valley names, and 19 other topologies
- **Natural resources areas**: like tree or bamboo or animal habitats (12)
- **Water**: 16 river names, 3 lakes
- **Public properties**: 21
- **Place names with related stories, histories or events**: 12
These mappings took place in the context of a number of sensitive issues, such as the construction of cable cars, border lines and reservation land appropriations. This analysis helped us to understand the 286 place names, and stories behind them, and also to assess what it is that helps people to either remember or forget information that contributes to the mapping processes and results. The past is reconstructed on the basis of the present.

A plan to decommission cable cars will be problematic for local people as this is currently the only method of transportation for moving large quantities of goods from the mountains to the plains. Thus, as part of the project, land that could be used as a base for cable cars, and a number of alternative cable car routes were marked on the map, in a bid to suggest to the National Park headquarters that they rebuild a transport system for indigenous people. Conflicts over the rights to the land occupied by the owner of the cable car system were also monitored in the mapping process.

Traditionally, border lines differentiating Skadang and Hohos alang were implicit and there is mutual recognition by the two communities regarding future access to lands that have not yet been appropriated as reservation lands. In future, lands between border lands will be granted to the locals by the township government. Thus, maintaining clear borders helps to maintain rights and space for future access within each tribe.

The results of the PPGIS mapping have raised reservation land issues concerning approximately 109 place names. Some of the conflicts regarding reservation lands were due to the National Park headquarters’ attempt to buy or take indigenous reservation lands located inside the National Park. There was a tendency by the National Park administration to define boundaries in a way that secured land and property in their favour. In fact, the lands in these two alang are primarily areas of indigenous reservation land that have already been demarcated by the national reservation land registration system. During the PPGIS mapping process, we found that local people often showed us cadastre maps to support their claims. Participants often referred to specific land numbers to indicate where they live. This is the first and second generation to be ruled by this cadastre system, which was introduced by the Japanese authorities and later strictly implemented by the nationalist authorities. Most of the participants were familiar with this system and used it as evidence to identify land ownership and land use. Indeed, every family seems to have a map of the total area of the two alang and not just the area they own.

Many local participants gave the example of a famous and successful land claim case, specifically, a request for the National Park headquarters to return pieces of land #109 and #216 to indigenous owners. The claimants asked for land
use rights to be granted on these two pieces of land that had been bought by the National Park from Shoulin Township without the consent of tribal people. The lands in question had not been registered or appropriated by any individuals; however they had been registered as being owned by the township office, which had acknowledged the fact that some local indigenous people were using the lands without full registration. When the indigenous people discovered that the lands in question had been transferred to the National Park they protested and said that they had a stronger prior claim to the land rights than the National Park. During the protests, local indigenous people used the cadastre to provide documentary evidence that they had been ‘recognized’ as ‘illegal cultivators’ (濫墾戶). This is a customary rule that indicates candidates for the next wave of appropriations of reservation land. As is well known among indigenous citizens, having your name on the cadastre is crucial to claiming rights. Even so, the township government was determined to deny the fact that the lands in question had already been in use by local indigenous people. ‘The township just hoped to sell lands to the National Parks for money as a way of making up the shortfall in township finance’, participants in the project told us. ‘Thus the cadastre is no guarantee, and this is why we want to map in our language, to show the National Park and the township and tourists, to let them know the lands in our territory belong to indigenous communities’, as a community leader told me when he invited me to join their mapping projects.

In terms of the 106 plot names, Sapah Someone indicates a house that is currently inhabited. Nniqan Someone indicates a house where someone used to live but which is currently empty. Pnspahan Someone indicates a plot of land where activities used to take place, like housing, working or planting. Using these markings, local participants were able to add more local meanings to the land that previously had just been numbered in the cadastre system. These labels differentiate whether places are currently in use or not. They respect places that were used by someone else, even if they do not know exactly who had used the lands previously. There are even cases where someone’s name is used as place name in order to indicate ownership of a piece of land. As Liu (2008) has highlighted, there is a plot of land in alang Snlingan that is named Pnspahan AKaw, which indicates that a Mr. Akaw was the individual who used to live in that place. In alang Hohos, there are neighboring plots of land with the place names marked as Tnlangan Danga Akaw, Tnlangan Tumun Akaw, and Pnspahan Telung Akaw. This indicates that the Akaw family had migrated from Snlingan to alang Hohos. Through these place names, we found that Truku people are able to trace migration histories that affirm the human relations among alang.

Among the places indicated were thirteen hunting lodges or hubs that indigenous mappers indicated to be biyi, a term that is used to mark the places and houses which were used to farm mushrooms or to rest during hunting activities. Biyi are controversial in terms of law because most of the mushroom houses or hunting areas were located inside National Forest lands that indigenous people still accessed for gathering and hunting ‘illegally’. The Forest Administration considers biyi illegal. Today, biyi are not used as mushroom farms because the
price for the crop is no longer good. However, local participants marked these places to indicate that they still cared about the places where they had spent a lot of time and effort, even though they were located at quite a distance from their houses. Thus, the locations of these *biyi* became one of the sensitive categories that the participants hoped not to reveal to officials.

Among the 40 private properties named in the mapping project, we found that the term *Dxgal* denotes a Truku idea indicating lands awaiting further use by someone who has a claim to the user rights or ownership of the plot. For example, the place name *Dxgal Udaw* indicates that the person *Udaw* has a priority right to the land in question. The Truku term *Qmpahan* is used to indicate land that is currently being planted or that had been planted in the past. Thus, the place named *Qmpahan Watan* indicates that a Mr. *Watan* is using the land now and everybody living in the *alang* knows this. If Mr. *Watan* died, the place name would probably change to *Pnspahan Watan* if nobody took over the land. However, such a transfer of land is unlikely to happen quickly since recent generations of local people still remember Mr. Watan and his ownership of the plot. However, if the land is inherited by his descendants or sold to other people, then the place name would change to the name of the new rights holder. Our research showed that place name markers used to indicate land-human relationships in Truku cultural topographies can and did change. Place names carry meanings explicit among local people and are used as points of reference.

### 3.3 Places of daily life: Private or public place names *in situ*

#### 3.3.1 Narrations on topogeny and genealogy

One of the outcomes of these PPGIS processes was the accusation that mapping is responsible for the reification of place names that could, in fact, change at some point in the future. I certainly found some evidence of this in my research. When maps are just records of the status quo, it is also possible to mark some places that are not yet named by the public but are implicitly used by a few local private individuals. A number of local participants in the project indicated some places that had names only known by a few private users; places names that denoted the close relations of the individual with the land (Basso 1996; Roy et al. 2000). Aunt Ikong’s mapping below illustrates some of these private places.

*Sapah Yuyung (Yuyung’s home)*

*Sapah* Yuyung is my sister-in-law’s home. We lived with my mother and my brother. My father was from Snlingan. I have not lived there for over 40 years. When I was 20, I left to come down to the place where I live now in the plains. I remember that we used to shout to the place called *ayug*, to call my brother and my mother to come back home to have lunch. I also had to work at *ayug* until 10am, and then come back to make lunch for my brother and his wife who were still working up there. It took about 15 minutes to walk back home from *ayug*. 
We lunched until 1 pm and then went back to work again. In summer we used to work until 6 pm. My brother was very hard-working and treated me strictly. My father died when I was 2, and my mother died when I was 17. I learned how to work from my mother. I remember that my mother and I walked to the plains carrying oranges and vegetables on our back to sell to the Han people. This made money for tuition fees. We used to start at 3 or 4 am with a torch and arrive at 6 am so we could avoid the burning sun.

**Honat (cliff)**

Honat is the place where our cultivation land is located. The land is much lower than our home, so sometimes we would sleep at a *biyi* (temporary house) there. We used to sing all the way when going there. We sang the songs from church. I liked to sing alone and I could hear the echoes from the opposite mountain. The louder you sang, the louder the echoes.

**Dkiya (mountain)**

The mountain is the place where my brother would take me to see the traps for mountain rats and birds. We had to start very early, especially when the winter was very cold and the dawn came very late. But when we saw many qowlit (mountain rats) in our traps, we were happy and did not feel tired. We still had to come back home before 7 am, because we still had to work in other places.
Ayug (gully)
In Ayug we had cultivation plots where my brother would drive our cow and plough the ground to plant dry rice (emhuna pyai), wet rice (oryza sativa Linn) and peanuts (emhuna trabus). That was also where we herded our cow.

Ayug Truma (the bottom of the gully)
Ayug Truma is the place where I worked with my mother. After she died, I used to work there alone. One day, white balls dropped from the sky there. I did not understand what it was. Actually it was hail. I was thinking that it was the end of the world, because the church always said that the time will come for the end of the world. At that moment I didn’t know what to do, so I just prayed and prayed to God to ask, ‘What is this, is this end of the world?’ Later, when I went back home, everybody felt astonished and strange. We planted peanuts and sweet potatoes and we used to grow cucumbers that were so sweet that my mother and brother liked to eat them fresh with salt. That was so delicious!

The terms or place names Aunt Ikong used, such as onat (cliff), dkiya (mountain), ayug (gully), and ayug truma (the bottom of the gully), are actually Truku terms to indicate physical topographies. Thus, while these terms can be used generally, we find here that they are used by Aunt Ikong as private place names, indicating her very personal experiences with the lands. Even people in the same alang, unless perhaps they were close neighbors, would possibly not know which places she was referring to. The four places she indicated as personal place names surround the house where she used to live. She centered the relations of these four places in the sapah (house) belonging to her sister-in-law, called sapah Yuyung. Aunt Ikong specified the house as Yuyung’s sapah to further indicate that the house carried the lineage of her brother’s father-in-law, who had built the house. Though it is mainly Ikong’s family that lives in Yuyung’s sapah (house), they still respect that the original owner of the house was someone else. A sapah could usually carry a genealogy of a few generations. Ikong recited the genealogy of her brother’s wife’s family. She said that when her brother married into Yuyung’s family she got the right to use the land from her brother’s father-in-law. She was expressing that they had use rights but not ownership rights; that the land was on loan from the family they married in to when their family left another tribe that did not have enough land to live on. Ikong’s cousin Ici articulated his family’s lineage by indicating that the land actually belongs to him. Among the lands Ici owned, most of the lands were obtained through purchase, only one third of his lands were inherited from his father, Ikong’s brother. Ici explained that he bought lands in Alang Hohos because their ancestors moved from another alang named Snlingan to Hohos where previous owners that had left some land for Ici’s ancestors to occupy and use. Ici and Ikong both recited their lineage from alang Snlingan as follows: (in Box 3.1 below): Ici Dadaw → Dadaw Yadu → Yadu in a sequence from the current generation to previous generations. Our research showed that informants usually remember three generations before them. Yadu’s father was not remembered by Ikong and Ici, but they knew their ances-
tor Yadu was born in their original alang Snlingan. Their Uncle Loking Yadu and father Dadaw Yadu moved to alang Hohos where they live now. They came with the approval of prior cultivators.

Migration is also a common issue mentioned in the mapping process. Most of the people in the Taroko area have experiences of migration, irrespective of the processes of nation building. In Ikong’s narrative, she mentioned that her father moved from Snlingan to Skadang, and that she moved from Sdadang to the plains. A narration of the sequence of place comes via the genealogy and produces a topography, as Fox described for other Austronesian peoples (Fox et al. 1997). When they recite the genealogy, they also indicate the relationships with the land.

![chart](chart3.1)

**Chart 3.1**

Topography of Ikong’s family

(←: means the direction they recite the genealogy)

3.3.2 Topography is/with genealogy

Topography with genealogy was a common model of narration among many participants. Migrations indicated in topography and genealogies are recalled in many people’s memory to mark the land in sequence and at the same time to bring the memory of landscape as a background for personal or family histories. Each family sent just one delegate to implement the narration model of genealogy and topography to indicate information on where, when and who should be inscribed on Google Earth in order to create a territory map.

Participants were eager to represent their vivid lives on the land they are familiar with. Ikong, for example, said that she wanted to describe her memories of the place before she was twenty years old, to create a reflection of her life. By contrast, she did not have much to say about Snlingan, the previous alang where her father lived, because she had very few ideas about the place. This certainly explains why she expressed her genealogy using a backward model, in sequence, from herself to her father and to her grandfather. As a result of the way she described their daily lives in the place where she used to live and that were so familiar to her, she provided us with a basis for further interpretations on human-land relationships. She told us about the happiness of hunting mountain rats or birds with her brother, and the sadness connected to the land where she worked with her mother. One participant interpreted Aunt Ikong’s narration: ‘From the perspective of land claiming, we could see that Aunt Ikong was describing the
land where they could do hunting, cultivating and gathering, which made up the
typical daily lives in mountain communities. Aunt Ikong was telling us about
more than just land rights and property, she was describing place with which
she had connections and held great affection for. A community leader concluded
that a place for daily lives is also a place that provides foundations for different
narrations. This interpretation seems to be recognized among the participants.
Following on from Aunt Ikong’s narrations, another family said that, ‘we also
hunted in the area that Ikong calls Dkiya, which was first explored by our ances-
tors. We gave permission for Ikong’s family to hunt there.’ Pastor Xue also recited
generations of genealogy and topogeny, telling us that his family had originated
in Snlingan before moving to Hohos.

Aunt Ikong’s descriptions of daily life were more powerful than any alien-
ated discourses for claiming land rights. Indeed, nobody’s story about this plot
of land was more legitimate than hers. Through her narrations we obtain a much
clearer idea of the landscape and the place called Ayug, which was within shout-
ing distance of her home on the plains. It was a place for cultivation that needed
daily care and hard work. We learned too that Honat (cliff) and dkiya (mount-
tain), where the family did their hunting and gathering, is also at a convenient
distance from their home on the plains.

3.3.3 From micro world to contextual world: scaling up of the PPGIS

So far we have found that the mode of narration used by participants – articu-
latng both genealogy and topogeny – provided a structure and order for space,
based on the rule of priority status for families of first cultivators and permission
for newcomers, granted by families of prior cultivators and explorers. With these
simple rules, local participants were able to differentiate other land relations that
resulted from inheritance, buying, selling, granting or lending and borrowing.
Thus, later we see that what Aunt Ikong describes within five place names that
make up a micro world, were actually embedded in more complex contexts.
These contexts were mentioned by other participants who also narrated their
own personal micro worlds. The church location mentioned by Ikong was also
mentioned by another family, who had donated the land to the church. These
church donors were in a position to reveal the meaning of the place names. The
only neighbor Ikong mentioned was sapah Lihan. This house is later mentioned
and marked as a result of the narrations of the Lihan family genealogy, which
demonstrated the family’s long residence and occupation of land in alang Hohos.
When a place name is indicated as a result of PPGIS processes, we also find that
a genealogy is recognized by the participants who were able to check and verify
these labels on the map. There is also an implicit recognition among locals for
the need for a suitable representative who can describe their places not only with
names, but also using genealogies. Not surprisingly, participants tended to rep-
resent places where they had legitimate or direct connections. Thus, they did not
tend to express meanings over places when there was someone else with more
legitimate relations to that land. It is a process that starts with the private and
then extends to the public, and is subsequently checked and verified using genealogies and topographies, all of which combine to provide the best and most legitimate position for articulating land-human relationships. This process starts with ‘hearing the other side when it comes what touches all should be agreed to by all thus to make up an awareness that anyone couldn’t replace the other person and speak for him or her (Tully 1995:35).’ (Author’s italics).

Through the representatives of the families that were able to articulate their places, a map indicating family land property in situ is processed. Those families that did not have representatives were also respected and invited to put a mark on the map to indicate the existence of a family who had rights to the land.

3.3.4 Village borderlines

The place names of land properties, and in particular reservation lands, indicated on the cadastre, actually had very clear cut borders. However, borderlines in alang Hohos and Skadang were not shown on the cadastre. One participant explained that this was because the Japanese policemen in each alang had divided up the territory to make space for reservation lands to be appropriated by individuals. Thus, the borderline was a way of marking the future appropriation of reservation land inside each alang. The township, however, did not recognize these borderlines and would often grant reservation land to other people belong-
ing to different alangs. Consequently, clear and undisputed borderlines were a sign of an original oral contract on land appropriation inside an alang. Certainly, to claim a borderline in an alang was to claim sovereignty.

An alang is not only made up of houses and cultivation lands that are allowed under the reservation land registration system, but also includes hunting and gathering areas that had largely been taken by the state as national lands, state forest lands or national parks (Yan, Jun-xiong 1997). Participants in the project were also eager to mark and indicate where they hunted and gathered, to provide a complete picture of their alang where they lived their lives.

They expressed many places names for hunting paths and areas, and temporary houses that the National Park or Forest Bureau would consider as illegal and priority targets for elimination. Though some participants were worried that these markings on maps would leave them vulnerable, some were still eager to mark them in order to document a personal story, one that detailed the topologies they had experienced, including mountain names, gorge and valley names, lakes and hunting paths or old trails or shortcuts. These places were indicated sometimes using private place names and sometimes using public place names; the result was a coordinated system that structured the relations inside each alang. In this mapping process, these participants are coordinated to make new mental maps that combine personal experiences with the experiences of others, thereby giving personal place names like Ikong a new public status. For example, the tiny island in the middle of the Skadang River was named by Mrs. Yaya as Taiwan Island, because of its shape like the Taiwan Island. Participants adopted this name, thus giving public recognition to private naming.

3.3.5 The co-management of river landscape among different communities

Besides hunting and gathering places (biyi) which the participants claimed access to through their traditional customary rights, river landscapes were also demonstrated during the PPGIS process. Some participants told me that the Skadang and Hohos alangs were proposing a co-management project with the Taroko National Park headquarters for the protection and conservation of the Skadang river basin. Through the project, we discovered that the administration authority maps of the Skadang River were actually very different from the map made by the locals, which had different names for different sections of the main river from the upper stream to the downstream, as indicated on the map from A to H:
Through the mapping of the river landscape we find that the principle of first occupation was still adopted to manage access to river resources. River sections were organized by clear boundaries and borders. However, these sections also combined to form a system of co-management among the stakeholders in different areas, especially in areas where fishing with the roots of a poisonous plant called tuba (Derris trifoliata, Jewelvine) was employed. This method makes the fish faint and flow from the upstream sections to the downstream where various stakeholders could harvest them at different points. The fact that co-management systems exist for different river sections was clearly a rebuttal of ideas that the river also belongs to those alangs located on the opposite side of the river, such as Sdgan and Rocing. As one participant said, the opposite side of the river is actually highly vertical, with steep gorges, making it difficult for the people to get access to the river bank. The narrations and disputes on the ownership of the river came to a climax when the National Park decided to accept the proposal for co-management from the Skadang and Hohos group.
3.3.6 Historicity and place

There are some place names carrying or indicating historical events or personal names. Take the place name Dxgal Skuring for example; it is the place that Ho-hos participants identified as the spot where the Dutch left their gold mining equipment. It is still debated whether the Skuring originate from the Dutch or another Austronesian tribe who used to live on the mountain slopes and on the plains area around the river mouth (Kang. P 1999). Ho-hos participants consider the place as evidence of outsiders who occupied the land prior to the Ho-hos people. They still leave the mining equipment intact, as an ethno-archaeological site, so that Ho-hos and Skadang people are reminded that there were previous explorers in this place. In this case, I would say that historicity is demonstrated and confirmed by the rule to respect the first and prior occupation of this land. The place name of alang Skadang means the jaw of a human being in Truku terms (s = old, used to be; kadang = jaw). A historical event to dump equipment, no matter whether it was by the Dutch or people from the coast, is inscribed on the landscape and remembered by the current occupants, even though they have not lived through the event personally.

Historicity is also demonstrated by many place names that indicate vivid historical or past events that people have encountered personally. Bangah indicates the place where they used to make charcoal. Amerika indicates a spot where an American was drowned. Sapah Knsat indicates where the Japanese police station was located. Lhngaw Qbulit indicates a place where some skulls that were hunted by tribal heroes were hidden. These place names carry stories that local participants recall to remember certain events.

3.3.7 Natural Sovereignty

Through the mapping processes we find participants using place names and stories to coordinate the alang communities, using the principle of respecting first occupation. From local private micro narrations, participants can coordinate with different families over a territory and make rules about access to the land and natural resources. These rules were set up by their ancestors who came to explore the lands that they have inherited. This is the reason why local people insist that they should obey the gaya of ancestors. To refer to ancestors is to refer to the principle of first or earlier prior occupation. Newcomers could join, providing they had approval from families of the first comers. One elder concluded that, 'on the processes of migration, what is of most importance is that each family on the river bank of the Skadang river has a clear boundary.' Each family, with the help of gaya, has to cooperate and negotiate on borders and rules to survive. Those who did not obey the gaya were killed (Yu, Guang-hong 1980; 1982; Yamaji 1987). Gaya contains genealogies and topogenies to demonstrate the rule of first occupation and, later, to structure a system to coordinate daily lives and activities like planting, housing, gathering, hunting and so on. These gaya actually form borderlines, zoning, access and rights to natural resources and even
determine punishment when necessary. As Pastor Xue and Elder Huang said, ‘these gaya still worked until at least 1960s when the state forced us to stop practicing our gaya by bringing in outsiders and state agents to fish with electricity and logging’. ‘We could do nothing now because the state is stronger and more powerful than us; otherwise, we would be able to kill or defend any one intruding inside our land without our permission in the past. The right to defense was our natural sovereignty’.

3.4 Conclusion

In an in situ scenario, place names are basic devices for producing a coordination and reference system for locals to indicate publicly recognized meanings of place and, thus, to be able to zoom into micro scale landscapes based on gaya rules. The gaya respects the place where prior occupations and historicity are articulated through vivid personal experiences. Thus, the gaya structured the land tenures and social relations in terms of genealogy and topogeny, which, in turn, ordered human-land relationships. These genealogies and topogenies created borders between alangs that keeps rights intact and prevent conflict over ‘sovereignty’. This subjectivity is demonstrated through all the PPGIS processes and results.

The PPGIS mapping project lasted about one and a half years. It experienced some obstacles in terms of funding and prioritization, but this is not surprising as the local people involved were busy with their livelihoods and various organizations (including an indigenous NGO), in the hope of finding work and improving their lives. The PPGIS results can certainly play a role in providing complementary information to existing maps. As was anticipated, the mapping coordinated and initiated by the Geography Association of Taiwan (our team), which was commissioned by the Indigenous Council, provided evidence for land claims. Participants understood, however, that there was a limit to how much these results could facilitate their aims. They know that it also takes further legislation and legal action to protect or bring back the rights they have lost. They realized, too, that the cable car or road building issues would not be solved by mapping alone. They also acknowledge that micro conflicts about reservation lands cannot be solved or analyzed by Google Earth’s low resolution images.

We hope the multimedia mapping results will provide fruitful information. Most of the local leaders felt it would be difficult to continue the mapping efforts since they did not bring any solutions to urgent issues. They did believe, however, that mapping had a role to play in ecotourism or as material for their children to learn about their ‘roots’ in the mountains. Indeed, we invited children to attend the meeting where we disseminated the information about the project, even though we knew that the mapping had resulted in some controversial assessments and had the potential to cause tension between the two alang that had been moved down from the mountains together to form a hybrid community, and that hoped to co-manage the lands above them where their homelands were
located. PPGIS mapping has the ability to scale up and down, to provide visualized topologies of the place in situ and, it has the real possibility to reveal micro issues or conflicts among locals living in situ. PPGIS is also controversial because it has the potential to raise conflicts but not provide resolutions. In conclusion, it is hard to determine whether PPGIS mapping processes or results are functioning in terms of meeting the purposes and aims of locals in the short- or long term. However, what it does provide is a new forum for participants to detail real and visualized topologies and to show their own relations with the lands in question. It should be noted, however, that even though Google Earth is becoming more accessible and the techniques and skills required to handle monitors are becoming easier, locals are not used to using this equipment.

We found locals living in situ with their lands have a need for such a forum when dealing with their many conflicts over land with the National Park. The PPGIS mapping methodology makes the public articulation of experiences of topologies and land-human relationships a priority, and is an example of a ‘deliberate democracy’, even though is still the cause of some controversy in this society. If one of the principles of democracy is based on Audi alteram partem (a Latin phrase that means, literally, hear the other side) (Tully 1995:35), Quod omnes tangit ab omnibus comprobetur (q.o.t) (what touches all should be agreed to by all). It is also true that the diversity awareness one comes to acquire in dialogues does not consist of being able to replace the other person and speak for him or her (ibid: 133). We found the participants in alang Skadang and Hohos had more opportunity to follow these principles because they are still living in situ on their traditional territories. These territories have authentic places names and lively spatial reference systems. Through PPGIS, these geo references have been inscribed and processed, whether it is by land owners or tribal sovereignty protectors, while most of the other Truku people are not living in situ on their original home lands and are caught up in complex local hybrid or diaspora situations. People in hybrid or diaspora situation thus have different scenarios on the claiming and mapping of the relationships between land and humans.
Photo 4.1
Free-sketch Mapping Workshop on Traditional Territory in Skadang and Hohos Tribe

Map 4.1
Mapping through Google Earth on Alang Btakan by the Shoulin Township Team on Traditional Territory Mapping