

4

Traveller's Path

WITSUWIT'EN KNOWLEDGE OF THE LAND

Just upstream from the place once known at Skeena Forks, in the drainage of the river called the Bulkley by the newcomers and Widzin Kwikh¹ by its inhabitants live the Witsuwet'en (people of Widzín Kwikh), neighbours of the Gitksan to the south and east. Their present village of Tse Cäkh² or Hagwilget was ceded to them in the 1820s by the local Gitksan to allow them access to fishing sites when a landslide in Hagwilget Canyon blocked the river temporarily, and prevented the movement of salmon to the ancient summer fishing place at the canyon now called Moricetown Canyon, the site of the village of Kyah Wiget (Morice 1978 [1904]:8). The Witsuwit'en homeland includes the drainage of Widzín Kwikh or the Bulkley River, and the adjacent headwaters of the Fraser River system (Figure 4.1). The Witsuwit'en live in an environment and cultural setting broadly transitional between the Northwest Coast and the sub-boreal interior of British Columbia and speak an Athapaskan language, though their culture has many similarities with the neighbouring Gitksan and other people of the Northwest Coast, as well as many elements in common with other Dene.

Northern Athapaskan speakers (Dene) have in general been nomadic hunters and fishers, such as the Kaska Dena and Gwich'in I will discuss in

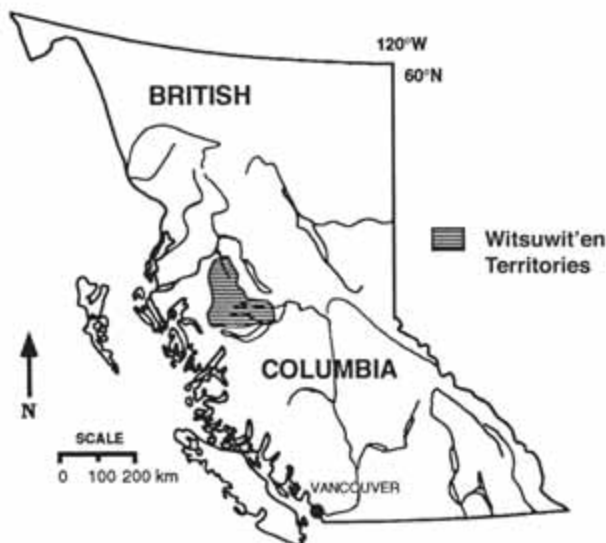


Figure 4.1 Map of Witsuwit'en territory

Chapters 6–8. The Witsuwit'en have depended more heavily on harvest and catching of salmon than many other Athapaskans, made possible by their residence on rivers of the Pacific drainage with rich salmon resources. After dispersed hunting in the winter season, they traditionally spent the summer season settled in villages adjacent to the major salmon fishing areas. The Witsuwit'en share many features of Northwest Coast life, including division into named exogamous Clans (called Phratries by anthropologists), and have a ranked society with Chiefs, commoners and (formerly) slaves. Their Houses (*Yikb*) and Clans own hunting grounds, and fishing sites which are formally owned and passed down along descent lines. Witsuwit'en social organization and ecology are discussed in more detail Mills 1994, and Daly 2005, and much rich material is also presented in *Hang onto These Words, Johnny David's Delgamuukw Evidence* (Mills 2005).

The Witsuwit'en homeland ranges from mountainous to plateau country, with some large lakes in the southern portion, and is traversed by the broad valley of the Bulkley River in the northern portion (Figure 4.2). Most of the landscape is within the Sub-Boreal Spruce biogeoclimatic zone, characterized by stands of aspen, and forests dominated by spruce and pine, with Engelmann spruce-subalpine fir forest at timberline, except in the northern



Figure 4.2 Bulkley Valley landscape showing mountains *dzilh*, a grassy meadow *tl'ò k'it*, a small lake called Ts'en co Tanedilh, lit. 'swans land in the water' (Toboggan Lake in English), and the mountains called Ts'idek'iy (Hudson Bay Mountain behind Smithers). Mixed forest grows along the far shore and conifer forest mantles the mountain slopes. Slide area tracks are also visible. Pat Namox commented about the snowfield *lhk'aygyuts'iy* in the cirque to the right of the cleft with the glacier, "them snow drift, 20 feet deep that's the one you see in July."

portion, where the inner edge of the Interior Cedar-Hemlock Zone is found in the Bulkley Valley. The exposition of Witsuwit'en landscape knowledge presented in this chapter is the result of my ongoing ethnobotanical and ethnoecological research in northwest British Columbia, and of a long collaboration with linguist Sharon Hargus of the University of Washington, the expert on the Witsuwit'en language, who independently elicited landscape terms and narratives, as well as carrying out linguistic analysis of terms (Johnson and Hargus 2007).

I explored Witsuwit'en understanding of local landforms, vegetation and habitats by conducting interviews in peoples' homes and going on field trips to different local areas. I used voice recording where feasible to record narratives accurately and allow linguistic transcription of Witsuwit'en terms. I also made written notes, and took photographs and video to record terms and provide a visual record of different kinds of place in the local environment.

I used visual methods for both as a prompt for terms and stories, and to document places and ecotopes, and recorded associated English narratives to achieve a fuller understanding of the meaning of different kinds of place. I also recorded narratives to document geographic vocabulary and to learn what the entailments or affordances are of these kinds of place. The research on which this chapter is based was carried out principally in 1997-1998 and 2005; my previous work with Witsuwit'en speakers and elders focused on ethnobotanical and healing knowledge. Translation and orthography of terms was checked with Sharon Hargus, who also conducted independent research into Witsuwit'en geographic terms; she has worked with documentation and revitalization of the Witsuwit'en language since 1988.

In my initial research design, I desired to compare the perception and understanding of landscape of groups whose languages and landscapes differed, to help to understand how their recognition and naming of landscape features and the meanings these places and kinds of place had might differ. I hypothesized that place kinds or ecotopes recognized by a group of people would reflect the regional geography of local groups, and also their ecological relations, encoding information about resource types and knowledge of the land necessary for successful travel. In the previous chapter I discussed landscape classification and meaning for the Gitksan, a group of Tsimshianic speakers whose homeland is just north and west of the Witsuwit'en lands.

Places also serve as landmarks, and reference points in travelling over the land, an activity almost synonymous with the traditional northern Athapaskan way of life, and are therefore important in ethnoecology. Athapaskan toponyms reveal how a place looks from the vantage of the traveller and what its characteristics are. (The placement of the observer in the landscape, conspicuous in Athapaskan place names [cf. Basso 1990], is facilitated by the extremely rich set of directional or locational adverbs and nouns in Athapaskan languages, which are incorporated into descriptive words and narratives [Kari 1989; Hagwilget Band 1995]). Named places link knowledge from many different domains, the sacred and moral, the historical, traditional ecological knowledge about subsistence, and about routes of travel and trade. Athapaskan peoples also have a set of names for larger physiographic regions (Andrews and Zoe 1997; Kari 1989; Kari and Fall 1987).

Named places also serve to identify social groups for Athapaskan speakers, particularly terms related to the local hydrology or physiographic regions; for example, groups are often named for rivers or for large fish bearing lakes, which may be foci of summer gathering of groups widely dispersed in the

rest of the year. This is certainly prominent for the Witsuwit'en (Bulkley River People) and their various neighbouring Babine and Carrier groups. Kari (1989) has reported that Athapaskan groups in Alaska may be named for physiographic regions. In contrast to Alaskan and northern Dene, Witsuwit'en place names are proprietary and serve to validate the relationship of Houses (*Yikb*), and Clans to bounded Territories where members are entitled to harvest resources. Only features of regional significance or associated with major trails seem to be "public" place names for the Witsuwit'en.

It is now apparent that substantial variation can occur in which features of landscape are named, and how they are subdivided, across environments, cultures and languages (Johnson and Hunn 2009). In this chapter I present a Witsuwit'en lexicon of landscape terms and discuss the system for describing landscape, its relationship to other Dene landscape classifications, and to scientific systems of landscape classification (see Figures 4.3 and 4.4 for examples of the range of landscape terms). I focus on general "kinds of place" or ecotopes, rather than presenting a detailed exposition of specific places in the Witsuwit'en landscape, in part because of the significance of named sites as owned properties of Chief and Clans.

Toponym studies and linguistic studies of spatial terms provide a useful context for consideration of Witsuwit'en ethnogeography. The toponym studies by Kari (1989), Kari and Fall (1987), working with Dena'ina, another Athapaskan language, and Hunn (1996) working with Sahaptin in the Columbia River drainage, are particularly relevant to landscape ethnoecology. Starting from a corpus of toponyms, Kari and Fall, and Kari elaborate a set of 'place kind generics', which reveals underlying concepts of significant kinds of place. Kari's work on hydronymic districts, and his cross linguistic analysis of stems referring to water, streams and rivers, and lakes is quite useful (Kari 1996). Tom (1986) provides a rich illustrated record of Southern Tutchone toponyms, while studies of Andrews and co-authors provide a sense of the link between locale, place names, and relationships to the living landscape and its mythic past in the Northwest Territories (Andrews 1990, Andrews et al. 1998), which are relevant to understanding of Witsuwit'en ethnogeography. A variety of dictionary efforts and land claim research also include both toponyms and their meanings (e.g. Andre and Kritsch 1992, Kritsch and Andre 1994 and Greer 1999 for Gwich'in; Kaska Elders 1997, for Kaska; and Hargus 1999 for Witsuwit'en). Linguistic studies that focus on spatial terms in Athapaskan languages, and their literal and metaphoric significance in the storied landscape include Tlen (2006) on Southern Tutchone directionals, and Moore (2000) on Kaska directionals.

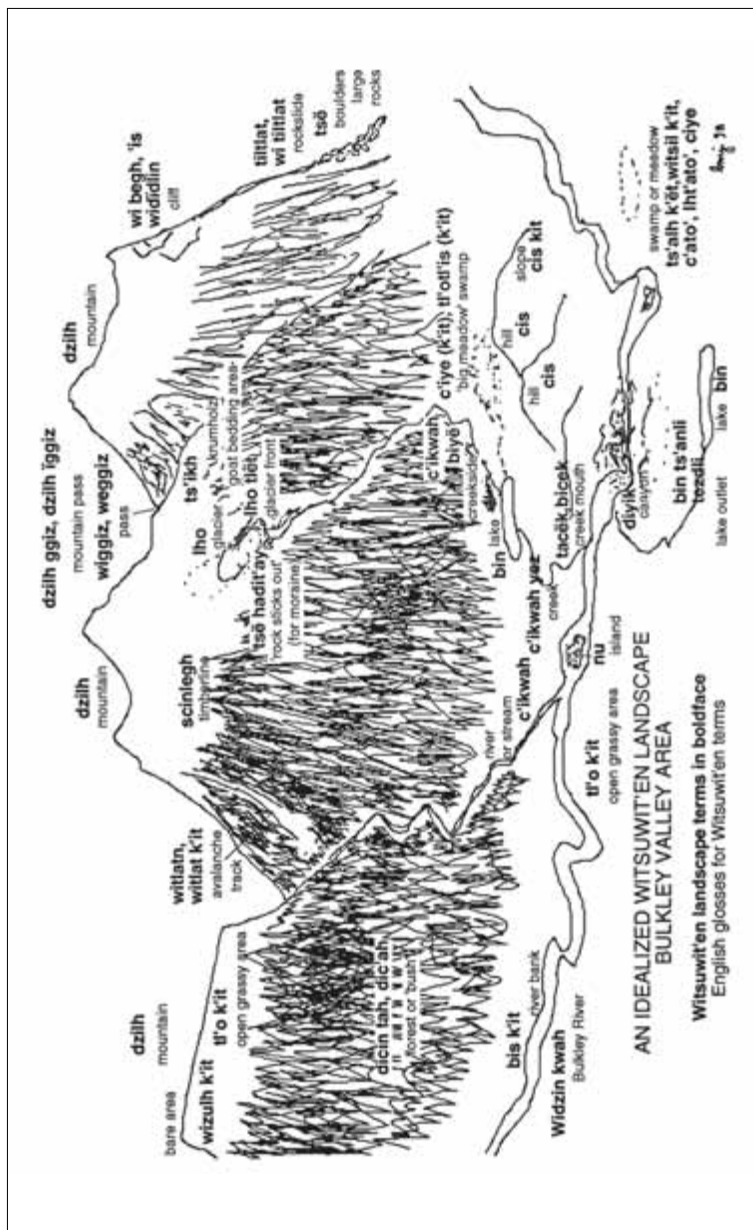


Figure 4.3 Idealized Witsuwit'en landscape, Bulkley Valley area

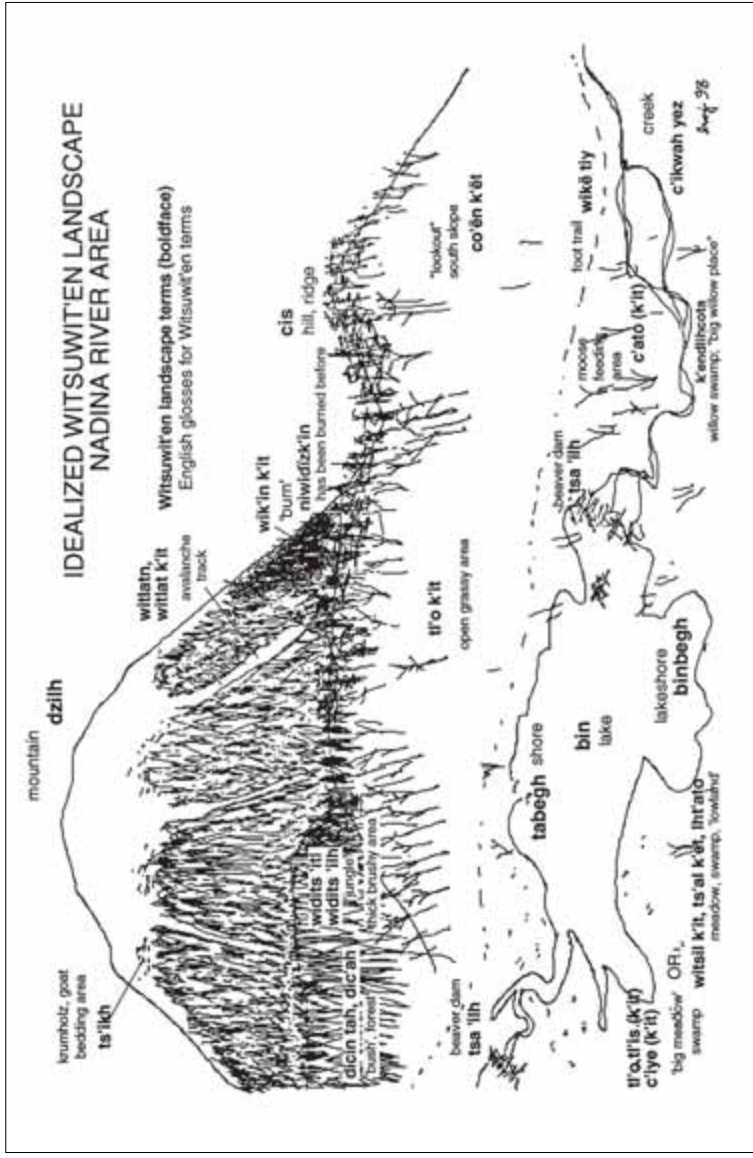


Figure 4.4 Idealized Witsuwit'en Landscape, Nadina area

Witsuwit'en landscape terms

In this chapter I present terms for physiographic features and their parts, vegetation terms, and other habitat terms. Though the landscape forms a unified fabric of spatial relationship and is all of a piece (e.g. Figure 4.5), for purposes of discussion it is useful to group terms analytically. As with Gitksan landscape terms, I have broadly divided these into terms for flowing water; other water bodies; snow and ice; physiographic features and land surface types; timberline, open areas and burns; berry patches, meadows and wetlands (Figure 4.6); and terms related to hunting and animal habitats. (see Table 4.1 at the end of this chapter). These groupings are partially dictated by convenience, and partly by the way that terms pertaining to certain broad environments seem to group together. Terms for flowing water, and features of rivers such as banks form a natural grouping that reflects the high importance of the main rivers for transportation, in shaping ecological communities, and for fishing (Figures 4.7 and 4.9). Lakes (Figure 4.8) and ponds are similarly important as are springs, forming another grouping of water related terms. Terminology for ice and snow is also well developed, reflecting the high importance of ice and snow features for winter survival and travel, and for traversing mountains with permanent glaciers and snow-fields. The Witsuwit'en homeland is mountainous, so terms for mountains, hills and cliffs also seem to form another natural group. Perhaps artificially, I have separated timberline and alpine terms from the mountain terms, but some justification for this is given by the fact that terms for open areas can refer both to alpine environments above timberline and to clearings or open areas at low elevation. Burned over areas are also included in this grouping. The broad category of forest and scrub is generally indicated by terms which translate as 'in the bush' or which specify the dominant species as *tighiz co tab* (among) aspen woods. Finally there is a significant domain of landscape terms that relate to animals and animal habitats, an important part of environmental knowledge for hunting peoples. Sacred places are another category; these are generally named places on territories, or gravesites, and are usually not openly discussed.

Witsuwit'en terms are transcribed in the local orthography. For correspondences with standard phonetic symbols see Hargus (2007).

Narratives of landscape

Listening to Witsuwit'en narratives about the land, one has a sense of the re-creation of specific journeys through specific places. Elders recalled their



Figure 4.5 View up Peter Alec Creek toward Nēdin'a, Nadina Mountain, May 1989 This view and the following photo were the places I had in mind when I drew my idealized block diagram. Photograph by Allen S. Gottesfeld.



Figure 4.6 Marsh along Peter Alec Creek, May 1988 Wetland terminology is highly elaborated in Witsuwit'en, depending on the focus of attention and the characteristics of the site. Photograph by Allen S. Gottesfeld.



Figure 4.7 Fishing at Moricetown Canyon on Widzin Kwikh, the Bulkley River A ‘canyon’ is *diyik* in Witsuwit’en. At the centre of the photo is a fishing station for gaffing spring salmon. Photographed July 1980 by Allen S. Gottesfeld.



Figure 4.8 Sdic’odinkhlh Bin, Blue Lake, from the lakeshore (*bin begh*) Blue Lake is an example of a place with many layers of significance in the landscape. Blue Lake figures in a narrative of Estes, the Witsuwit’en Trickster/Creator, and I was told that first time visitors to Blue Lake were supposed to put ashes on their face before they arrived (Herb George, pers. comm.). The Blue Lake area is also an area where the traditional root food *diyii’n* was harvested (Elsie Tait, L.M. Johnson interview notes), and was a harvesting area for mountain goat, black huckleberry, and traditional medicines. It was heavily used by residents of Hagwilget as it was one of the closest productive resource areas on Witsuwit’en territory. Blue Lake is on the massif called Sdic’odin, known in English as Rocher de Boule. Photo by Allen S. Gottesfeld.



Figure 4.9 Hagwilget Canyon, *diiyk*- at fall low water (term provided by the late Pat Namox (Wah'tah'kwets) and Lucy Namox (Goohlat). Photo taken from the modern suspension bridge over the canyon. In the 1950s, Federal Fisheries orchestrated the blowing up of “the rock” under the bridge, which eliminated the traditional salmon fishery that was the reason for the siting of Hagwilget or Tsë Cakh ‘under the rock’ in that location. Recently, the Witsuwit'en have taken the government to court to try to restore their fishery by emplacing an artificial rock. As of this writing, the outcome is pending.

own early experiences of hunting, trapping, and berry picking, their training, the wisdom of their Elders. The land is experienced in the specific; these experiences may then be generalized as a guide for other similar circumstances. Narratives mixed discussions of winter travel or travel techniques in the mountains, preventative self-discipline, and techniques for avoidance of many specific risks. "That's *danger!*" as the late Pat Namox said a number of times, discussing items as diverse as the need to show respect for grizzly bears or proper ax technique when clearing a winter trail of boughs and branches bent over by heavy snowfall.

The Witsuwet'en perspective of the land seems to be one of learning to look after one's self, travelling over the land to make one's living, and of learning one's own place. A major topic of discussion was learning to travel the land safely and avoid dangerous places and situations. Safe winter and spring travel in the mountains of Witsuwet'en country requires recognition of, and extreme care in crossing, avalanche tracks, which extend to the bottom of many higher elevation valleys and cannot be avoided. As Pat Namox recounted:

Pat: You know, uh, when that thing it's uh, well, in the first snow, the same thing again. Too much snow at one time, big hill like that, they start to slide again. And that's the one they call *wil'atk'it*. And they knows the area where it is, there, you have to watch.

Leslie: Yeah, you can see on the land.

Pat: Yeah. Yeah. Well, there's uh, I don't know, them old people they knows about that avalanche, at, uh, wintertime. You know, you go across that dangerous place that it, there's a avalanche there, but they said you have to, uh, get them boughs from the tree like this. Lots of them, and you in a hurry to go across through that avalanche area, with the snowshoes. You have to take one little—and you threw like this.

Leslie: OK, you throw the boughs in front of you and then you step on it?

Pat: Yeah. And you step on that one there, with snowshoes across there. They'll never go down.

(Pat Namox interview transcript August 25, 1997)

Mountain goat hunting without rifles requires a superb knowledge of the habits of the animals and ability to traverse steep slopes without slipping over cliffs. Other types of hazardous terrain discussed included the risks of

crossing glaciers, of stepping on slopes of cohesionless sand or fine gravel on mountains, and of avoiding frostbite crossing swampy areas on snowshoes.

For the Witsuwet'en, place also has another dimension. Because of the Territory system, they are attentive to the characteristics of the land as indications of their history and for demarcating boundaries (see Thornton 2008 for a detailed discussion of this aspect of geographic knowledge for the Tlingit in southeast Alaska). One Elder commented, as he described his experiences as a Land Claims researcher, that in the old days nobody would have been asking about and learning the kinds of things he was documenting for the Court Case³; as knowledge of one's territory is not public, it is inappropriate to seek to learn about, and to discuss, somebody else's Place.

Place also has a spiritual and mythic dimension, as attested for other Athapaskan peoples (cf. Andrews 1990; Andrews and Zoe 1997; Andrews *et al.* 1998; Basso 1990a, b; Brody 1988; Ridington 1990). Some kinds of place may have more meaning in these terms than in strictly ecological ones, though I believe this would most often be on the level of specific named sites or features. As for other indigenous people, burial sites are, for example, sacred places. Other kinds of place also have spiritual implications: while discussing the word for 'glacier', one Elder began to speak of the glacier on the mountain locally called Hudson Bay Mountain (Ts'idek'iy). Her grandfather told her that if it disappeared, it would herald the end of the world. It has diminished in recent years as climatic warming has brought about diminution of montane glaciers throughout the region, perhaps a portentous observation.

As with other Athapaskan languages, the structure of Witsuwit'en encourages reference to parts of the landscape in relationship—relationship of features to each other, and to the speaker. Considering the landscape sketches I used for elicitation (Figures 4.3 and 4.4), elders and language experts provided terms that indicated motion, flow, relationship of creeks to slopes, and whether they flow into or out of lakes. Certain terms indicating the position of a feature on the landscape *k'it* 'on' or in relationship to the speaker *tab* 'among' (placing the speaker in the described landscape) occur repeatedly in Witsuwit'en construction of landscape descriptive terms.

Witsuwit'en, in common with other Athapaskan languages, has a rich lexicon describing terrain, of quintessential importance to travelling people. Sizes of features from entire mountains or rivers to banks, peaks, or cliffs, to rock, sand, quicksand and mud are named. Vegetation types, wetlands, and habitats of animals can be described with nuance, and the entailments

of terms, such as the plant or animal species which favor certain habitats are often described. Locations where plants may be picked or animals likely encountered are known. Landscape processes, and their visible indicators such as burns, rockslides and avalanches are recognized and named. Associations of various features with plants and animals that are significant in Witsuwit'en traditional life are known and can be elucidated.

Orienting terms indicating upslope/downslope and facing upstream/facing downstream are also well developed, as well as other terms indicating spatial relationships [across, under, etc.] (The Hagwilget Band 1995, Hargus 1999). Sophisticated constructions indicating relationships of features to each other and to speakers or observers are ubiquitous.

Thinking about places and kinds of place often puts speakers in mind of specific places on the territories on which they were raised, or which may be accessed from locations such as Moricetown, and people may tell stories or recall memories from their past, a phenomenon recorded by others for non-Athapaskan languages (Palmer 2006, Thornton, n.d.).

It may be that not all knowledge about kinds of place is neatly coded with particular words. I asked Alfred Joseph if there was a term for south-facing slopes that are open and grass covered (Figure 4.6), and melt early in the spring; these are good habitat for deer and moose in the southeastern portion of Witsuwit'en territory. His musing answer suggested he understood easily what kind of place I was referring to, and had a specific example in mind, but was uncertain if there was a generic word for it:

A: Well, like 6 mile hill?

L: Yeah, probably.

A: Yeah, it's nice, south slope, well, they always, they, I don't know, it just sounds like the time. Could be too, like in the spring time when the deer start feedin' there. That's when they talk about it. They say *k'ëbiggeslal*,⁴ maybe *k'ëbī* is the south slope. I didn't think about that. That's what they always say, when the animals appear on the south slope in the springtime...

That's when they go after the deer, they say *k'ëbikeslal*. *keslal* is the animals crawl- or migrate to this area. There's a whole bunch of them.

Later on in the interview, Alfred speculated about a possible parallel to a place where goats can be found:

A: And uh, when they, uh, when the mountain goat bed down for the night, they call that *as* ['is]⁵ *tanələl*. So, *as* ['is] is a cliff ... That's where the *as* ['is] *tanəla* and *k'ėbikehla* is about the same thing, eh? *K'ėbikehla* is - deer go on the side.

On another occasion I was discussing grassy south-facing slopes with a different Elder, the late Pat Namox.

It's like a little hill and grass 1 side, and that's where that animal goes and get in in springtime. Bear, grizzly bear or deer. Everything coming out in the bush. Hillside, first grass coming out first everytime. Lookout *co'enk'it* eye is *onen* or *o'en*. You see or you look, that's what it is *co'enk'it*. Well, you have to go down below and you see the animal up there. You have to go around and place that animal there and what place you coming out on the top before you go- you have to go away from the wind and gauge the wind. You'll see and you'll get that. That's professional Indian hunters.

Some of they they try to get it. They go up. Even no wind, they smell you and the run away.

Down Frances Lake area there lots of place like that. There's one in my father's hunting ground, *co'enk'it*.

No Supervalu, nothing. Supervalu is right in the woods. Animal, fish, all different kinds of berries they can use. They have to learn right from the start, like. They learn from their uncle or grandmother or grandfather. They train them. now they gonna work through the bush. It's very important for young people then.

[untranscribed story about an orphan omitted]

That's really true. They live on the country. They know how to hunt everything that they live on, even that sap [pine sap or 'cambium'].⁶ They make a cornflakes and dry it up, sun dry for winter time. Take it out and soak it. Get it right now. They know what kind of timber, what kind of tree, new young short jackpine, with the bark so shiny. Juice coming in there. So sweet and it's good for you too. You'd been Indian you'd be 150 years old! [Laugh].

Now our life is so short—chemicals.

Their hair was white and then it turned blonde. They lose all their teeth, and new teeth coming in. They live to 150 years old. They crush drymeat to powder on a rock and put in water and

that's what old people eat, and they live a long time.
(tape transcript 980528A recorded May 28, 1998)

Pat's narrative combines a specific analysis of place kind, its name, etymology, and significance with comments on the overall importance of knowledge of the land to health and Witsuwit'en life.

Comparisons with other Dene languages

Witsuwit'en shares with other Athapaskan languages the way it encodes spatial relationships, surfaces and topographic positions in the construction of place terms and in ways of speaking about places. As with other Athapaskan languages, drainages, upstream/downstream, and upslope/downslope, are important ways of thinking about the land. The relationship between generic place kinds and the names of specific places is rich, and places are often named descriptively ['head of the lake'] or ['water flowing in among the cattails'] in ways that give a strong sense of the place. Witsuwit'en place kinds carry entailments that give information about animal and plant habitats, and perhaps a sense of kinds of place in the annual cycle of movement and harvest on the territory.

In Athapaskan languages, place kind terms are used alone, and in compound descriptions to refer to specific named places. Kari (1989) and Kari and Fall (1987) have explored what they term "place kind generics" for Athapaskan languages, as well as documenting in detail Dena'ina and Ahtna toponyms. The rich relational sense of place names and the way they encode Athapaskan relationship to land has been eloquently described by Keith Basso for White Mountain Apache (Basso 1990 a., b.; Basso 1996).

A number of Witsuwit'en geographic terms are cognate with terms in other Athapaskan languages, and appear to indicate similar or identical concepts, a topic that will be discussed in greater detail in Chapter 6. Many similarities occur between terms in Witsuwit'en and Kaska and Sekani (Johnson unpublished manuscript and Kaska Tribal Council 1997). More broadly shared appear to be constructions including -____ [*co*] *tab* ['among (big)'] as in *ts'o co tab* 'among big spruce trees' (Witsuwit'en) and *gat chō tab* 'among big white spruce trees' (Kaska) for vegetation types. Constructions including *k'it* or other terms for 'on' also seem to be widespread and appear to apply both to physiographic features (such as *cis k'it* 'hillslope' Witsuwit'en term, *busk'ut* 'river bank' Carrier term [Antoine et al 1974] and *béskage* 'alpine', lit. 'on mountain' Kaska term [Kaska Elders 1997]) and wetlands

and meadows (*witsil k'it*, *tl'o k'it*, Witsuwit'en terms, "Klokut" [*Tl'o k'it*] Vuntut Gwitchin place name).

As hunting is of paramount importance in Dene traditional economies, Athapaskan languages have a rich domain of terms pertaining to animals, habitats and hunting. Some key examples include terms for lookout, trail (differentiated by the animal who made it, or as a human foot trail), and, of great importance to hunters, mineral licks ("lick" or "muddy place"). In addition, physiographic and vegetation features which are preferred habitat of various animals are described by hunters, such as areas where mountain goats bed (for Witsuwit'en), mountain sheep take refuge (for Kaska; see Chapter 6), or "sloughs" or "swamps" where moose feed in the summer (both Witsuwit'en and Kaska).

Sophisticated "partonomy" (cf. Brown 1976) or terms for parts of rivers and drainage systems is characteristic of Athapaskan languages in general, and is significant for both Witsuwit'en and other Athapaskan speakers of Canada and Alaska (cf. Kari 1999, Kari and Fell 1987, Kaska Elders 1997). The complex and detailed river terms such as 'eddy', 'rapids', 'canyon', 'slough', 'confluence' and associated features such as 'high bank' are highly important for both travel along rivers (on ice or by boat) and for fish habitat and fishability. In Witsuwit'en country, river fishing for salmon with traps and weirs, gaffs and more recently gill nets has been important, and requires sophisticated knowledge of river features to locate fish and to navigate safely. In other Dene regions, and in the more southern and interior parts of Witsuwit'en territory, lake and river fisheries for trout, whitefish and other fish such as loche (lingcod) are significant.

Reflections on Witsuwit'en place kinds and the landscape

The presentation of Witsuwit'en landscape understanding in this chapter is still partial and preliminary. What is included, and what is not, are influenced by a number of factors: gender—mine and that of those with whom I have worked; location—where was the information recorded? in the kitchen? by the river? and so on; and methods of elicitation—use of photographs or line drawings, explanation in the midst of narrative, asking on site on the land. How and by whom information was recorded are significant influences on the types of information and level of detail provided. Gender is an obvious influence, in that the contexts for sharing of hunting related terminology are substantially fewer for female researchers speaking with male Elders and language experts. It has been observed by language researchers that it is much

more difficult to recall vocabulary in the absence of a context, while a rich narrative naturally arises in the course of shared activities on the land. The need to spend more time on the land with fluent speakers engaging in land related activities and visiting significant locations, and my lack of fluency in Witsuwit'en, restrict detail and nuance in what I have recorded. In particular, terms for kinds of place in the mountains, hunting related terms, and specific river terms are substantially underrepresented in the material I have amassed because none of my work occurred in the specific contexts of fishing or hunting.

Despite these limitations, it is clear that the Witsuwit'en possess a rich and sophisticated vocabulary of landscape terms that reflects detailed understanding of the features of the Witsuwit'en homeland, and linkage of geographic terms to ecological knowledge, oral histories and cosmology. Witsuwit'en ethnogeography places people in the landscape, and speaks of things in dynamic spatial relationships. Physiography, hydrologic features, vegetation and wildlife habitats and animal behavior are all present in Witsuwit'en geographic terminology, which is linked both to specific place names and to narratives of personal experience and of tradition.

The corpus of ecotope or place kind terms recognized in the Witsuwit'en, as with other Athapaskan speakers of Northwest North America, reflects topography, hydrology, vegetation, and animal habitats. A great deal of ecological knowledge is tied to these types of places, such as risks in winter or spring travel in the mountains or over ice, risks of river or lake travel or potential areas of fish habitat and fishability, habitat of various game animals, ease of travel through different types of vegetation or terrain, berry availability, and spiritual risk or potency. "Trail" is itself a specific kind of place, as well as metaphor for human history and cosmology, and places people, travelling, in the landscape.

The *trail* appears to be a preeminent Athapaskan metaphor or organizing principle. Ridington (1990) eloquently expresses the pre-eminence of the *trail* as an organizing principle of experience and understanding for the Beaver (or Dunne Za, now spelled Dane-zaa):

The Beaver (Dunne Za) people viewed human experience as a life-sustaining network of relationships between all components of a sentient world. They experienced their world as a mosaic of passages and interactions between animate beings in motion against the backdrop of a terrain that was itself continually in process through

the cyclical transformations of changing seasons. *They looked upon the trails of people and animals as a record of these interactions.* Each trail, they believed, continued backward and forward beyond the point at which it could no longer be followed physically. The trails that lay ahead, as well as those that lay behind, could be followed by people in their dreams. The trail of every adult could be followed in the mind back to the point of visionary encounter with a medicine animal, just as the trail of a successful hunter could be followed ahead to his point of encounter with the spirit of an animal. Each actual point of meeting between person and animal was believed to be the manifestation of antecedent meetings in the medium of dream or vision. (emphasis added)

The Witsuwit'en '*kungax*' (*cin k'ib*) are "trails of song" (Mills 1994:122) linking past, present and future-*situated in place* (Mills 1994; Hugh Brody, address to Gitksan –Wet'suwet'en Tribal Council Convention 1986). The *cin k'ib* can be represented by a historical narrative, or can be shown by enactment in the feast hall of the crest of the House Chief, and make publicly manifest the connection of people and Territory. Witsuwit'en stories which relate the early shaping of the world, the stories of Estes, too are linked to places in this world, at least in that they are said to have happened near modern recognized places such as the village of Moricetown (Kyah Wiget and nearby locations), François Lake, or along the Skeena River.

In the narratives of Athapaskan speakers, and other residents of the region such as the Gitksan, types of places are understood as animal habitat for significant species. For example, the late Pat Namox gave an extended discussion of goat habitat (including bedding areas in krumholz and access trails) and goat huntability when discussing travel in the mountains. He also took care to describe minimizing of risky encounters with grizzly bears in open alpine meadows, such as avoidance of leaping over large stones with a dip on the far side-where you might jump on or over a resting bear.

Berry patches are an important kind of place for the Witsuwit'en, and discussion of berry picking brings up discussions of specific berry patches, and of maintenance of berry patches by burning. The topic of berry patches will be taken up in detail in Chapter 5. "Swamp" or "meadow" environments are also important, because two economically important plant products were gathered there: sphagnum moss for babies' diapers (and women's menstrual supplies) and "meadow" (bog) cranberries. Specific localities for gathering moss and cranberries are reported by women when discussing diaper moss.

Table 4.1
Witsuwit'en Geographic Terms

Witsuwit'en term	English gloss
Flowing Water Terms	
<i>c'ikwab</i>	'river, stream'
<i>c'ikwab yez</i>	'creek'
<i>tacëk</i>	'mouth (of river, creek)'
<i>bin k'ënli</i>	'creek flowing into a lake'
<i>bin ts'anli, tēzdlī</i>	'creek flowing out of a lake'
<i>bis k'it</i>	'bank (of river, etc.)'
<i>diyik</i>	'canyon'
Other Water Terms	
<i>bin</i>	'lake'
<i>tabegh</i>	'shore'
<i>nu</i>	'island'
<i>tadiz'ay</i>	'pond, backwater, puddle'
<i>hanli</i>	'spring'
<i>tak'iz k'ët</i>	'spring'
<i>talhtis</i>	'deep water'
<i>tëwbilh</i>	'deep water'
<i>dzen</i>	'muddy water'
Ice and Snow and Related Terms	
<i>lho</i>	'glacier'
<i>lho tl'ët</i>	'glacier foot' (lit. 'glacier front')
<i>lbim</i>	'ice (chunk)'
<i>tin</i>	'ice (flat)'
<i>yis</i>	'snow'
<i>lbk'ëc'ots'iyh</i>	'snowdrift'
<i>witlat, tilitlat, wilitlat</i>	'slide, avalanche'
<i>witlatn, witlat k'it</i>	'avalanche track'
Mountains, Hills, Cliffs and Caves	
<i>cis</i>	'hill, ridge'
<i>dzilh</i>	'mountain'
<i>weggiz, wiggiz</i>	'pass'
<i>dzilh k'it</i>	'summit' (lit. 'on mountain')
<i>dzilh ïggiz, dzilh ggiz</i>	'mountain pass'
<i>wenin</i>	'sidehill'
<i>'is</i>	'cliff'
<i>wibegh</i>	'cliff'
<i>wididlin</i>	'cliff'
<i>tsë bī bon'a</i>	'cave'
<i>c'ī'an</i>	'den, hole, cave'

(Table 4.1, continued)

Rocks and Sand

<i>tsë</i>	'rock, boulder'
<i>tsë badit'ay</i>	'moraine' (lit. 'rock sticks out')
<i>say</i>	'sand, fine gravel'
<i>say k'it</i>	'sand bar'
<i>say titgut</i>	'quicksand'

Timberline, Open Areas, Burns

<i>ts'ikh</i>	'dwarf trees at timberline, krumholz'
<i>scinlegb</i>	'timberline'
<i>wize begb</i>	'timberline'
<i>wik'in k'it</i>	'burned area'
<i>widink'in k'it</i>	'burned area'
<i>niwdizk'an</i>	'burned area'

Vegetation–Berry Grounds, Meadows and Swamp

<i>nit'ay k'it</i>	'berry picking ground'
<i>wizulh k'it</i>	'open area, also above timberline; bare ground with nothing on it'
<i>tl'o k'it</i>	'meadow, open grassy area' (e.g. a lawn, a grazed slope, alpine meadow)
<i>tl'ot'is (k'it)</i>	'meadow, marsh' (where large grass grows)
<i>c'iyë (k'it)</i>	'swamp' (where moss grows?)
<i>ts'al k'ët</i>	'swamp' (lit. diaper place)
<i>witsil k'it</i>	'damp place'
<i>c'ato', lht'ato'</i>	'swamp'

Vegetation– Forest and Scrub

<i>dic'ab,</i>	'(in the) bush'
<i>dicin tab</i>	'(in the) bush', 'among the trees/ sticks'
<i>widiis'itl</i>	'brush, brushy area'
<i>ts'o co tab</i>	'big spruce country, spruce forest area'
<i>t'ighis co tab</i>	'big poplar country, poplar woods'

Terms Related to Animals

<i>lhiyil c'itiy</i>	'goat trail'
<i>ts'ikh</i>	'dwarf trees at timberline, krumholz (goat bed at edge of cliff)'
<i>tsa 'ilb</i>	'beaver dam'
<i>c'ikën</i>	'(beaver) lodge'
<i>c'itok'ët</i>	'moose watering hole'
<i>co'en k'it</i>	'lookout' (e.g. open south facing slope)
<i>lhëit'is c'ididlet</i>	'mud lick'