Journal of the Linguistic Society of Papua New Guinea

ISSN: 0023-1959

Vol. 36, 2018

Landscape categorisation in Nalik, an Austronesian language of New Ireland

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Abstract

This paper presents and analyses the lexical and the grammatical elements used to encode the semantic domain of landscape (the geophysical environment) in Nalik, an Austronesian language spoken in the New Ireland province of Papua New Guinea. The data discussed in the paper are primarily derived from my own fieldwork in New Ireland. The Nalik landscape lexicon is mostly formed by monomorphemic nouns; partonomies are usually derived from the semantic domain of the human body, as in *vaat a daanim* 'head of the river', ie. 'spring'. The conformation of the New Ireland landscape is reflected in the Nalik directional particles, which encode the position of the speaker and of the object with respect to the sea ('north-west up the coast', 'south-east down the coast', 'inland/out on the sea'). In the Nalik territory, toponyms related to human settlements are particularly dense and are often semantically transparent; toponyms referring to landscape features as hills or rivers are less dense and less prominent as reference points. The paper shows that the primary categorisation forces that drive the categorisation of landscape in Nalik are the affordances (ie. the benefits) of the landscape features and the socio-cultural practices of the community.

Keywords: semantic typology; ethnophysiography; toponomastics; Western Oceanic

1.   Introduction

The object of this paper is the linguistic encoding of the semantic domain of landscape (i.e. the geophysical environment) in Nalik, an Austronesian language spoken in the New Ireland Province, Papua New Guinea. The goal of this investigation is to describe the lexical and grammatical means that serve to expression of landscape semantics in Nalik, and to offer an analysis of the principles that drive the categorisation of the landscape. It is inspired by the recent developments in the research on the cross-linguistic and cross-cultural variations in landscape categorisation as laid out in the seminal works by Smith & Marks (1999) and Mark & Turk (2003, 2004), and later on in Burenhult & Levinson (2008); Burenhult (ed., 2008), O'Meara (2010), Mark et al. (eds., 2011), Huber (2013) and Rybka (2014). This paper aims at bringing a contribution both to the discussion on the linguistic encoding of landscape in the languages of the world, as well as to the documentation of Nalik, a still under-documented language.

The paper is organised as follows: in section 1, I introduce the recent research on landscape in linguistics and I present the Nalik speaking community, its territory and the elicitation methods that I used in my fieldwork activities. In sections 2 and 3, I provide an account of the encoding of landscape semantics in lexicon and grammar. Finally, in section 4, I draw some conclusions.

1.1 The linguistics of landscape

The term 'landscape' defines the set of the natural and artificial features that characterise the geophysical environment where a given community dwells. In language, it is instantiated in toponyms (place names) and landscape ontologies (Smith & Mark 1999): the common, non-scientific, words that languages use to describe the geographical space, cutting it up into a set of labelled features as 'mountain', 'hill', 'sea', etc. The cross-linguistic study of landscape categorisation has hitherto been given relatively little attention in linguistics. Yet landscape represents an ideal object of comparison (Burenhult & Levinson 2008): even if landscapes differ much from site to site, it is a fact that every human being and every human community lives in a determined environment and interacts with it. Geographical space is a domain all humans make experience and, presumably, all languages have terms to describe it. Landscapes also do also not come as sets of distinct features pre-determined by nature: human categories are as much responsible for the division of the continuous surface of the earth into selected parts as the physical nature of the territory is. The study of landscape categorisation has found its dedicated place in the recently grounded discipline of *ethnophysiography* (Mark & Tusk 2003, 2004): a highly interdisciplinary field of studies which involves linguistics, ethnography, cognitive studies and geography. Its main assumption is that people with different cultural and linguistic background differently conceptualise, categorise and thus name landscape features. Ethnophysiographic investigations aim primarily at defining an inventory of the geographical ontologies in the languages of the world and at understanding the principles that govern their formation – such as the objective *perceptual saliency* of the landscape features, their *affordances* (ie., the benefits they bring to the community; Gibson 1979) and their *cultural/spiritual significance* to the speech community (Levinson 2008). So far, the seminal ethnophysiographic research, which has been carried on a relatively small number of languages, mostly spoken in the Americas, Africa and Austronesia, has shown that cross-linguistic variation in the selection of labelled features is significant (Burenhult (ed.) 2008; O'Meara 2010; Mark et al. (eds.) 2011; Moore 2013, Rybka 2013; Grenoble & McMahan 2014; Huber 2014). The data challenge the Western understanding of 'basic geographical features': for instance, the term for 'valley', which rank very high as a good representative of 'landforms' for speakers of English (Mark et al. 1999) has been proven absent in a range of languages (Burenhult & Levinson 2008). Languages have also been proven to follow

different principles when forming their ontologies. In English, for instance, scale is the relevant parameter for distinguishing between kinds of inland waters, as 'lake' and 'pond'. In the Australian language Yindjibarndi, on the other hand, the 'temporariness' of water bodies is the key parameter: a *yinda* is a *'permanent water body'*, regardless of its size, and *bawa,* 'water' is a temporary water body (Mark & Turk 2003; Mark, Turk & Stea 2011). Permanent water sources are of primary importance for the Yindjibarndi community, whose traditional territory is situated in a desert area: the beneficial role of waters is reflected in the labelling practices of the community. Linguistic factors such as language contact also have an impact: in situations of diffused bi- or multilingualism, loanwords offer a key to understand which categories are native, and which ones have been taken over from another language (and, hence, another culture). In contexts where one of the contact languages dominates over the other one(s), the replacement of indigenous names with borrowed ones may point out to a penetration of the dominant culture, even in a basic domain as landscape. Contact languages can also offer linguistic material for the expression of previously unknown features. Besides the analysis of cross-linguistic variation in how geographical features get labelled, the linguistics of landscape has also the goal of investigating the linguistic encoding of landscape semantics from a language-internal point of view, discovering landscape semantics 'hidden' in perhaps unexpected language levels. Relevant questions concern the systems of lexical relations among landscape terms (partonymic and taxonomic distinctions, metaphorical relationships) and the distribution of landscape semantics across grammatical classes: nouns, verbs, deictics, etc. (Ahlner et al., ms; Levinson & Burenhult 2009). The present paper aims at offering further material to the discussion on the linguistics of landscape, in the hope that it may nourish and foster further analyses and lead to new typological findings in ethnophysiography.

1.2 The Nalik people and their language

The Nalik people inhabit a ca. 30 km long and 12 km wide strip of land in the New Ireland Province of Papua New Guinea. The Nalik-speaking territory comprises of 15 main villages (Volker 2013: 210), on both the East and the West coast of New Ireland, the second-largest island of the Bismarck Archipelago; the two southernmost villages on the East Coast, Faatmilak and Bolbol, are separated from the main Nalik-speaking area by a Kuot-speaking village. Volker (2013) reports ca. 4000 speakers of Nalik. The Nalik territory borders north-west with the Kara-speaking area and with the village of

Lakurumau, where the homonymous language (also known as Loxodumau, Lakuramau) is spoken.[1] South-east, the Kuot-speaking territory is found: Kuot is a non-Austronesian language, the only one in the New Ireland Province (Lindström 2002).
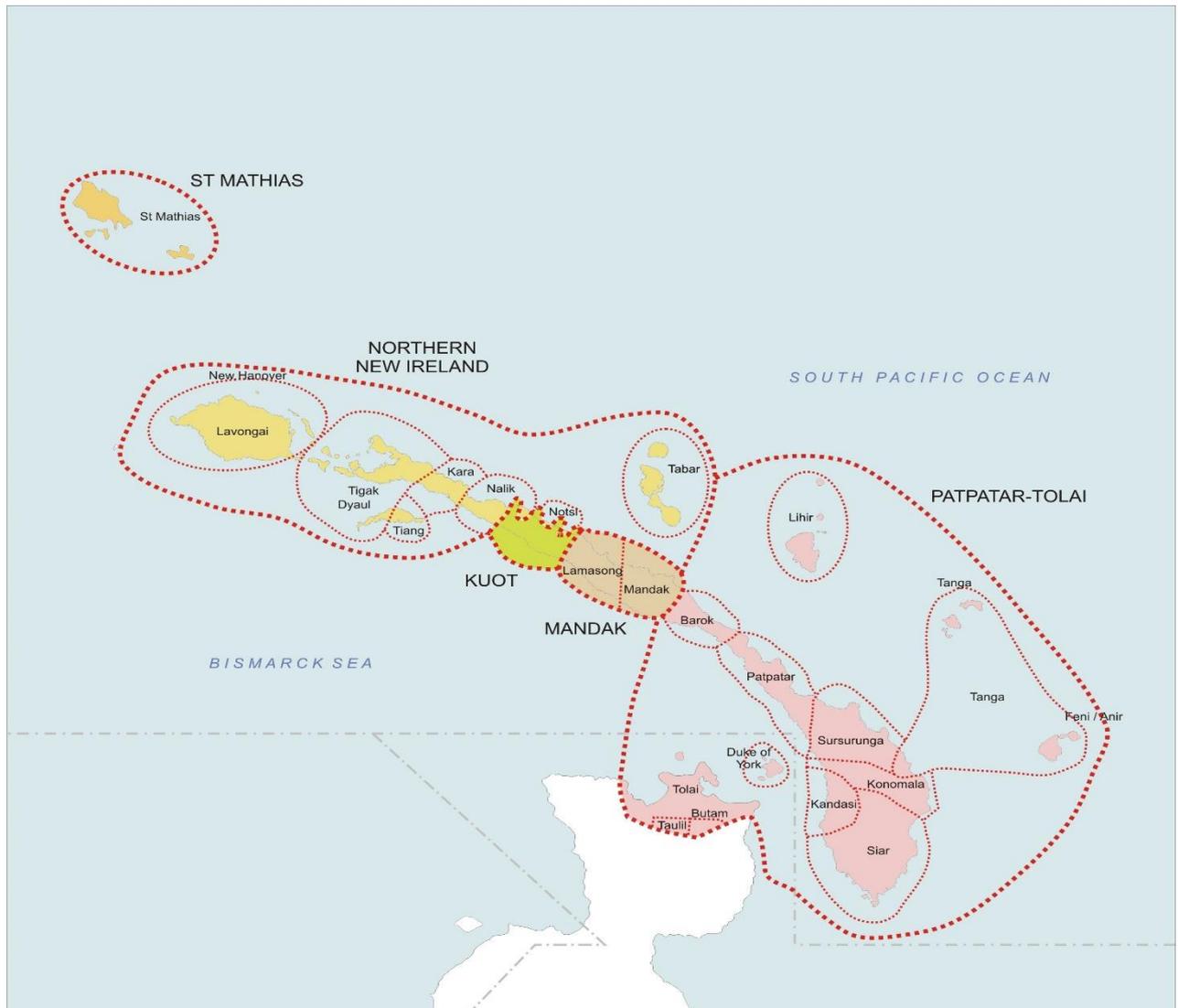
Fig. 1 The languages of New Ireland (source: Wikimedia Commons; http://tinyurl.com/hblhtmz)

The Nalik language belongs to the Meso-Melanesian group of the Austronesian family (Ross 1988); its morphosyntax has been described in Volker (1994 (1998)). Volker is also

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[1] Lakurumau does not appear on the map in Fig.1 because its status as a separate language has not yet been recognized (Mazzitelli 2017). Previous studies have not given a definitive definition and have described Lakurumau as a "transitional language" or "transitional dialect" between Kara and Nalik (Volker 1994: 3).

compiling a Nalik dictionary, but, at present, the documentation material on Nalik available to public consultation is limited to his 1998 grammar and to a couple of printed booklet.

Typologically, Nalik is a predominantly SVO language, with no noun or verbal inflection. Bound morphology is limited to valency-changing and nominalizing verbal affixes and possessive nominal suffixes. Two major distinctions, both of which relevant to the semantics of landscape, are made for noun phrases: locative nouns vs. common nouns, and alienably vs. inalienably possessed nouns. Volker (1994: 38) distinguishes four principal dialects: two on the West Coast (more conservative) and two on the East Coast (more innovative).

Nalik is not yet in a critical stage of endangerment, but it can doubtless be defined as endangered. The language is still used, but – at least in the East Coast– it is being replaced more and more by Tok Pisin, the English-based creole that has become the *lingua franca* of Papua New Guinea. Nowadays, only elderly to middle-aged people talk to each other in Nalik. The children acquire a passive and, to some extent, an active knowledge of the language, in which they may talk to their grandfathers and occasionally parents, but they use almost exclusively Tok Pisin when talking to each other. Tok Pisin has become the dominant language even in customary practices (funerals, ritual ceremonies), as well as in social events like the traditional Monday community meetings: in Laraaibina, the village where I conducted my fieldwork, in Monday meetings all communications regarding the life of the village are made in Tok Pisin.

1.3 Fieldwork and methods of elicitation

The Nalik data presented in the following sections derive mostly from my own notes, taken during my fieldwork in New Ireland in 2016, 2017 and 2018. I worked primarily with six consultants, of both genders, ranging from an age of ca. 45 to ca. 80 years old. They are all native speakers of Nalik (Northern East Coast dialect), and still use Nalik as primary language at home, at least when interacting with other persons of their age: in the communication with children and younger people, they all use mostly Tok Pisin. My interaction with them took place in both Tok Pisin and English.

In order to get data, I used different elicitation methods. In particular, I performed the following tasks (cf. Ahlner et al., manuscript; Turk et al. 2012; Bohnemeyer et al. 2004):

- *Naming and descriptive task on the field ("fieldwalking")*. I walked around – on the beach, in the bush, on the nearby hills - with the consultants, asking them to describe the places and naming the different features that we could observe.

- *Translation task.* I asked the consultants the Nalik term for some features that I named in English or Tok Pisin. This task proved useful also to define what is *not* a salient feature in Nalik: for instance, all my consultants recognised the English word *waterfall,* but they could not provide a Nalik equivalent term.

- *Naming task.* I asked consultants to name landscape features that I drew on paper, showed in photos or that I described in English or Tok Pisin.

All the examples referred in the text come from elicitation sessions, except when otherwise indicated.

2.   Representing landscape in Nalik in lexicon and grammar

2.1 Water bodies: rivers, lakes and the sea

In Nalik, the basic distinction regarding water is between not drinkable saltwater, *raas*, and fresh, potable water, *daanim.* This distinction can be traced back to Proto-Oceanic (POC): Nalik *daanim* continues the POC **[dr, ra]anum*, in its turn retraceable to Proto-Austronesian **daNum* 'potable freshwater', while Nalik *taas* can be traced back to POC **tasik* 'salt water; sea' (Blust 1999; Osmond, Pawley & Ross 2007: 58, 91).

2.1.1 Inland water bodies

In Nalik, all freshwater courses are called *daanim.* The semantic extension 'water' > 'river' can be traced back to the Proto-Oceanic system: "No POC term has been reconstructed for 'river' as distinct from the term for 'fresh water'. Speakers of Oceanic languages would probably lack the map-based view of a river thought of primarily in terms of an entity with length. Rather, they seem to conceive of it simply as fresh water that flows." (Osmond, Pawley & Ross 2007: 60).

The Nalik term for inland standing waters (ponds, lakes, puddles) is the compound *maranamara* 'eye (*mara*) of the eye', or 'opening'. This term denotes the small ponds that

can be found at the source of the river or that can form when rain fills up small caves. There is no distinction between seasonal ponds, found only in the rain season, and permanent ponds. Similarly, there is no distinction between smaller pools and bigger ponds (no real lakes are found in the Nalik territory). Compound nouns meaning 'eye of the water' are found in a number of other Oceanic languages to denote springs, cf. Tolai *mətə nə tavə* 'eye of the water' (Osmond, Pawley & Ross 2007: 62). In Nalik, though springs can also be termed as *maranamara*, a specific name for springs is found as well, namely *vaat a daanim* 'head of the water'. As it will be further discussed (3.3), Nalik makes extensive use of body-parts for partonomies, and both *mara* 'eye' and *vaat* 'head' are frequently met, meaning the first 'opening' and the second 'highest point; beginning'. Springs, thus, can both be conceptualized as being the 'beginning of a water course' and (indistinguishably from ponds) as being an 'opening' in the soil, where water comes out. The first definition, *vaat a daanim,* is undoubtedly more salient: my consultants defined the springs found in the Laraaibina territory always as *vaat a daanim*, though they admitted to the possibility of using *maranamara* when explicitly asked about it. Nalik also has a specific term, *rus,* for freshwater pools on the beach, which can typically only be accessed during low-tide, in the morning: as soon as the high tide comes in, most *rus* are submerged by saltwater.

Contemporary Nalik seems to lack a dedicated term for 'waterfall' (there might have been a word for it, but its knowledge has been lost): my consultants always used the English word *waterfall.* Admittedly, I could elicit a Nalik definition for waterfall (1):

(1) *A   su-ing   sin   a   daanim*

ART   fall-NMLZ   of   ART   water

'The falling of the water'

I suspect that this may be a calque from Tok Pisin *wara i pun daun* 'water falls down'; it is interesting, though, that Nalik consistently used nominalizations where Tok Pisin uses active clauses (cf. also example (2) below).

2.1.2 The seascape

The terminology linked to the sea, and particularly to the reef, is very rich. A very salient distinction, in Nalik, is between the shallow sea on the reef, *raas*, and the deep ocean beyond the reef, *laman*. The distinction is found already in Proto-Oceanic, where the

general term for sea, *tasik*, is also used for the sheltered sea in a lagoon or on the reef, while the term *laman* (of which Nalik *laman* is a continuation) denotes the deep sea beyond the reef's edge. As apparently in Proto-Oceanic, also in Nalik *raas* has the most general reference: it is the neutral term used to mean 'sea' as opposed to 'land' (Osmond, Pawley & Ross 2007: 91-2). In Nalik, the term *laman* has a strong connotation for 'deep water': it can also be used to denote deep spots in a river, where one can swim without touching the ground. Deep pools in the shallow sea on the reef, however, are not called *laman*, but have a dedicated name, *ruru*.

Tides and currents are both defined by the generic term *xaxaais*. Low tide (2a) has a specific name, *raasmat*, that continues POC *maqati* 'dry reef (N); being dry (of reef) (V)' (Osmond, Pawley & Ross 2007: 103-4). In Nalik, *raasmat* has primarily a stative meaning: 'being dry'; 'the reef is dry, the tide is low'. High tide, instead, is defined by means of the dynamic verb *mbus* 'rise (of sea)'(2b):

(2a)　　*A　　raas　ka　　　　raasmat*

　　　　ART　sea　3SG.SM　　be_dry

　　　　'The reef is dry; there is low tide'

(2b)　　*A　　raas　ka　　　　mbus*

　　　　ART　sea　3SG.SM　　rise

　　　　'The sea is rising'

Osmond, Pawley & Ross (2007: 104) quote the Nalik term for 'low tide; dry reef' as *(sara)mat*, but I have never heard it during my fieldwork, and suspect it might be a misspell of *raasmat*. Nalik *raasmat* should be analysed as a compound of *raas* 'sea' and *mat* 'dry (of reef)'. Arguably, the expression was originally clausal, *a raas (k)a mat* 'the sea is dry', and it has been successively reanalysed as a single phrase, which can be used as a predicate of the very first element, *raas* 'sea', hence contemporary *a raas ka raasmat.* Interestingly, contemporary Nalik speakers analyse *raasmat* as *raas maat* 'dead sea': indeed, expressions meaning 'dead sea' are registered in Eastern Oceanic languages with the meaning of 'sheltered sea' (Osmond, Pawley & Ross 2007: 95); in this case, however, it is clear that the phonetic and semantic resemblance between *mat* and *maat* has prompted a case of folk etymology.

The coral reef is *zaar* (from POC **sakaRu*; Osmond, Pawley & Ross 2007: 109); the reef's edge, where the *laman* begins, is called *vaat a zaar* 'the head of the reef', or *kin tabuking sin a rof:*

(3)   *A*   *ra-buk-ing*   *sin*   *a*   *rof*

      ART   INTR-break-NMLZ   of   ART   wave

      'The breaking of the waves' (cf. Tok Pisin *solwara i bruk* 'the sea breaks')

Parts of the reef covered in white sand are termed *burburaa*: this term, interestingly, also indicated the 'sacred enclosure', an area delimited by a fence where the *maimai* (chief) stays during sacred ceremonies (*malagan*; Craig Volker, p.c.). Larger rocks in the sea are called *baaru*. These can be found both in the deep sea (*laman*) as well as on the reef; in the latter case, they typically emerge when the tide is low and are submerged when the tide is high. The Nalik lexeme *baaru* seems to be cognate of Proto-Eastern-Ocenic **baro* 'flat rock or ledge (in or near sea)', reconstructed on the basis of several Solomonic and Micronesian languages (Osmond, Pawley & Ross 2007: 114); however, no form is reconstructed for Proto-Oceanic or Proto-Western Oceanic.

The culturally most relevant entity on the reef is the *zaawoi* 'reef passage' (Tok Pisin *basis*). This term, which can be traced back to POC **sawa(n,ŋ)* (Osmond, Pawley & Ross 2007: 116) indicates the stripe of shallow sea from the canoe anchoring on the beach to the break in the reef that allows canoes to sail into the open sea. The endpoint of the *zaawoi* – where the reef opens into the ocean - is referred to as *mara na zaawoi* 'eye of the passage' or *ngus a zaawoi* 'mouth of the passage'. The *zaawoi* is of crucial importance to the Nalik fishing economy: every community has its own canoe passage, which cannot be used by members of other communities. Canoe passages usually have proper names, and are believed to be a place where spirits dwell.

2.2 Landforms

In Nalik, only one word is found to describe any kind of major elevations: *vut* 'mountain, hill', which continues POC **pʷotu* (Osborn, Pawley and Ross 2007: 50). The land between

two hills is called *maale,* which can roughly be translated as 'valley' (POC *male*; Osborn, Pawley and Ross 2007: 52).

No proper term for 'coast' is found. As for 'beach', two different terms are found, depending on the composition of the soil: *xon* and *paraling. Xon* (from POC *qone*; Osborn, Pawley and Ross 2007: 67) is the common term for 'sand', and it is used to refer to coastal beach as well as to any kind of sandy terrain, including riverbanks. *Paraling* is one of the rare compound terms in the Nalik landscape terminology (*para-* 'side; beside' and *ling* 'cliff; cave') and denotes rocky beaches (usually at the feet of cliffs, hence the name). However, Naliks conceive the sandy beach as prototypical: when talking about the beach as the place where the sea meets the land, the term *xon* is always used – even if in a particular instance the rocky beach is intended. The utterance in (4) can be used also if the beach the speaker is going to is rocky:

(4)	*Ga*	*waan*	*apa*	*la*	*xon*
	1SG.SM	go	DIR:down	LOC	sand

'I go to the beach'

As for the other coastal features, the Nalik term *vi* describes what we can define as 'cape', that is, the bending part of the coast that closes off a bay. The portion of sea delimited by the two most prominent capes near to Laraaibina is called *raas laba* 'big sea', translatable as 'bay'.

The Nalik term for island is *xurunuza* (cf. POC *nusa*; Osmond, Pawley & Ross 2007: 42). I must say that only an elderly speaker, aged around 80, could easily remember the term *xurunuza*. All other speakers could recognize this term when I mentioned it to them, but they had not been able produce it themselves. From the Nalik territory, actually, one island, Tabar Island, is visible. It even holds a special place in Nalik culture, as the place of origin of one of the eight Nalik clans (but on Tabar a different language, Tabar, is spoken). However, nowadays, even when speaking in Nalik, speakers refer to it as *Tabar* or *Tabar Ailan* (Tok Pisin *ailan* 'island'). The semi-loss of the native word for island may sound ironical, when considering that Naliks actually live on an island; however, New Ireland is probably too big to be conceived of as an island by its inhabitants. In fact, Nalik

lacks a toponym for the whole of New Ireland: it is always referred to as *Niu Ailan* (where *Ailand* is Tok Pisin for Ireland, and not for island).

2.3 Areal boundaries and human settlements

In Nalik, all types of human settlements – villages, towns, hamlets - are referred to as *bina* 'village' (occasionally *bina laba* literally 'big village' is used to refer to Kavieng, the biggest town in New Ireland). The semantics of the term *bina* is extremely rich. It can refer to one's country: for my Nalik consultants, both Rome (my hometown) as well as Italy in general (my homeland) could be termed as *bina*. Moreover, *bina* can also refer to what can be roughly translated as 'environment', or even just 'place' and 'sea' as in (5-6):

(5)   *A   bina   ka   mbus*

         ART   *bina*   3SG.SM   rise

         'The place will rise', ie. 'The sea will rise; the high tide will come in' (cf. 2.1.2 above)

(6)   *A   bina   a   lagaf*

         ART   *bina*   3SG.SM   hot

         'The place is hot', ie. 'It is hot'

As I will show later with reference to toponyms (3.5), Nalik does not have either proper names or common nouns to denote administrative larger units as 'district', 'region'. Within New Ireland, the larger areas are distinguished with reference to the language communities (eg. the Nalik area). On the smaller scale, three different terms are found with the meaning of 'area, place', with a very different semantics: *kiana, pop* and *non. Kiana* means 'one's usual spot' or 'one's permanent home, customary land': *a kiana Cathy* 'Cathy's usual spot', which can mean 'the chair where Cathy usually seats' or 'Cathy's customary land'. In (7), the mountain Salazi is defined as the *kiana* of Sabutan, a pig spirit:

(7) *Akula   Salaazi   a   kiana   Sabutan,   a   bare*

    DIR:above   Salaazi   ART   traditional_home   Sabutan   ART   pig

    'On Salazi there is the home of Sabutan, the pig' (traditional story)

Both *pop* and *non* can be translated as 'part of', 'area', and they indicate the space occupied by a specific object, or by a specific person (his home): *a non (pop) nur* 'cocounut patch; coconut plantation'; *a non (pop) daanim* 'water patch', ie. a specific segment of a river; *a non (pop) si Momos* 'the place where Momos' house is'. I could not ascertain any difference in the distribution of the two terms *non* and *pop*, which seem to be almost perfect synonyms. However, *pop* alone is found in the Nalik toponym of the West Coast of New Ireland: *poptaasmur* 'the place (*pop*) of the sea (*taas*) at the back (*mur*)'; no *nontaasmur is recorded.

2.4. Ecological zones

In the Nalik region, three main ecological zones are found: the coast, the rainforest and sago swamp. The coast is the centre of the contemporary Nalik life. It is relatively malaria-free, in comparison to the mosquito-infested inland rainforest. Here houses are built, dead are buried and coconut palms are grown (coconut has a special place in the life of Nalik people: it is a source of food, of financial income through the selling of copra and its wood provides construction material for the houses).

Going from the sea towards the hilly interior, the *lauran* 'forest' is found. Here, the soil is rich in minerals and fertile, especially on the hills, where Naliks have their plant gardens. On the hilltops, the rainforest becomes denser, and it is called *bual*. Traditionally, Nalik people had their villages on the hills, next to the gardens: however, following the German colonization in the 1880s, they started to come down to the coast, where nowadays most of the Nalik population is concentrated.

Finally, Nalik has two terms used to denote a 'swamp': *but* and *baabaak*. Both refer to muddy areas, rich of water. However, the former exclusively refers to the swampy areas dedicated to the cultivation of sago, and it can also be referred to as *vaat a zakzak*, literally 'head of the sago'. The denomination *vaat a zakzak* might refer to the fact that the swamp is the first place where the process of sago production begins, to be ended in the houses downhill. All other types of muddy areas are referred to as *baabaak* 'mud'. Again, as in the case of *raas* 'sea, salt water' and *xon* 'sand, beach', an element's name is used to term the whole area where this is found.

These three zones have a crucial relevance for the Nalik culture, as they are paramount to claim land ownership. In order for a family (more specifically, for the matriarch of the

family, as in the Nalik culture land is usually owned by women) to be able to claim customary ownership of a portion of land, this must extend from the beach to the hills, including a sandy beach area, a sago swamp and a plant garden. In fact, traditionally, a family, in order to be independent, had to have access to a place where the deceased family members can be buried and where coconut palms can be planted (the beach), where sago grows (the swamp) and where vegetables can be grown (the gardens in the forest).

3. The grammatical structure of the Nalik landscape terminology

3.1 Noun classes: inherently local nouns

In Nalik, as in most Oceanic languages, nouns are divided into common nouns and local nouns (Hill 1996). Common nouns are usually preceded by the specific article *a* 'the' (8a); in locative constructions *a* is replaced by the locative preposition *la* (8b):

(8a)   *A   bina   ka   vit   na   gaat   a   mazalei*

ART   village 3PL   NEG:be 3SG.SM   have   ART   spirit

'The village does not have a spirit (ie. that lives there)' (traditional story)

(8b)   *Ga   i   zi   la   bina*

1SG.SM   DUR   sit   at   village

'I am staying in the village'

Local nouns do not take either the locative preposition *la* nor the article *a.* Contrarily to what happens in other Oceanic languages, where the local nouns class can count dozens of members, in Nalik this class is limited to toponyms (9):

(9) *Ga   waan   apa   Kavieng*

1SG.SM go   DIR:down   Kavieng

'I go to Kavieng'

The noun *lauran* 'forest' seems also to behave as a local noun, in that it does not take the locative particle *la* (10)*,* though it does take the article *a:*

(10)   *Ga   na   waan   akula   lauran*

         1SG   FUT   go   DIR:above   forest

         'I will go to the forest'

In Proto-Oceanic, a root **lau(r)* 'sea; towards the coast' has been reconstructed for lexical morphemes that can occur without a locative preposition (Lynch, Ross and Crowley 2011: 88). However, Nalik *lauran* is probably not derived from it[2]: in fact, as Volker (1994) notices, the initial *la-* in *lauran* should be analysed as the fossilized locative preposition *la*.[3] The simple nouns *uran* is recorded in Nalik with the meaning of 'uncultivated grass; bush': *la uran* would therefore mean, literally, 'in the bush'; the coalescence of the locative preposition and the noun would explain why *lauran* does not take an additional *la.* Moreover, Ross (2004: 186) notes that **lau(r)* is not recorded in any language as an independent noun, but only as adverbial in a locative construction.

3.2 Possession and classifiers

In Nalik, as in all other Oceanic languages, noun phrases can enter two types of possessive constructions: inalienable (permanent; inherent) or alienable possession. In constructions of inalienable possession, pronominal possessive suffixes are attached directly to the possessed noun (11); if two noun phrases are in a relationship of inalienable possession, they are simply juxtaposed (12):

(11)   *A   mara-gu*

         ART   eye-1SG.PX

         'My eye'

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[2] The difference in meaning - *lauran* in Nalik denotes the *inland* forest, thus away from the coast -would not be an obstacle to the assumption that POC **laur* and Nalik *lauran* may be related. The meaning shift can be explained by the traditional Nalik conception that everything that exists on earth has a specular correspondence in the sea; *lauran* could therefore mean both 'inland territory' as well as 'sea' (Craig Volker, p.c; see also Volker 1994: 216 translating *lauran* as 'sea'; here, though, *lauran* is indicated as taking locative *la,* an option ruled out by my consultants).
[3] In many Oceanic languages the term for 'forest; bush' is preceded by a fossilized locative preposition, which Blust (1989) defines as "adhesive locative".

(12)   *A   vaat   a   daanim*

         ART   head   ART   water

         'The head of the water', ie. 'spring'

Noun phrases in a relation of alienable possession are linked together by the preposition *si(n)* (13):

(13)   *A   vaal   sin   Cathy*

         ART   house   of   Cathy

         'Cathy's house'

With regard to the distinction between alienable and inalienable possession in modern Nalik, Volker (1994) states: "Inalienable possessive forms were reserved for items which could not be removed from the owner, such as body parts, blood relations, and customary land. Alienable possessive forms were used for all other items. […] In modern Nalik many speakers no longer use the special inalienable forms. Undoubtedly this is due to the dominating influence of Tok Pisin and English, neither of which makes a distinction between inalienable and alienable possession." (Volker 1994: 176). Even if nowadays, at least in speech of younger speakers, the inalienable possessive construction has lost ground to the *si(n)*-construction of alienable possession, all partonomyc expressions (see Table 1. above) are always inalienably possessed. This is probably due to the fact that such expressions are by now lexicalised as terms denoting concrete entities.

    Interestingly, the tree terms for 'area' mentioned in 2.3 above have a different behaviour. *Kiana* 'customary, ancestral land' governs a construction of inalienable possession (14a), while *pop* and *non* 'area, patch' govern alienable possession (14b) when used with personal nouns:

(14a)   *A   kiana   Sabutan*

         ART   customary_land   Sabutan

         'Sabutan's home'

(14b)   *A   pop (non)   sin   Momos*

          ART   area   of   Momos

          'Momos' land'

The inalienable/alienable distinction between *kiana* and *pop/non* is semantically justified: while *kiana* is used to indicate one's original home – thus, something that cannot be 'taken away' -, *pop* and *non* are used to mean the spot where one has built a new home, not on his/her ancestral land – and this land can be sold, or one can be evicted from it (cf. Volker 1994: 184).

Pop and *non* have undergone a further grammatical development. When used to define geographical entities, the second element of the construction appears without the article *a* (15):

(15)   *A   pop (non)   nur*

          ART   area   coconut_palm

          'A patch of coconut palms'

I suggest that in cases like (15) *pop* and *non* should be treated as classifiers. Nalik has a number of classifiers, which only appear with selected nouns and which appear between the article *a* and the head noun, the "collective name of group of individuals": *a rixing fudu* 'a bunch of bananas' (Volker 1994: 142). *Pop* and *non* seem to have undergone a process of grammaticalization and have turned into classifiers with the meaning of 'place, where the [head noun] is found'.

3.3 Partonomies and taxonomies

In Nalik, at least at the present state of the language, there is no system of taxonomies based on scale: a small creek and a big river are both *daanim͘*, a hill and a high mountain are both *wut*. Such a system might have existed in the past, but it left no traces, and there is also no evidence of a new system emerging: no established concepts as 'the big river' as opposed to 'the small river' are present, the only exception being *bina laba* 'big village, ie. town', which is systematically opposed to *bina* 'village'.[4]

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[4] In the neighbouring language Lakurumau a specific term for 'hill', as opposed in size to 'mountain', is found: *vutaang* 'hill' – *vut* 'mountain'. *Vutaang* is quite evidently derived from *vut:* the suffix *–aang*, however, is not productive in Lakurumau, and it remains yet to be ascertained whether *vutaang* is a residual term of a once existing size-based taxonomy or if it is a newly created term.

The main lexical source domain for partonomies is the human body (Table 1).

wun 'bottom; ass'	The lowest or final part of an entity	*a wun a laman* 'the bottom of the deep sea' ie. 'horizon' *a wun a vut* 'the bottom of the mountain' ie. 'hillfoot'
xutaai 'bottom; ass'	Backside; lowest of final part of an entity	*A xutaai a vut* 'the backside of the mountain', ie. the West Coast *A xutaai a daanim* 'the bottom of the water' ie. 'mouth of the river'
mara 'eye'	Any opening	*A mara na daanim* lit. 'the eye of the water', ie. 'lake; pond' (usually: just *mara,* or *maranamara)* *A mara na bina lit. '*the eye of the village', ie. 'the beach in front of a village' (the place where the village opens onto the sea); usually also referring to single houses: *a mara na bina sin Pastor Moses* 'the beach in front of Pastor Moses' house'
vaat 'head'	Highest point; starting point	*A vaat a vut:* lit. 'the head of the mountain', ie. 'peak, summit of an elevation' *A vaat a daanim:* lit. 'the head of the water', ie. 'source, spring' *A vaat a zaar:* lit. 'the head of the reef', ie. 'the reef's edge'
Ngus 'mouth'	Endpoint; starting point	*A ngus a daanim* lit. 'the mouth of the water', ie. 'source; spring' (same as *a vaat a daanim,* which is, however, much more frequent than *a ngus a daanim)*[5] *A ngus a raas* lit. 'the mouth of the sea', ie. 'water's edge (on the beach); littoral zone' *A ngus a vut:* 'the mouth of the mountain', ie. 'peak, summit of an elevation' (same as *a vaat a vut,* which is, however, much more frequent than *a ngus a vut)* *A ngus a zawoi*: lit. 'the mouth of the reef passage', ie. the point where the reef passage opens into the deep sea

Table 1. Partonomies in Nalik

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[5] An older speaker identified the source of a river as *a ngus a daanim*. However, other younger speakers called the mouth of a river as *a ngus a daanim*: this might be a calque from Tok Pisin *maus bilong wara* 'mouth of the river', ie. 'river mouth'.

The involved body parts are *vaat* 'head', *mara* 'eye', *ngus* 'mouth', *wun* 'bottom; ass' and *xutaai* 'bottom, ass'. Some overlaps are present: for instance, both end- and starting points can be defined as being 'mouth' and 'ass'. In contemporary Nalik, one can find expressions like *a mit a daanim* lit. 'the hand of the river', or *a xaak a daanim* lit. 'the leg of the water', both meaning 'river branch'. These expressions are probably calqued on Tok Pisin *han bilong wara* 'hand of the water', *leg bilong wara* 'leg of the water'; older speakers do not recognize them as correct and 'truly Nalik'. Arms and legs, thus, seem not to be part of the original Nalik partonomy system. Interestingly, the concept of 'at someone's left/right' is realized in Nalik as 'at someone's left arm/right arm' (16a); when the reference point is an object, and not a human being, the use of the term 'arm' is ungrammatical and it must be replaced with the previously mentioned *pop/non* (16b):

(16a)   *Ga   i   zi   la   mit   sazaxo su=num*

          1SG.SM DUR   sit   LOC   arm   right   of=2SG

          'I sit at your left'

(16b)   *Ga   i   zi   la   pop/non   sazaxo sin   a   bottle*

          1SG.SM DUR   sit   LOC   area   right   of   ART   bottle

          'I sit at the left of the bottle'[6]

3.4 Spatial orientation

As Burenhult and Levinson (2008) show, landscape semantics is not restricted to the lexicon, but it also extends to grammar. In Nalik, the peculiar orientation of New Ireland - a long and narrow island, clearly divided on the north-south axis by high hills – is reflected in the locative/directional particles *ata* 'up towards south-east', *apa* 'down towards north-

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[6] The example is a bit unfortunate, as humans are usually not conceptualized as 'sitting at the left of a bottle'. However, in the elicitation session during which I got this example, my consultant was actually sitting next to a water bottle and we used it as a reference point for 'left' and 'right'.

west' and *akula* 'above towards the interior/towards the open sea; far away (on outer islands, abroad)' (cf. Volker 1994: 107; Fig.2).[7]

Fig. 2 Directional particles and their relation to the New Ireland landscape (credits: Google Maps)

Ata and *apa* are clearly related to the POC terms **pa*, in adverbial form **qa-pa* 'to one's right [left in the original text, sic!] when facing the sea' and **ta*, in adverbial form **qa-ta* 'to one's left when facing the sea'; for *akula* no clear POC origin can be reconstructed. Notably, all Nalik directionals, *apa, ata, akula* and *arit* 'here', show an initial *a-*. In the case of *apa* and *ata* it can be traced back to the adverbial formant **qa-* (which regularly loses the initial *q-;* Ross 1988: 268); in the case if *akula* and *arit*, one can hypothesize that the initial *a-* has been extended per analogy and functions as a class marker of locative adverbs: Nalik registers no **kula*, but it does indeed have the word *rit* 'proximity' (as in *la rit a vaal* 'next to the house'), of which *a-rit* can be interpreted as the adverbial counterpart.

The *ata/apa/akula* distinction is based on a system of two axes: the first, along the coast, going north-west to south-east and the second going east to west. On the first axis, each direction is distinguished: everything that is north up on the coast is *apa*, everything that is south down the coast is *ata* (16). On the second axis, instead, the direction distinction is neutralized: both the hills (on the west) and the open sea (on the east) are *akula.* Out-island places – the nearby islands, as well as mainland New Guinea and foreign countries – are all conceptualised as being *akula* (17):

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[7] Volker also states that, on the West Coast of New Ireland, *apa* and *ata* are reversed (as the orientation of 'on one's left/right while facing the sea' is of course rotated of 180° on the West Coast). When I asked how would *apa/ata* be used on open sea, I got the answer that they would be used as on land: *apa* would then mean 'West' and *ata* 'East'. One must remember that, nowadays, Nalik seafaring is extremely limited: Naliks do not usually travel very far from land on their canoes and boats – and as long as one can see the land, one can also know whether something (eg. another canoe) is *apa* or *ata*. On longer trips on boat (eg. towards New Britain) *ata* and *apa* would be replaced by *akula* 'far away' and *arit* 'here'

(16)   *Ga*   *waan* *apa*   *Kavieng/*   *ata*   *Namatanai*

        1SG.SM   go   DIR:down   Kavieng   DIR:up Namatanai

        'I go to Kaveing/ to Namatanai'

(17)   *Ga*   *waan* *akula*   *Niu Briten*

        1SG.SM   go   DIR:above   New Britain

        'I go to New Britain'

Nalik speakers translate *apa* as 'down', *ata* as 'up', and, while speaking in Tok Pisin, they often say *bai mi **go daun** Kavieng – bai mi **go antap** Namatanai* 'I will go down to Kavieng/ up to Namatanai'. As for *akula*, Nalik speakers translate it into Tok Pisin as *arasait* 'on the other side' or *antap* 'above' (Volker 1994 also glosses *akula* as 'above'): the latter meaning can derive from the fact that *akula* is primarily used to define places on the hills, which are 'above' with reference to the beach. Interestingly, while *laman* 'open sea' is conceptualised as being *akula*, the *raas* 'shallow sea on the reef' and *xon* 'beach', though being topographically on the *akula* axis*,* are usually referred to as *apa* (18; cf. also example 4 above):

(18)   *Ga*   *waan*   *apa*   *la*   *raas*

        1SG.SM   go   DIR: down   LOC   sea

        'I to go the sea'

The *apa/ata* distinction is also lexically encoded in two different verb of movement found in Nalik: *vizik* 'go right facing the sea' (*apa*) and *waan* 'go up facing the sea' (*ata;* Volker 1994*:* 107): however, *waan* has transformed into a general movement verb and it is nowadays used with both *apa* and *ata,* as well as with *akula.*

    Apa/ata/akula can only be used to define things that are out of reach can be defined as Referring to a nearby coconut tree, a Nalik speaker can utter the sentence in (19):

(19)   *Ga*   *rain*   *a*   *nur*   *apa*

        1SG.SM   see   ART   coconut   DIR:down

        'I see the coconut tree down there'

However, on a micro-scale, *apa/ata/akula* cannot be used. In order to describe the position of, for instance, objects on a table, a Nalik speaker will use the categories 'left' and 'right'; similarly, objects at a reaching distance from the speaker are also localised as 'left', 'right', 'behind' or 'in front' (20):

(20)   *A   chair   la   maran   a   vaal*

         ART   chair   LOC   front   ART   house

         'The chair in front of the house'

The deictic point of view of a speaker with respect to the distinction *apa/ata* can be nullified in narrations. In (21), the storyteller is from Laraaibina and was in Laraaibina while telling me the story: from her perspective, the village Munawai should be *apa.* However, the storyteller identifies with the people she talks about and says *arit Munawai* 'here in Munawai':

(21)   *La   muran   a   balas-ing   sin   a   uru   vaat*
       LOC   behind   art arrive-NMLZ of   ART two   stone
       Methodist   lotu ka   ramaraat   arit   Munawai
       Methodist   cult 3SG.SM flourish   here   Munawai
       'After the arrival of the two stones the Methodist church flourished here in Munawai'

3.5 Toponyms

Burenhult and Levinson (2008: 145ff.) distinguish two main points when analysing toponyms: (1) the internal structure of toponyms, ie. their grammatical status and etymology; and (2) the relation between toponyms and geographical entities, ie. what entities also get a proper name. For both points, languages testify to a significant degree of diversity. While in some languages toponyms may only have a very simple, monomorphemic, structure (as in Jahai), in others toponyms may be polymorphemic, including entire phrases (eg. 'Towards the Almond Tree', as in Kilivila and Marquesan; Burenhult and Levinson 2008: 145-146). Arguably most languages of the world have both 'feature names', ie. names for concrete, identifiable geographical entities (such as mountains, lakes, cities), and 'area names' (abstract land units, not defined by geography, but by some kind of cultural/legal principle, as for instance administrative units)– but there

are some languages, as Jahai, where only area names are found (Burenhult and Levinson 2008: 147).

In Nalik, as already stated above, toponyms enjoy a special grammatical status, being the only nouns that do not take the local preposition *la* when used in locative constructions. Many toponyms referring to human settlements are semantically transparent, and usually polymorphemic: the toponyme of a village, *Laraaslaba*, is easily identifiable as *la* 'LOC' *raas* 'sea' *laba* 'big', 'at the big sea' or 'at the bay'. Semantic sources can be geographical position, geophysical characteristics or events that occurred in the community. For instance, the name of the village *Lugagun* (< *lu(a)* 'stop, not being able to go further' *g(u)gun* 'pack and go away') 'the place where they packed up and ran away' relates to a story about how the Nalik people came from the forest to live on the beach and made the original dwellers of the area now known as Lugagun escape. Interestingly, only toponyms of human settlements (villages, hamlets) are transparent: names of mountains or springs are not (or anymore, at least). In Table 2. some toponyms from the Laraaibina region are shown.

Toponym	Etymology	Feature
Panaxusxus	*pan* 'about' *a* 'ART' *xus*-RED 'talk' 'The place where people tak' (ie. where the community held its meetings'	Hamlet within Laraaibina
Laraaibina	*la* 'LOC' *raai* 'bottom' *bina* 'village' 'At the end of the village'	Village
Laraaslaba	*la* 'loc' *raas* 'sea' *laba* 'big' 'At the big sea, at the bay'	Village
Lugagun	*lu(a)* 'stop, not being able to go further' *g(u)gun* 'pack and go away' 'The place where they took and went away'	Village
Faatmilak	*faat* 'stone' *milak* 'red''Red stone'	Village
Salazi	Not motivated (at least synchronically)	Mountain
Kadava	Not motivated (at least synchronically)	Spring

Table 2. Some Nalik toponyms

As far as the issue of 'what gets named' (Burenhult and Levinson 2008) is concerned, Nalik seems to have a great density of toponyms referring to what Burenhult and Levinson define as 'area names', albeit only on a small scale. In the Nalik territory, every smaller patch of land has a proper name. Name-giving is essentially a social endeavour: it serves to distinguish land owned by different families and individuals, and it tells the story of the community. Nalik does not have any proper names for larger units as *New Ireland* as a whole; usually, people refer to larger areas with the name of the language spoken there: *Mandak, Tigak* refer to the regions where these languages are spoken. The system is very well suited to the nature of New Ireland, where languages are spoken in consistent layers going from coast to coast (with the exception of Lakurumau and Notsi; cf. Fig. 1 above).

Prominent geographical features do also get names – springs, reef passages, bigger hills usually do - but they do not need to (smaller hills do not have individual names, for instance). Rivers, for instance, never have a name that would define them as a geographical unit from the spring to the mouth (as the name *Thames* does, for instance): instead, they get the same name of the patches of land they cross.

4. Conclusions

4.1 The categorisation and naming of landscape: driving principles

The Nalik categorisation of landscape entities is tightly linked to their affordances, ie. the benefits that a particular place brings to the life of the community. In general, scale, a parameter that is relevant in many English distinctions (lake vs pond, mountain vs hill, wood vs forest), is not relevant in Nalik: *wut* can be a small or a higher mountain; *maranamara* can define ponds and pools of any size. Instead, the affordance principle is relevant to most of the landscape Nalik distinctions: for instance, *daanim* 'freshwater' (and by extension 'river, creek') and *raas* 'salty water' (and by extension 'sea') are not distinguished by size, or shape, but exclusively by their chemical properties – and, hence, by the use that the community can make of them (one cannot drink *raas*). Similarly, *raas* 'shallow sea on the reef' and *laman* 'open sea' are not distinguished on the base of their sizes, but on the base of their geomorphological nature and of the activities that take place in each one of the two places; *lauran* 'forest' and *bual* 'dense forest on the hilltops' have the crucial difference that plant gardens are only found in the *lauran,* while the *bual* is

usually wild forest (and its extension is shrinking under the pressure of oil palm plantations and family gardens).

Of course, perceptual saliency, ie. the visual prominence of landscape features that makes them easily recognizable and perceived as distinct elements (as an elevation opposed to flat terrain; a river opposed to the dry ground where it flows; the sea opposed to the land) plays an important role too. A *wut* 'hill, mountain' is easily detected as a different object from the surrounding lower terrain, and it is therefore given a specific term by which it can be referred to. The distinction between *raas* and *laman* can also be traced back to their visual properties (the open sea is deeper and darker than the shallow sea on the reef), as well as, as said above, to their affordances (in the open sea different fishes are found than on the reef).

A major pattern in the organization of the Nalik landscape lexicon is that of extension, whereby the nouns denoting an element is extended to the whole place where the element is found: *daanim* 'freshwater' is extended to mean 'river'; *raas* 'saltwater' > 'sea'; *pira* 'clay, earth' > 'ground'; *xon* 'sand' > 'beach'.

The cultural meaning of places and their importance to the life of the community are major criteria for the attribution of proper names. River sources (where the drinking water can be taken from), canoe passages, caves where spirits live and villages all have a proper name. Instead, even perceptual salient objects, like rivers and smaller hills, mostly lack in proper names, and are referred to using the name of the land they flow through or are situated on.

4.2 The Nalik conception: a human landscape

The Nalik conception of their territory is tightly linked to the story and the life of the community. Naliks usually refer to places and movement between places using as reference point the human settlements, villages or parts of villages. Hills, forests, rivers, ponds, roads are all seen and talked about with reference to the people and the spirits who live next to them. Every patch of land has a story, usually linked to the clan or the family that owns the land. One of my consultants could tell exactly to which community each one of the canoe passages found in the Laraaibina bay belonged, but she refused to tell me the names of the canoe passages that belonged to clans other than hers, because, as she said, one should not talk about other people's properties.

Toponyms bear witness to the history of the community. Even apparently 'geography-motivated' toponyms like *Laraaslaba* 'at the big sea', or 'at the bay' are related by the speakers to the story telling the arrival of the first Naliks from the ancestral village of Baum to the coast: they settled first 'at the bay', and then expanded towards *Laraaibina* 'at the end of the village'.

The traditional Nalik conception of landscape is of a human landscape: the land is populated, cultivated, possessed, travelled on, and it mostly functions as a background for the people's and spirits' activities and stories. Perhaps, this is due to mild and favourable to life nature of the Nalik territory: relatively low hills with fertile soil, calm reefs rich in fishing fields, numerous rivers and water sources providing drinking waters. Naliks see their land – the forest, the beach, the reef – primarily as the place where humans and spirits live, and the coast is the focus of all activities. The 'hills' are a much less prominent object in discourse than the 'forest' (Tok Pisin *bus*) itself (which is where the fertile soil is found): while talking about the ancestral place of origin of the Nalik people, the village of Baum, people always refer to it as being placed in the *lauran*, the forest, and not in the hills. Similarly, the deep sea, the *laman,* is seen as a source of nourishment, but it is not crucial to the spirituality and life of Naliks: the spirits do not live in the open sea and people do not adventure much far away from the reef for fishing.

It can only be hoped that the Nalik landscape vocabulary will not fade away, and with it an important part of the Nalik culture. The fact that many of my consultants – even those using Nalik on a daily basis – could not easily remember the native terms for 'island' or even for 'canoe passage', a salient element in the Nalik culture, is alarming – they could only remember the term in Tok Pisin. The increasing use of Tok Pisin and of its landscape terminology, where many of the Nalik distinctions (as for instance *raas* 'shallow sea' – *laman* 'deep sea'*; xon* 'sandy beach'- *paraling* 'rocky beach') are neutralised, could even bring Naliks to use less and less native terms that do not find an appropriate correspondence in Tok Pisin. However, at the moment, this seems not to be the case yet: my consultants were proud of telling me words that could not be exactly translated into Tok Pisin and saw the landscape terminology as part of their unique Nalik culture.

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Acknowledgements

Abbreviations

1	first person	FUT	future
3	third person	LOC	locative
ART	article	NMLZ	nominalizer
DIR	directional particle	PX	possessive
DUR	durative	SG	singular
INTR	intransitive	SM	subject marker