Mountains, Rivers, Billabongs: Ethnogeographical Categorization in Cross-linguistic Perspective

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Declaration

Except where otherwise indicated, this thesis is entirely my own work.

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Abstract

This thesis examines the topic of ethnogeographical categorization by way of looking at the contrastive lexical semantics of a selection of landscape terms in a number of languages. The main languages in focus are English, including the Australian variety of English, French, Spanish, and the Australian Aboriginal language, Pitjantjatjara/Yankunytjatjara.

The thesis argues that languages and cultures categorize the geographical environment in diverse ways. Common elements of classification are found across the selected languages, but it is argued that different priorities are given to these factors. Moreover, the thesis finds that there are language-specific aspects of the landscape terms, often motivated by culture and land use. Notably, this thesis presents ethnogeographical concepts as being anchored in an anthropocentric perspective, based on human vision and experience in space. The Natural Semantic Metalanguage (NSM) technique of semantic analysis is used throughout. The use of the universal concepts and language of NSM allows me to clearly state the cross-cultural and cross-linguistic similarities and differences in the semantics of the landscape terms examined. It is argued that this methodology provides an effective tool in the exploration of ethnogeographical categories.

Areas of landscape vocabulary covered in this thesis include words for 'long flowing-water places', such as river, in chapter 3; words for 'standing-water places', such as lake, in chapter 4; words for 'elevated places', such as mountain, in chapter 5; seascape terms, such as coast, in chapter 6; and words for larger areas of the land, such as desert and the bush, in chapters 7 and 8. The thesis also offers suggestions new directions for research.
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### List of abbreviations

1: First person  
3: Third person  
ABL: Ablative  
ALL: Allative  
ACC: Accusative  
ASSOC: Associative  
CHAR: Characteristic  
CIRC: Circumstantial  
CONJ: Conjunction,  
DEM: Demonstrative  
DU: Dual  
ERG: Ergative  
FUT: Future  
HAVING: Having  
IPFV: Imperfective  
IMP: Imperative  
INS: Instrumental  
LOC: Locative  
NOM: Nominative  
NMLZ: Nominalizer  
POSS: Possessive  
PRT: Particle  
PL: Plural  
PRS: Present  
PST: Past  
PURP: Purposive  
SEQ: Sequential  
SER: Serial  
SG: Singular
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CHAPTER 1

ETHNOGEOGRAPHICAL CATEGORIES: AN OVERVIEW

1.1 Introduction

What could be more real than a mountain? To the philosopher John R. Searle, a mountain is the ultimate example of a “brute fact” – a concept which does not depend on human observation and thought. A mountain or, to take two other examples, a star, or a molecule, are to him “brute facts”. These kinds of facts differ from an “institutional fact”, which is based on human perception and organization, such as money, or citizenship, or a bathtub (Searle 1995: 1-4).

Searle uses the example of an object he carries in his pocket to demonstrate the difference between brute facts and institutional facts. The weight of this object is, he argues, a brute fact because it is based in the laws of physics and is independent of a human observer. However, he writes that the property of the object being a Swiss army knife is an institutional fact and relies on the way an observer thinks about it (Searle 2007: 7).

Like a Swiss army knife, a mountain has objective physical features such as volume. But do all people talk about mountains? What if we look at the concept of a ‘mountain’ from a cross-linguistic point of view? It is not simply a matter of translating the English word *mountain* into other languages because landscape vocabulary does not carve nature at its joints (e.g. Burenhult ed. 2008; Mark and Turk 2003a).

For example, Mt Woodroffe (Ngarutjaranya) in South Australia is called a *mountain* by English speakers, while Pitjantjatjara speakers call it a *puji*. By contrast, the Australian landmark Uluru (Ayre’s Rock) is also called a *puji* by
Pitjantjatjara speakers, whereas English speakers call it a rock or a monolith, but not a mountain.

Differences in landscape categorization even exist in reasonably closely related languages. The Pyrenees are called a mountain range by English speakers, while Spanish speakers call them a cordillera. However, in Spanish one can label a smaller jagged chain of mountains within a larger mountain range, a sierra, whereas this category is only available in English as a lexical borrowing.

Clearly, just as the classification of an object as a Swiss army knife is subject to human interpretation, so too is the demarcation of places in the landscape. Many linguists accept that there is cross-linguistic and cross-cultural semantic diversity in fields of vocabulary related to the social worlds of language speakers, such as emotions and kinship. However, fewer linguists would see words for parts of the physical world as being determined by the cultures of speakers. But languages and cultures do differ as to how they categorize the landscape.

Individual landscape terms, that is, words like mountain and river, in various languages often have different meanings. I want to ask what the differences are between ethnogeographical categories in various languages and what are their common features? To what extent do culture and utility play a part in ethnogeographical categorization, in addition to differing geographies? In seeking to provide some answers to these questions, in this study I offer a fine-grained semantic analysis of selected landscape terms in a number of languages with the use of the culture-neutral Natural Semantic Metalanguage, NSM.
English, including Australian English, and the Australian Aboriginal language Pitjantjatjara/Yankunytjatjara will be the main languages in focus. Also included are selected examples from French, Spanish, Swedish, and Polish. I will say more about some of these individual languages in chapter 2.

1.2 The NSM approach to semantic analysis

As mentioned, the semantic framework used in this thesis is the Natural Semantic Metalanguage (NSM) technique of linguistic analysis. In NSM semantic analysis meanings are expressed via reductive paraphrases (referred to as explications) using the metalanguage. NSM is a 'mini-language' of semantic explanation, based upon natural languages.

NSM consists of an inventory of 66 semantic primes, elementary units of meaning, which appear to be expressible in all languages, and it also has its own inherent grammar. NSM has been developed over a period of around thirty years by Anna Wierzbicka, Clif Goddard and other researchers through cross-linguistic empirical research (see esp. Goddard 2011; Goddard ed. 2008; Goddard and Wierzbicka eds 1994, 2002; Peeters ed. 2006; Wierzbicka 1996, 2006a).

The advantage of this "reductive paraphrase" approach is that it avoids circularity, it can be used across languages and cultures without running the risk of terminological ethnocentrism. The NSM approach and the way in which I am applying it to the field of landscape will be explained further in chapter two.
1.3 Language and culture in the landscape

In this study, I am following in the tradition of scholars who take the view that every language is a different “guide to reality”. As Edward Sapir famously wrote:

...the 'real world' is to a large extent unconsciously built up on the language habit of the group. No two languages are ever sufficiently similar to be considered as representing the same social reality. The worlds in which different societies live are distinct worlds, not merely the same world with different labels attached.” (Sapir 1951: 162).

This idea is often termed the principle of “linguistic relativity” (see Foley 1997: 192-214; Whorf 1956: 221). Early advocates of the principle include the 18th century German thinker Johann Gottfried Herder, and, prominently, fellow German thinker Wilhelm von Humboldt, who wrote in the 19th century that “...there resides in every language a characteristic world-view.” (von Humboldt 1999 [1836-1840]: 60). This school of thought is often most closely associated in linguistics with the names of Franz Boas, the aforementioned Edward Sapir and Benjamin Lee Whorf, who had a huge impact on both linguistics and anthropology in the first half of the twentieth century.

Some researchers, such as anthropological linguists like Paul Friedrich and Madeleine Mathiot, and cognitive linguists like George Lakoff and Zoltán Kövecses, kept a strong cultural focus in their work despite the universalist turn in linguistics from the mid-twentieth century, prominently pursued by the generativist Noam Chomsky (see, e.g., Friedrich 1970; Lakoff 1987; Mathiot 1979).

It is not only linguists and anthropologists who recognize that every language has a characteristic worldview. Scholars such as the literary critic and thinker George Steiner and bilingual life writer Eva Hoffman take a similar
stance based on their observations of various languages and their lived experience as multilinguals (e.g. Hoffman 1989; Steiner 1975). Countering a previous emphasis on generative grammar, in the past twenty years the study of the relationship between language, culture and cognition has become one of the main strands in contemporary linguistics (see, e.g., Gumperz and Levinson eds. 1996; Levinson and Wilkins eds. 2006; Malt and Wolff eds. 2010).

The Natural Semantic Metalanguage (NSM) approach to linguistic analysis which I will take in this thesis is one leading example of a branch of linguistics with a strongly cultural focus. Anna Wierzbicka, Cliff Goddard and other researchers have furthered the study of the link between ‘ways of speaking’ and ‘ways of thinking’ in various languages using the tool of the culture-neutral metalanguage of NSM.

Areas of vocabulary which have been analyzed using the NSM approach include emotion words (e.g. Harkins and Wierzbicka eds. 2001; Ye 2001); cultural value terms (e.g. Gladkova 2008; Levisen 2012), human sociality terms (e.g. Waters 2012), and temporal expressions (e.g. Priestley 2012), colour terms (e.g. Wierzbicka 2008); words for body parts (e.g. Wierzbicka 2007); artefact words (e.g. Goddard 2011); natural kind words (e.g. Wierzbicka 1996); speech act verbs (e.g. Wierzbicka 1987); interjections and discourse particles (e.g. Travis 2005; Wong 2005), among others. Furthermore, NSM has been used to study syntax (e.g. Wierzbicka 2006a; Asano-Cavanagh 2009), cross-cultural pragmatics (e.g. Goddard ed. 2006), and historical semantics (e.g. Bromhead 2009).

I submit this thesis as the first extended study of the semantics of landscape using NSM, building upon my two previously published articles and my book chapter (Bromhead 2011 a and b; Bromhead forthcoming).
1.4 What is the significance of the study of ethnogeographical categories?

The study of ethnogeographical categories is comparable to the better known and well researched fields of ethnobiological classification (e.g. Berlin 1992; Hunn 1982; Medin and Atran 1999); body part classification (e.g. Majid, Enfield and van Staden eds. 2006); colour labeling (e.g. Berlin and Kay 1969; Wierzbicka 2008); and kinship systems (e.g. Schneider 1984; Wallace and Atkins 1969). These areas all raise interesting, and sometimes controversial, broader questions about the connections between language, culture, and human cognition. One major issue is whether there are some universal categories. For example, in the domain of the human body some researchers have asked whether there are some body parts which are lexicalized in all the world’s languages, such as hands (Wierzbicka 2007: 27-33).

A similar question can also be asked about landscape. For instance, even if one accepts that not every language has the category ‘mountain’, do all languages have a term for some kind of elevated feature? (see e.g. Smith and Mark 2003). Another important issue in human categorization is to what extent the way in which people describe the external world is shaped by intellectual interest, and to what extent, by culture and utility (see e.g. Malt 1995).

For example, in ethnobiology there is a long running opposition between the utilitarian view, in which plants and animals are seen as being classified and named according to their usefulness to people, and the intellectualist stance, in which people are thought to name and classify species simply because they strike them as distinct and noteworthy (Brown 1995). In the field of ethnogeography, researchers can also ask the question as to whether certain
kinds of geographic features are named because of their utility. This topic links in with the psychologist James J. Gibson’s notion of affordances of the environment which “are what it [the environment] offers the animal”, including shelter, water, and tools (Gibson 1979: 127). For example, Enfield (2008) discusses the affordance of Lao water feature concepts as places for gathering various kinds of materials.

1.5 “The folk picture of the world”

In geography a mountain can be defined on formal topographic criteria such as height, altitude and the degree of incline, and the category can then be applied across the world (Kapos et al 2000). To illustrate, the Gazetteer of Australia issued by the Australian government agency Geoscience Australia classifies kinds of geographic places using codes. They include MT for mountains and peaks, and STRM for streams, rivers, gullies, and creeks (Geoscience Australia 2010). Categories such as these may suit the purposes of scientific research in areas such as ecology and geology (Chape et al. 2005).

However, the present study is not seeking to capture a “scientific reality of the Earth”. My goal in this thesis is, rather, to describe some ways in which people conceptualize the landscape through looking at the picture created by relevant lexical items. That is to say, the research is concerned with “naïve” topography or everyday geography – what the word mountain means to the man on the street, rather than what the word mountain may imply to a geographer. I am drawing upon what semanticist and lexicographer J.D. Apresjan (1992, 2000) says about “the naïve picture of the world” or “the folk picture of the world”, which is language-specific and reflects the experience of a
culture. The "naïve picture" differs from the scientific view which would not depend on the language of the description. To quote:

The folk picture of the world that developed in the course of centuries and includes folk geometry, physics, psychology, etc reflects the material and spiritual experience of a people (native speakers of a certain language) and is therefore language-specific in the following two respects. First, a folk picture of a certain portion of the world may be crucially different from a purely logical scientific picture of the same portion of the world that is shared by speakers of a variety of languages ... The task of a lexicographer ... consists of discovering the naive picture of the world hidden in lexical meanings and presenting it in a system of definitions. ... Second, folk pictures of the world, obtained through analysis of meanings of words in various languages, may differ in details, whereas a scientific picture of the world does not depend on the language used to describe it. (Apresjan 1992: 32-35)

1.6 Previous landscape work

In this section, I treat a selection of the previous work on the relationship between landscape and language. Ethnogeographical categorization is a topic of interdisciplinary interest. It has been studied in anthropology (e.g. Hirsch and O'Hanlon 1995), and there is a history of linguistic interest in the field (see e.g. Boas 1964; Egli 1893). To quote from Benjamin Lee Whorf:

'Hill' and 'swamp' persuade us to regard local variations in altitude or soil composition of the ground as distinct THINGS almost like tables and chairs. Each language performs this artificial chopping up of the continuous spread and flow of existence in a different way. 2 (Whorf 1956: 253)

In the 2000s, there has been more linguistic work in the area of landscape, particularly prompted by the cognitive geographer David M. Mark and collaborators, who have found that simply using English landscape terms does not suffice in geographic work (e.g. Mark 1993; Mark and Turk 2003a, 2003b; Mark et al. 2007). Three notable recent volumes in the study of language and landscape include the 2008 Special Issue of Language Sciences (Burenhult ed.
“Language and landscape: geographical ontology in cross-linguistic perspective” composed of papers by linguists from the Language and Cognition group at the Max Planck Institute (MPI), Nijmegen; *Landscape in Language: Transdisciplinary perspectives* (Mark et al. eds. 2011) with contributions from anthropologists, geographers, information scientists, linguists, and philosophers; and *Landscape ethnoecology: Concepts of Biotic and Physical Space* (Main and Hunn eds. 2010) composed of chapters, for the most part, by anthropologists and ecologists.

Studies contained in these works all recognize that languages and cultures differ as to how they categorize the landscape, and many of these studies are treatments of landscape vocabulary in one particular language. Here, I will treat three perspectives on language and landscape found in this literature. In 1.6.1, I will look at the ethnophysiography school; in 1.6.2, I will discuss the MPI Language and Cognition Group approach; in 1.6.3, I will cover a more anthropological approach, including the ethnoecological approach; and in 1.6.4, I will say a few words about the novelty of my NSM approach in comparison to the other approaches detailed in the previous subsections.

### 1.6.1 Ethnophysiography

The term *ethnophysiography* was coined by cognitive geographer, David M. Mark and geographic information scientist, Andrew G. Turk “to refer to an ethnoscience of landforms” (Mark and Turk 2003a, 2003b). In the introduction to the aforementioned volume (Mark et al. eds. 2011), Mark et al write, “ethnophysiography is the investigation (for any particular language) or categories of landscape features, especially those denoted by common words (usually noun or noun phrases)” (Mark et al. 2011: 7). Therefore, at its core,
ethnophysiography is comparative extensional semantics in the field of landscape.

Furthermore, ethnophysiographic investigations can be used to further illuminate other aspects of the relationships between a particular culture and the landscape in which its people live (Mark et al. 2011: 7). Ethnophysiography research has centred on the Australian Aboriginal language, Yindjibarndi, spoken in the Pilbara region of Western Australia (Mark and Turk 2003a; Mark et al. 2007, 2010, 2011).

Studies which fall under the banner of ethnophysiography have a number of broad research questions. Firstly, they ask whether all cultural/linguistic groups think about landscape in the same way, or, whether there are significant differences between cultural/linguistic groups (Mark et al. 2011: 7). In one case, for example, they answer that the Yindjibarndi word *wundu*, although often glossed as 'river' in English refers to a, for the most part, dry creekbed, whether or not there is water in it (Mark and Turk 2003b: 7; see also 3.4).

Secondly, they ask how important the nature of the particular landscape in which a speech community lives is in terms of the particular landscape category system and terms used by a speech community (Mark et al. 2011: 8). To illustrate, they answer that English and Yindjibarndi differ in their classification of water places because the former language originates from a relatively wet climate, and the latter language is spoken in a dry climate (Mark et al. 2007: 12).

Thirdly, they ask how influential the culture and lifestyle of a people are on their conceptions of landscape (Mark et al. 2011: 8). An example of an answer to that question is the case of indigenous Australians seeing permanent sources
of water as particularly significant because they did not, traditionally, have the technology to store large quantities of water (Mark et al. 2007: 12).

Finally, one novel aspect of ethnophysiography is the research question of whether non-English language landscape categorization can be used to produce appropriate, culturally specific geographic information systems (GIS) (Mark et al 2011: 8). They researchers conceive of an ontology which provides a “framework within which meanings of folk terms for landscape elements can be defined” (Mark and Turk 2003b: 4). Ethnophysiographers write that this ontology is “an objective, realist account of the true nature of landscape” (Mark and Turk 2003b: 4). Mark and Turk (2003b) hold that concepts such as ‘land’ and ‘water’, ‘large’ and ‘small’, ‘concave’ and ‘convex’, and ‘vertical’ and ‘horizontal’ are universal, but that different languages and cultures give more or less weight to these properties (Mark and Turk 2003b: 4). They propose that folk landscape concepts from various languages could be represented in GIS using these primitive concepts.

1.6.2 The MPI Language and Cognition Group Approach

Linguists from the Language and Cognition Group produced studies for the aforementioned 2008 Special Issue of Language Sciences (Burenhult ed. 2008). These papers treat the linguistic categories of both landscape terms and place names. Here, I will only discuss their coverage of landscape terms. The approach taken in the Special Issue differs from the ethnophysiography approach in that the MPI linguists are more interested in landscape category systems, and how one can view wider linguistic concerns through the prism of landscape, rather than the meanings of individual nouns for kinds of places in the landscape.
One of their major findings is that “the geographical environment can lend itself to categorization according to prefabricated cultural or linguistic systems” (Burenhult and Levinson 2008: 144). For example, Seri categorizes kinds of places in the landscape according to the substances from which they are formed (e.g. seawater, stone), and the spatial properties of the particular kind of place (e.g. lying, standing, sloping). To illustrate, the substance term hast ‘stone’ is used with the definite article derived from the posture verb ‘sit’ in the form hast com, to mean, roughly, ‘mountain range’; and the same term hast ‘stone’ is used with the definite article derived from the posture verb ‘sit’ to mean, roughly, ‘mountain’ (O’Meara and Bohnemeyer 2008: 316, for elaboration, see 5.1).

One question raised in the Issue is what is it “that causes a language to categorise and label the geographical environment in a certain way” (Burenhult and Levinson 2008: 142). To illustrate, Enfield (2008) provides one answer that kinds of places in the landscape are labeled because they need to be spoken about. An example is the Lao word nòng3 ‘swamp, marsh’, which is a place people go to collect a type of reed to be used for weaving. Because people go to collects reeds in this kind of place, it needs to be labeled in order that, for example, people can say where someone has gone.

1.6.3 Anthropological and ethnoecological approaches

Of particular relevance to this study are cultural models of the environment and land use held by various cultures and societies, such as the traditional water-gathering practices of the Australian Aboriginal Anangu (Pitjantjatjara/Yankunytjatjara speakers). Such models are often referred to as traditional ecological knowledge in anthropology, and Luisa Maffi defines
traditional ecological knowledge as “local people’s classification, knowledge, and use of the natural world, their ecological concepts, and their resource management institutions and practices” (Maffi 2001: 6). There are relationships between, on the one hand, lexical semantics and categorization, and, on the other, wider cultural models of land use, and these will be explored in the thesis.

Johnson and Hunn’s (2010) book mentioned earlier, treats the field of ethnoecology. In one chapter Johnson writes that ethnoecology “deals with a people’s relationship to the land or their environment, and their understanding of the environment and their relationship to it” (Johnson 2010: 204). Part of this investigation concerns what is named, kinds of places, so-named “folk ecotypes”. Researchers are interested in cultures’ subsistence, meanings, and spiritual practices as regards the landscape. For example, Johnson 2010 identifies kinds of places where Kaska (a Canadian First Nations group) women can gather plants for food and medicine, such as tötsel ‘swamp’ or ‘slough’. Gilmore et al. examine the spiritual significance of the forest type mañaco taco to the Maijuna, an indigenous group in the Peruvian Amazon. Ethnoecologists take a more holistic view than the other two approaches. The field has fewer linguistic concerns than the MPI approach and is less interested in strictly segmenting the landscape than the ethnophysiography approach.

1.6.4 The novelty of my approach

My study is based in the fine-grained description of selected landscape terms from a number of languages. The approach I will take to the study of language and landscape is novel because of my use of the NSM technique of semantic analysis. The use of a culture-neutral metalanguage, NSM, allows me to precisely state the semantics of individual lexical items, and, at the same
time, to avoid an Anglocentric or technical bias. On the foundation of a collection of precisely identified word meanings I will make comparisons across languages. Additionally, I will show how the details of lexical senses of geographic vocabulary give insights into human cognition and culture.

While the approaches of ethnophysiography, the MPI Language and Cognition group, and ethnoecology offer insights into the subject of language and landscape, they are all limited by their use of English language glosses to define landscape terms in other languages. The use of English landscape terms as a metalanguage does not allow one to propose an indigenous model of meaning. NSM explications, by contrast, do.

Moreover, although the ethnophysiography approach is interested in putting landscape categories into configurations of what they propose as universal components (e.g. 'concave', 'convex', 'land', 'water'), many, though not all, of these words are from scientific language. While they may suit the purposes of GIS, they are not translatable into the languages whose landscape concepts the researchers seek to model.

1.7 A human-centred perspective

A notable aspect of my analysis is the proposal that, like the meanings of words for other concepts based in the concrete world, the meanings of words for geographic concepts incorporate a human-centred perspective (see also, Baudoin de Courtenay 1929; Fillmore 1982: 121; Wierzbicka 1989).

In a literal sense, there are human interests in the landscape. Concepts for kinds of landscape places identify places that people can see, and places in which people can be and do things in. As previously mentioned, geographers have an objective measurement in thousands of metres, which is used to deem
some landforms 'mountains' and others 'hills' (Kapos et al 2000). But ordinary speakers of a language make these kinds of decisions on the basis of human vision.

As compared with a 'hill', a 'mountain' occupies a larger part of the landscape. To a person standing in one place looking at a 'mountain', a 'mountain' fills a greater part of the distance between the ground and the sky than does a 'hill' (Wierzbicka 1989: 54). Therefore, my definition of the word *mountain* states that the top part of a 'mountain' is very far above the ground, and that, people can see a 'mountain' from far away. Other landscape concepts are anchored in the activities of humans in the environment. For example, the eco-zone of Pitjantjatjara/Yankunytjatjara speakers, 'puṭi', is conceived of as a places in which people can do things of many kinds, e.g. camp, gather food, hunt animals etc.

A further case in which human perspective clearly plays a role in the interpretation of the landscape is the situation in which the same referent can be conceptualized as places of different kinds, depending on the point of view of an observer (Fillmore 1982: 121; Mark et al. 2007: 15). In English, the boundary between land and sea can be described as both a 'shore' and a 'coast'. The semantics of *coast* is based in the concept of 'land' – a place where people can live. On the other hand, a 'shore' is conceptualized is a place where the water of 'sea' can be, rather than a place where people can live (see 6.4). To take another example, in Yindjibarndi (Western Australia), "cliff" places are given different labels on the basis of whether the viewer is looking up or down (Mark et al 2007: 15).

Naming metaphors relating to the human body, such as "the mouth of a river", or body-based measures, such as "a hill of 428-feet", (particularly
commented on by, e.g., Baudouin de Courtenay 1929; Vico 1968[1744]), also
provide evidence for the anthropocentric nature of landscape concepts.

1.8 The case of Australia

One particular focus of this study will be landscape categories and words
used in Australia. This country can provide an instructive case study for the
diversity of ethnogeographical classification. For example, in the Aboriginal
Noongar language of Western Australian there is no word exactly
Corresponding to the English river. As noted by the writer Kim Scott, a Noongar
man, the “tenuously linked ponds” of the South coast of Western Australia are
called river in English despite not living up to the usual standard for the English
language category of river. What Australian English speakers call rivers, are
called in Noongar bily, the same word as that for ‘navel’ (Scott 2007: 10).

Kinds of places which many people label with English terms like creek or
hill have older labels in indigenous languages. These indigenous terms reveal
conceptions of land different from the Australian English one, as has been
explored in the study of place names in Australian languages (e.g. Hercus et al.
eds. 2002; Koch and Hercus eds. 2010).

Looking at Australian English landscape terms is also illuminating because
they differ somewhat from those in other varieties of English. “New World”
languages bear the imprint of settlers’ attempts to relate to their adopted
country (Arthur 2003: 2-3). For example, the meaning of the term creek has
morphed from that of ‘inlet’ in British English to, roughly, ‘small watercourse’ in
“New World” English varieties, such as American, Australian, Canadian, and
New Zealand English. Contrasting landscape terms from an indigenous
language with comparable terms in the English language of the colonizers,
newcomers to that land, provides an insight into how different groups of people
can think and speak about the same landscape and the same referents in
different ways using words with different meanings (e.g. Morphy and Morphy
2002; Goodall 2002).

The topic of the role of landscape terms in Australia is of interest to the
broader Australian public given that the question of “the encounter with
landscape” is a frequent theme in Australian identity discourse (e.g. Bonyhady
and Griffiths 2002; Robin 2007; Rothwell 2008). “The encounter with landscape”
refers to how people coming from lands very different from Australia, principally
the British Isles, viewed this unfamiliar land and adapted English to deal with
the Australian landscape. As environmental historian Libby Robin writes, “In
every era, Australian identity has been defined by environmental oddities ...”
(Robin 2007: 6). Notable in such work on landscape and identity is writer and
lexicographer Jay Arthur’s (2003) concept of “the default country”, which refers
to the fact that Australia is described in terms of how it differs from European
lands. Australia is called ‘dry’, ‘wide’ and ‘brown’ in comparison to ‘green’ and
‘narrow’ England, although this description of Australia is not necessarily
intended as negative (Arthur 2003: 25-26).

1.9 The structure of this thesis

In chapter 2, “Methodology: NSM in the landscape”, I will look further at
the linguistic approach taken in this thesis, NSM; I will explain how I am
applying NSM in the semantics of landscape; and I will also say a few words
about the languages treated in this study. Chapters 3 to 8 will contain my
analysis of various kinds of landscape terms.

In chapter 3, I will explore some words for “long flowing water places” in
English, Australian English, French, and Pitjantjatjara/Yankunytjatjara. In
chapter 4, I will turn my attention to a selection of words for “standing water places” in English, French, and Pitjantjatjara/Yankunytjatjara.

Chapter 5 will cover some words for elevated places in English, Spanish, and Pitjantjatjara/Yankunytjatjara. In chapter 6, I will analyze a selection of English words for seascape places with some contrastive reference to Swedish and Polish.

In chapter 7, I will explore the word desert in Australian English, and contrast its semantics with some eco-zone words in Pitjantjatjara/Yankunytjatjara. Chapter 8 is an extended study of the Australian English cultural key phrase, the bush.

In chapter 9, I will offer some conclusions, and I will put forward some ideas for future directions of research.
Notes

1) Wierzbicka 1989 is also an early sketch of a few landscape terms using the NSM approach.

2) Unlike Whorf, I see words such as hill and swamp as "places" as opposed to "things". I will expand on this topic in 2.3.

3) The conceptualization of kinds of places in the landscape is anthropocentric in a different way from that of animals and artefacts, which can be seen as somewhat analogous to landscape vocabulary. All three groupings of vocabulary are based in the concrete world.

   Artefacts are human-centred in terms of how they are handled by the human body and for what purpose they are designed. For example, a mug can be held in one hand and is used by people to drink hot drinks from (Goddard 2011: 230-233). Human beings come into the meanings of animal terms in that the size of animal can be defined in relation to the human body. An animal's relationship to people is also important. In the case of cats, they are of a size that they can be picked up by a person with her two hands – an aspect of conceptualization related to the fact that cats live, for the most part, with humans (Goddard 2011: 206-209).

   Landscape features are anthropocentric primarily in that they are places people can see and places in which people can be and do things.
CHAPTER 2

NSM SEMANTIC METHODOLOGY

2.1 Introduction

In this chapter, in section 2.2, I will further expand my discussion of the approach I will take in this thesis, NSM semantics, which was briefly outlined in section 1.2. Then, in 2.3 I will speak more about NSM and I will explain how I am applying it in the area of ethnogeographical categories. Next, in 2.4 I will say a few words about the languages I am looking at in this thesis. Then in 2.5 I will treat the corpus I am primarily using in this thesis -- the Collins Wordbanks corpus of English. Finally, in 2.6 I will discuss the fieldwork on Pitjantjatjara/Yankunytjatjara that I have done.

2.2 NSM: The Natural Semantic Metalanguage

2.2.1. NSM Semantic Primes

The present study adopts the NSM (Natural Semantic Metalanguage) approach to linguistic analysis. NSM is a "mini-language" of semantic explanation, based upon natural languages. To break down meaning, the approach uses a vocabulary of 66 basic words whose meanings cannot be decomposed further, and are therefore referred to as semantic primes. NSM functions as a whole metalanguage and has an attendant simple syntax for use with the semantic primes (Goddard ed. 2008; Goddard and Wierzbicka eds. 2002). The inventory of primes and the syntax are proposed as universal (based on empirical studies). Exponents of the semantic primes have been identified in a range of languages and versions of NSM have been devised for Chinese, Danish, French, Spanish, Russian, and Korean, to name only a few.
(Gladkova 2007; Goddard and Wierzbicka eds. 2002; Levisen 2012; Peeters ed. 2006; Ye 2001; Yoon 2006).

In table 1, I give the set of semantic primes in their English language exponents. For the most part, the analysis in this thesis is carried out using the English language version of NSM. Furthermore, work has been done on a version of NSM in Pitjantjatjara/Yankunytjatjara, and I will sometimes refer to this in my analysis of Pitjantjatjara/Yankunytjatjara terms (Goddard 1994). NSM semantic primes can be grouped into related categories on syntactic and thematic grounds, such as “substantive”, “mental predicate”, “temporal expression”, and “locational expression”.

Table 1. A table of universal semantic primes – English version

<table>
<thead>
<tr>
<th>Prime</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY, BEING</td>
<td>Substantives</td>
</tr>
<tr>
<td>KIND, PART</td>
<td>Relational substantives</td>
</tr>
<tr>
<td>THIS, THE SAME, OTHER~ELSE</td>
<td>Determiners</td>
</tr>
<tr>
<td>ONE, TWO, SOME, ALL, MUCH/MANY</td>
<td>Quantifiers</td>
</tr>
<tr>
<td>GOOD, BAD</td>
<td>Evaluators</td>
</tr>
<tr>
<td>BIG, SMALL</td>
<td>Descriptors</td>
</tr>
<tr>
<td>KNOW, THINK, WANT, DON'T WANT, FEEL, SEE, HEAR</td>
<td>Mental predicates</td>
</tr>
<tr>
<td>SAY, WORDS, TRUE</td>
<td>Speech</td>
</tr>
<tr>
<td>DO, HAPPEN, MOVE, TOUCH</td>
<td>Actions, Events, Movement, Contact</td>
</tr>
<tr>
<td>BE (SOMESWHHERE), THERE IS, BE (SOMEONE~SOMETHING), BE (SOMEONE'S)</td>
<td>Location, Existence, Possession, Specification</td>
</tr>
<tr>
<td>LIVE, DIE</td>
<td>Life and Death</td>
</tr>
<tr>
<td>WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT</td>
<td>Time</td>
</tr>
<tr>
<td>WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, ON</td>
<td>Space</td>
</tr>
<tr>
<td>NOT, MAYBE, CAN, BECAUSE, IF</td>
<td>Logical Concepts</td>
</tr>
<tr>
<td>VERY, MORE</td>
<td>Intensifier, Augmentor</td>
</tr>
<tr>
<td>LIKE~WAY</td>
<td>Similarity</td>
</tr>
</tbody>
</table>

Notes: Primes exist as the meanings of lexical units (not at the level of lexemes). Exponents of primes may be words, bound morphemes, or phrasemes • They can be formally complex. • They can have different morphosyntactic properties, including word-class, in different languages. • They can have language-specific combinatorial variants (allolexes, indicated with ~). Each prime has well-specified syntactic (combinatorial) properties.

(Goddard 2011: 66, updated January 2013)
There are some notable features of the NSM lexicon which are listed as bullet points under the table of primes. Here, I will briefly expand on them.

Firstly, semantic primes exist as the meanings of “lexical units” (Cruse 1986: 77–78, see also Mel’chuk 1989) rather than at the level of lexemes, and they can be formally complex. They can be realized as words consisting of more than one morphological element (e.g. English SOMEONE and French QUELQU’UN ‘someone’ vs. Pitjantjatjatjara/Yankunytjatjara KUTJUPA ‘someone’). A bound morpheme can also express one of the primitive meanings. For example, Pitjantjatjatjara/Yankunytjatjara uses the ablative suffix –NGURU for the prime BECAUSE. Some exponents of primes are also phrasemes, multi-word units. To illustrate, the English A LONG TIME is equivalent to a single item, RAWA, in Pitjantjatjatjara/Yankunytjatjara, and, LÆNGE, in Danish. Following on from these points, the primes can have different morphosyntactic properties in different languages and can belong to various word classes. For example, the exponent of the prime KNOW is a verb in English but an adjective-like element, NINTI, in Pitjantjatjara/Yankunytjatjara (Goddard 1994: 236–237).

Primes can also be realized in a single language in more than one way depending on the syntactic context. These different exponents are referred to as the allolexes of the one prime. The “double-barrelled” items in Table 1, such as SOMETHING~THING and LIKE~WAY are allolexes of some English language exponents. For example, the prime LIKE~WAY in most cases appears as the word like in frames such as “someone like me”, “to live like this” and “I want to do something bad to this someone, like this someone did something bad to me” (see Goddard and Wierzbicka 2002: 78–79). But the prime is realized by the “substantive” allolex WAY when it is used in combination with specifiers, e.g. “in one way”. To illustrate, in the sentence “he did it like this” the prime LIKE~WAY
appears as *like* but in the sentence “he did it in the same way” the form *way* is used.

Furthermore, one must recognize polysemy when identifying semantic primes. Often words or word-like elements which realize the meanings of primes have additional meanings. For example, in Pitjantjatjara/Yankunytjatjara the exponent of the prime *SAY, WANGKANYI* also has the non-primitive senses of ‘speak’ and ‘make sounds’, and in French the exponent of the prime *FEEL, SENTIR* also has the meaning of ‘smell’. The same word form can also be used to realize more than one semantic prime. To illustrate, when the Pitjantjatjara/Yankunytjatjara word form *kutjupa* appears as a nominal head it has the sense of *SOMEONE*, but when *kutjupa* is used as a modifier the word form has the meaning of *OTHER*.

**2.2.2 NSM Syntax**

In NSM the semantic primes are used according to a simple syntax that is proposed as universal. Each semantic prime has a well specified set of syntactic properties which can include: (i) basic combinatorics, (ii) valency, and (iii) complementation. To begin with, we can take an example in regards to basic combinatorics. Primes classed as determiners can often combine with those classed as substantives, e.g *THE SAME THING, THIS SOMEONE*. However, we can see from the ungrammatical combination *THE SAME YOU* that each prime is grammatically unique: each prime has its own semantic and grammatical signature.

Secondly, we can see that primes can have various valency options. For example, the prime *DO* can appear simply in a frame like *SOMEONE DOES*
SOMETHING, but also in extended frames such as SOMEONE DOES SOMETHING TO
SOMETHING and SOMEONE DOES SOMETHING WITH SOMETHING.

Thirdly, to illustrate the complementation possibilities of semantic primes, let
us take the mental predicate prime THINK, which is often used in the semantic
explications contained in this thesis. THINK can be used in four main frames.
Most simply, it can appear as SOMEONE THINKS ABOUT SOMETHING, or it can take
a substantive complement, as in SOMEONE THINKS SOMETHING (GOOD/BAD) ABOUT
SOMEONE. THINK can also take a quasi-quotational complement as in SOMEONE
THINKS LIKE THIS: ..., and it can appear with a propositional complement SOMEONE
THINKS THAT: ... (Goddard 2003: 112). (There are additional restrictions on this
last frame "someone thinks that: ...", see Goddard and Karlsson 2008).

One can describe the simplest type of clause of NSM as being composed of
a predicate, such as SAY, THINK or DO, and one or more substantive phrases,
such as SOMEONE or SOMETHING (or an elaborated substantive, such as THE SAME
THING), e.g. I SAY SOMETHING. Adjunct phrases of space and time (e.g. HERE and
NOW) can also be added, e.g. I SAY SOMETHING NOW.

Through 30 years of cross-linguistic empirical research undertaken by Anna
Wierzbicka, Cliff Goddard and other researchers, NSM has been developed and
refined (see especially Goddard ed. 2008, Goddard 2011, Goddard and
there exists a substantial body of work across a range of typologically diverse
languages which has been carried out in the NSM framework (see 1.3).

2.2.3 Semantic Molecules, Derivational Bases, Exemplars

A notable theoretical concept of NSM which will play a major role in this
thesis is the semantic molecule (notated with an [m]). As Goddard (2010a: 123)
writes, "These are non-primitive meanings (hence ultimately decomposable into
semantic primes) that can function as units in the semantic structure of yet more complex words”. For example, the concept ‘bird’ functions as a semantic molecule for the meaning of the term *sparrow*, and ‘sharp’ does the same for the term *cut* (Goddard and Wierzbicka 2009: 64). The notion has similarities with that of “intermediate-level concepts” in the Moscow School of Semantics (Apresjan 1992, 2000; Mel’čuk 1989).

Somewhat counter-intuitively, what can roughly be called concrete vocabulary, such as terms for animals and artefacts, is semantically more complex than what can be termed abstract vocabulary, such as emotion terms and speech act verbs. Some more abstract concepts can often be explained using the simple words found in the lexicon of semantics primes. For example, the core of the meaning of the English emotion term *disappointed* is the thought (or prototypical cognitive scenario) composed entirely of primes: ‘I thought that something good would happen, I felt something good because of this, I now know that this good thing will not happen’ (Wierzbicka 1999: 71). Conversely, it is necessary for landscape concepts to be explained, in part, through intermediate concepts which themselves need to be explained via semantic primes.

The semantic molecules used to explicate landscape terms include environmental and ambient terms, topological terms, physical descriptors, and life form words. To illustrate, in order to explain terms such as *river*, *sea*, or *lake* we need the molecule ‘water’. Terms for elevated places like *mountain* and *hill* call for the concept ‘top’. The shape molecule ‘long place’ is required for words for kinds of places such as ‘rivers’ and ‘creeks’. Terms which refer to large areas of the environment, such as *the bush*, need molecules related to life forms, such as ‘tree’, ‘grow’, and ‘animal’. The country concepts ‘Australia’ and
'country' are part of the sense the Australian landscape term *the bush*. This is because the notions of native Australian plants and animals are part of the sense of the term *the bush*.

A number of issues surround the concept of the semantic molecule. As Goddard writes, "The sole criterion of whether a given word is a semantic molecule is the criterion of semantic necessity, and this can only be determined by detailed semantic analysis" (Goddard 2010a: 130). Additionally, how do molecules differ cross-linguistically? This is a particularly important question when one is explicating terms from multiple languages and comparing them. It would appear that some molecules are found in all languages. As mentioned in section 1.4, Cross-linguistic surveys suggest that the molecule "hands" is universal (Wierzbicka 2007: 27-33). It is required for the explication of shape concepts, texture concepts, terms for tools, as well as many physical activity verbs etc. Some of the main molecules used in this thesis are ones which seem to be universal. Among them are the environment molecules, 'water' and 'ground', and the molecule needed for explaining vegetation, 'grow'.

A further group of semantic molecules appear in some languages but not in others. For example, prior to European contact Pitjantjatjara/Yankunytjatjara did not have a word for 'money'. (The word for 'money' in present-day Pitjantjatjara/Yankunytjatjara is the English borrowing *manî*). 'Money' and its equivalents in languages other than English are productive molecules, and 'money' is used as an intermediate concept for the meanings of terms like *buy*, *sell*, *pay*, and *bank*.

Another type of molecule is one which seems to be "near universal". One example comes from the area of shape concepts. The English term *long* and the Polish term *podłużny* are very close, but not identical, in meaning
The explication of the English term *legs* includes the molecule ‘long’. If one were presenting this explication to a Polish audience one could put ‘podłużny’ in square brackets after ‘long’. This fact means that in presenting an explication of the English term *legs* to a Polish audience one could use the English ‘long’ as a molecule but put ‘podłużny’ in scare quotes in brackets. Polish readers would then have a good idea of the vague details of ‘long’, but would have to look at an explication of ‘long’ to fully understand the differences between the two concepts (Goddard 2010a: 146). The same procedure would be followed if I were to present my explications of English flowing-water place words which include the molecule ‘long place’, a molecule which I will discuss further below.

The explications of some Pitjantjatjara/Yankunytjatjara landscape terms require some semantic molecules which are not available in English. Ecological zone words like *puji* and *apu/pulji* require molecules for the resources that are found in these places (see 7.3.2 and 7.3.3). The molecules used which do not match up with any English terms include ‘punu’, roughly, ‘trees/bushes’; ‘mai’, roughly, ‘plant food’, and ‘kuka’, roughly, ‘game’ (see chapter 7).

I will now take examples of semantic molecules which come from a different semantic domain, that of shape. I will now treat the shape molecule ‘long place’ which is used in the explications of long flowing-water place words (see chapter 3). Places of these kinds, such as ‘rivers,’ have length, as in (1).

(1) ... fortresses had been built along the lengths of the rivers ...
(Wordbanks Br Books)

Places of other kinds can also be ‘long places’, such as a ‘country’, a ‘county’, or a continent, as in (2) about Argentina.
Argentina is a long country smack dab in the middle of South America, which is a long continent.

I argue that the term long is polysemous (following Wierzbicka 2007). Long has at least three meanings: 1) “long” in shape as in “a stick is something long”; 2) “long” as in dimension, for example, “a particularly long stick”; and 3) “long” as in a “long place”, such as in the case of the word river and related terms. The ‘long’ in shape molecule has been explicated in Wierzbicka 2007. To say that a thing, such as a tail or a stick, is “something long” is to say, roughly speaking, that it has two ends, far from one another, and that people can know this through seeing and touching the object. Let us call this sense of ‘long’, ‘long₁’.

The explication of ‘long’ appears in [A].

[A] something long (e.g. a tail, a stick, a cucumber)

a. when someone sees this thing, this someone can think about it like this:
   b. “two parts of this thing are not like any other parts, because one of these two parts is very far from the other”
   c. if someone’s hands touch this thing everywhere on all sides, this someone can think about it in the same way (Wierzbicka 2007: 49)

The sense of ‘long place’ can be explained along similar lines to ‘long₁’. To say that a place is a “long place” is to say, roughly speaking, that it has two ends, far from one another, and that it takes a long time for someone to travel between these ends. My explication of ‘long place’ follows in [B]:

[B] long place (e.g. a river)

a. when someone sees this place, this someone can think about it like this:
   b. “two parts of this place are not like any other parts, because one of these two parts is very far from the other”
if this someone wants to be at the other one of these parts of this place, 
this someone can’t be at this part of this place after a short time

In chapter 3 I will treat “long flowing water place” words in 
Pitjantjatjara/Yankunytjatjara and French, as well as English. For ‘long place’ in 
Pitjantjatjara/Yankunytjatjara I used the translation equivalent ‘wara’, a term 
which is defined in the Pitjantjatjara/Yankunytjatjara to English Dictionary 
(PYED) as ‘long, tall’.

Another relevant concept is the derivational base (notated in NSM with a 
[d]). This is found in cases where there is a relationship of semantic derivation 
between one word and another derived from it. In these cases, the base word 
can function as an element of an explication, e.g. ill is a base in the meaning of 
illness (Goddard and Wierzbicka In press). For example, in chapter 8 I propose 
that the concept of ‘bush’ (Australian vegetation) functions as an element in 
meaning of ‘the bush’ as an area of land. I further submit that the concepts of 
‘the bush’ as a human domain and ‘the bush’ as in places outside cities are 
derived from the concept of ‘the bush’ as an area of land.

In chapter 7, I will include exemplars in some of the explications of the 
“eco-zone” words contained within. The use of exemplars in semantic 
explications is a relatively recent innovation in the NSM research program. To 
take one example of the use of exemplars, Goddard (forthcoming) proposes 
that functional collective superordinates in English, such as furniture and 
vegetables, need to be explicited with reference to salient exemplars of these 
categories (see also, Waters forthcoming on exemplars in sociality terms).

One case of the use of exemplars comes from the explication of furniture 
which contains the component “tables [m*] are things like this”. Exemplars are 
notated with [m*], rather than with the usual ‘semantic molecule’ notation [m].
They are not like normal semantic molecules which are widely used across a number of different domains in the lexicon, e.g. "water" [m]. Rather, words such as functional collective superordinates in English, e.g. *cosmetics*, and eco-zone words in Pitjantjatjara/Yankunytjatjara, have embedded in them a large amount of cultural knowledge, in the case of eco-zones, ecological knowledge. Meanings like ‘tables’ (used in the explication of *furniture*), ‘peas’ (used in the explication of *vegetables*), ‘kurku’ ‘mulga trees’ (used in the explication of *puṯi*), and the like, would only be needed for the explications of a few words. Therefore, they are clearly very different in status to a semantic molecule such as “water” which features in the sense of a large number of words. The exemplars given in the explications of eco-zone words in chapter 7 are particularly salient examples of the trees, plants, plant foods, and game found in these kinds of places.

2.2.4 NSM Explications

Each NSM semantic explication can be seen as a mini-portrait of a particular word, expression or part of grammar, and these explications allow the study of meaning to become tangible and concrete. This can be contrasted with more opaque methods which use more abstract forms of semantic representation such as those used in formal semantics.

An explication may consist of one or more lines, and individual lines (and sometimes clauses) are referred to as components of the meaning. Let us take an example, from a more “abstract” realm of vocabulary, interjections. The English interjection *oh!* means that someone knows something new and that they feel something because of this. A semantic explication of *oh!* formed using NSM primes and syntax reads as follows in explication [C]:

```plaintext

```
In NSM work letters are ascribed to each component of the explication, and then referred to in discussion as component (a), component (b) etc.

Two main conditions are used to test NSM explications. The first condition is substitutability. It is necessary that explications be able to be substituted into their contexts of use with no change in meaning. The second condition is that explications be well-formed. Explications must be phrased using semantic primes and molecules, adhere to the syntax of the natural semantic metalanguage, and within them the components have to make sense as a whole package.

As Goddard writes, “Doing NSM analysis is a demanding process and there is no mechanical procedure for it” (Goddard 2010b: 464). He continues, “Published explications have often been through a dozen or more iterations over several months”, and those contained in this study are no exception.

Writing explications requires introspection as well as empirical work. In regards to how explications are formed, in 2.3 I will talk about some of the issues involved in the writing of the explications of landscape terms included in this thesis.

The NSM semantic analysis of landscape terms presented in the thesis is based on conceptual analysis. This analysis can be likened to the conceptual analysis of natural kind words, such as cat and tiger, and of concrete objects, such as cup and mug (see, e.g. Goddard 2011; Wierzbicka 1985). NSM
provides a way to construct plausible and testable hypotheses about indigenous meanings, in the form of the reductive paraphrase explications.

### 2.2.5 Evidence for explications

One can use various pieces of linguistic evidence to help in the process of devising explications, or to test them in terms of the substitutability condition. In NSM analysis collocations and phraseology are used to give clues as to the meanings of words (e.g. Goddard 2011: 27-28). As J.R. Firth, who coined the term collocation, writes: “You shall know a word by the company it keeps” (Firth 1957: 11; see also Apresjan 2000: 50-54). To take an example from another field of vocabulary, collocations such as *angry backlash*, *angry response*, and *angry confrontation*, suggest that part of the meaning of the emotion term *angry* is based on someone wanting to *do* something in retaliation (Wierzbicka 1999: 87-89).

In the area of landscape terms, we can take the example of the common collocation, a *river flows*. This collocation is consistent with the idea that water in a *river* moves all the time (see 3.2.1). A further example comes from the comparison of the collocational possibilities of the words *mountain* and *hill*. In my analysis of *mountain* I propose a semantic component which accounts for the presence of a summit, whereas I do not propose the same for *hill*. Collocational evidence for this proposal includes the fact that one finds the common collocations of *undulating hills*, *rounded hills* and *rolling hills*. However, *rounded*, *undulating* and *rolling* are not among the common collocates of *mountain* (see 5.2.1 and 5.2.2).

In terms of phraseology, when looking at animal terms, a phrase such as *quiet as a mouse* is indicative of the perceived quietness of *mice* (Goddard
One example of the use of phraseological evidence in this thesis is the social category of the ‘bushman’ which is examined in my treatment of the Australian cultural keyword the bush (see 8.4). The ‘bushman’ is thought to be tough and resourceful and this indicates the ethos of ‘the bush’ as a social and cultural space.

Moreover, the cultural significance of a word is connected to how productive it is in the creation of compounds, phrases, idioms, and new terms (Firth 1935). As the lexicographer of Australian English Bruce Moore observes, “[T]he word bush has been the most fecund of all words in Australian English, in terms of the number of compounds it has generated”.

One can see the importance of the term the bush in compounds such as native plants, e.g. bush rose; outdoor activities, e.g. bush walking; and cultural pursuits, e.g. bush poetry. Furthermore ‘the bush’ has been identified as a semantic field of Australian English containing a wealth of vocabulary, such as squatter, swag, cattle station, and drover to name a few (Ramson 2001: 193).

In many cases, when looking at the collocations of English terms I use results from the word sketch feature of the Collins Wordbanks corpus of English (Wordbanks). As de Schryver writes, “A word sketch is an automatically produced, corpus-based summary (i.e. ‘sketch’) of a word’s grammatical and collocational behaviour” (de Schryver 2009: 479-480). From looking at word sketches, one can see whether a particular collocation frequently occurs, but one can also use the data in a more nuanced way. In my analysis, I find especially clear contrasts when I compare common collocates with the absence of their antonyms in the word sketch. For example, the fact that tall mountain is a frequent collocation in the word sketch of mountain whereas short mountain is not, tells us something about the size and height of a mountain (see 5.2.1). (In
some cases, when looking at a particular variety of English, I will look at a word sketch composed of only tokens from that variety of English). Statistical measures aside, collocations can also be tested through native speaker intuition.

In devising and testing explications, many examples of the use of the terms in question are also examined. In this study, a number of examples of the chosen words appear, which are naturally occurring uses taken from the Collins Wordbanks corpus of English, media, dictionaries, and literature. These examples are often used to illustrate various collocations of relevance to the argumentation.

In presenting English examples from Collins Wordbanks I indicate from which subcorpus they come and I draw on all the varieties of English represented: US English, British English, etc.

2.3 NSM Explications of Landscape Terms

The first primes used to explicate the meanings of landscape terms are PLACE and KIND which are combined in the phrasing “a place of one kind” (to be discussed further in the next section). “A place of one kind” appears as a first component, a header if you will, in all the explications of all landscape terms in this study. Readers may why wonder component (a) is phrased as “a place of one kind” rather than “a kind of place”. Both formulations would be possible. However, “a place of one kind” works better in substitution, e.g. “two rivers” are “two places of one kind”, rather than “two kinds of places”.

As discussed by John Lyons in his influential work Semantics (1977: 693) and, notably, by specialist in the grammar of space, Gabriele Cablitz (2008), generic landscape features can be ambiguous between objects and places.
Lyons distinguishes between first-order entities (usually humans, animals and objects) and places/locations, and states that:

There are some first-order entities that are either permanently or normally static, rather than self-moving or moveable: but they will not count as first-order entities unless the language so classifies them and they stand out from their environment with respect to their colour, shape or texture. Such aggregates, collections or conglomerations of matter as cliffs, clouds, lakes, and so on, may or may not be perceived and conceptualized as first-order entities: their status is indeterminate; and they may be treated differently by different languages. (Lyons 1977: 693)

Cablitz describes the interesting case of landscape terms in Marquesan, an Eastern Polynesian language. Some terms, such as *mouka* ‘inland mountain’, take the same prepositional marker as common full words for first-order entities (Cablitz 2008: 216). Other terms, such as *motu* ‘island, islet’, can appear with prepositional markers for both objects and places, depending on the circumstances. Another group of terms, for example *uta* ‘inland’, are only found with the marker for a place (Cablitz 2008: 219).

The two main languages featured in this study English and Pitjantjatjara/Yankunytjatjara treat landscape terms such as *river, mountain, apu/pulju* and *karu* in the same way as they treat more thing-like terms, such as *car* and *house*. For example, locative constructions are alike for both types of terms. English uses prepositional phrases, e.g. *in the river* and *in the car*. In Pitjantjatjara/Yankunytjatjara the locative suffix *-ngka* is attached to the word, e.g. *karu-ngka* ‘in the karu’ and *mutuka-ngka* ‘in the car’. The landscape terms discussed in this study are placed into the category of “places of some kinds” rather than “things of some kinds” on semantic grounds. This is in line with Lyons’ statement that a language will not deem landscape terms “things” unless it classifies them as such. In the case of Marquesan, further consideration
would be necessary to form explications for its landscape terms, particularly in regard to the categories of “thing” and “place”.

Parts of these places can be described using the prime PART. As an example, the explication of the term creek contains the component: “often there is water [m] in parts of places of this kind”. This component using PART can account for a creek when it has patches of water interspersed with dry areas (see also Arthur 2003: 22).

Also of use are spatial terms like ABOVE and ON ONE SIDE. For example, in explaining the meaning of the term mountain, one can say in NSM semantic primes (as a one part of a more elaborate meaning) “the top of a place of this kind is very far above other places on all sides of this place” to describe a shape in the landscape protruding upwards.

The temporal primes OFTEN and SOMETIMES which can be referred to as frequency expressions are at times utilized. This is particularly in the discussion of kinds of places in which there is a fluctuating level and flow of water, the Australian English creek and the Pitjantjatjara/Yankunytjatjara karu (‘creekbed, creek’) (see 3.2.2 and 3.2.3).

To state the obvious, size is an important factor in the meaning of terms for geographic features. A semantic component like “places of this kind are big places” captures the size of a place such as a ‘river’ (see 3.2.1). It is notable that the phrasing is “places of this kind are big places” rather than simply “places of this kind are big”. Saying that a place is a “big place” has built into it the standard that “when people are in this place they can think about it like this: this place is big”. Essentially “a big place” means “big” for a “place”, rather than “big” in any objective sense. The same practice is followed in all the size components in the explications contained in this thesis.
As discussed in section 1.7, one of the notable aspects of my analysis of landscape terms is the human-centred perspective. This point of view makes its way into the semantic explications via the primes PEOPLE and SOMEONE, and the primitive verbs SEE, THINK, and DO e.g. “people can see this place”, “people think about this like this”, “people want to do things in these places”. One common way in which a human view of a place enters an explication is by way of the component “when someone see a place of this kind they can think like this: …”. Such phrasing is followed by the content of the thought. For example, in the explication of the polysemous Pitjantjatjara/Yankunytjatjara term apulpuji ‘hill, outcrop’ the person’s assessment is that this feature is composed of the material apulpuji; ('rock') (which appears as a semantic molecule).

2.4 Languages treated in this thesis

2.4.1 Introduction

‘Familiar’ English language words are treated in this thesis because, given that cross-linguistic comparison is used in the study of landscape categories, it makes sense to include the researchers’ home, or academic home, language, in the case of the present author, English. In addition, I treat ‘familiar’ words from some well-described, prestigious national European languages, in particular, French and Spanish. In order to get the full picture when, as Burenhult and Levinson put it (2008: 14) “capturing landscape ontology cross-culturally” landscape terms in “Standard Average European” languages are in as much need of being explained as ‘exotic’ concepts, in indigenous languages, in the case of the present study, Pitjantjatjara/Yankunytjatjara. Thus far, European languages have been little treated in this regard (Mark 1993 on standing water places is a notable and valuable exception) in comparison with
non-European indigenous languages (e.g. Burenhult ed. 2008; Mark et al. eds. 2011). I will now turn to look at the main languages from which words are examined in this thesis.

2.4.2 English, Australian English, British English

For the most part, in chapters 3, 5, and 6, the English I treat can be referred to as “English of the inner circle” (Kachru 1985), i.e. the English of Britain and its settler societies e.g. the United States, Australia and so on. This is not to say that these varieties of English do not vary as to their landscape terms. For example, the term *beck* ‘brook or stream often with rugged course’ seems to be confined to certain dialects of British English and the term (borrowed from Spanish) *arroyo* ‘dry riverbed’ is only used in some varieties of American English. To take another case, the terms *brook* and *woods*, found in both British and American English, are not used in Australian English.

Many writers on the topic of landscape terms (e.g. Stock 2008) are struck by their “relative” nature. For example, people living in the rather flat Australia label certain landforms as *mountains* which, in New Zealand, or other more mountainous areas, would only be called *hills*.

Similarly, the British English prototype of a ‘river’ may be a wider place than an Australian English prototype. Nonetheless, I would argue that it is justified to say in the semantic explication of *river* proposed: “these places are big places” for both British English and Australian English speakers. To Australian English speakers their relatively narrow ‘rivers’ seem ‘big’ because they do not have bigger long flowing-water places with which to compare them. As Moore (2008: 37) writes of Australian English speakers, “Their language is largely transported. For example, they know that antipodean rivers are not like
European rivers, since Australian rivers are often dry, but in their minds and even in the dictionaries they produce into the twenty-first century, they will continue to define a river as: 'a large natural stream of water flowing in a channel to a sea or lake.’ In chapters 3, 5, and 6, my project is, in the main, to find the common core of meaning of a number English language landscape terms across varieties.

I will now look more closely at Australian English which has been called, variously, a settlers’ English (Arthur 2003:1-10), a colonists’ or colonial variety (Kiesling 2006: 75), and a Southern Hemisphere English (Trudgill 2004: 13). This variety of English can be considered an English of the “inner circle; as it is the language of a nation settled by English-speaking migrants (Kachru 1985). The English spoken in Australia is by no means homogenous. The range of English spoken in Australia include Aboriginal English (Harkins 1994; Malcolm 2001; Sharifian 2006), and the Englishes of recently arrived migrants from non English-speaking countries (Clyne 2003: 152-157; Leitner 2004b). What I refer to in the thesis as Australian English can also be termed Standard Australian English or Mainstream Australian English. It is based on Anglo-Celtic heritage in Australia (Leitner 2004a: 1). It was formed as part of the “first diaspora”, the movement of a British population to places such as Australia, North America and Southern Africa.

2.4.3 Pitjantjatjara/Yankunytjatjara:

Land, Language, and People

Next, I will speak in a little more detail about Pitjantjatjara/Yankunytjatjara because it is less well described than the European languages treated in this thesis, and, readers may be less familiar with the environment and culture in
which it is spoken. Pitjantjatjara and Yankunytjatjara are two mutually intelligible neighbouring varieties of the much wider Western Desert Language family. These varieties are still spoken as a mother tongue in parts of Central Australia. Pitjantjatjara and Yankunytjatjara are grouped together as Pitjantjatjara/Yankunytjatjara in the present study, as in the Pitjantjatjara/Yankunytjatjara to English Dictionary (PYED 1996) and a number of pedagogic works (e.g. Pitjantjatjara/Yankunytjatjara Picture Dictionary (PYPD) 2007). According to the Australian Bureau of Statistics Census 2006, there are approximately 2700 Pitjantjatjara/Yankunytjatjara speakers. In terms of Australian languages, the two varieties are well-described. A grammar of the Yankunytjatjara variety has been written (Goddard 1986). Other materials include learners’ guides and children’s stories (e.g. Brumby et al. 2008; Eckert and Hudson 1988; Goddard 1993; Kirke 1987).

Pitjantjatjara/Yankunytjatjara is spoken across a vast, arid area of Central Australia in the North-West of South Australia and the South-West of the Northern Territory. The landscape is extremely dry and rainfall is variable, though at times rain comes in a deluge (Layton 1986: 24-28, 34-35). The landscape is divided by Anangu (the name Pitjantjatjara/Yankunytjatjara speakers use to refer to themselves) into different kinds of locales and ecological habitats such as bush country (puti) and hilly, rocky country (apu/puli3) (Layton 1986).

For the most part, Pitjantjatjara/Yankunytjatjara speakers now live in small remote communities of a couple of hundred people. However, traditionally, Anangu were nomadic hunter-gatherers who travelled across large areas. They used the plants, animals and limited water to sustain themselves, and often
their movement was determined by the availability of water, as will be explored in more detail in 4.6 (Keen 2004: 109-111).

In Anangu cosmology the landscape is created and shaped by the movements of Ancestral Beings during the creative period known as the Tjukurpa or Dreaming. This worldview is similar to the beliefs of other Australian Aboriginal groups (Keen 2004: 211). Keen (2004: 218) writes of Anangu belief, “Ancestors made waterholes by digging for water and left creek-beds where they crawled; depressions remained where they had slept. Their bodies and bodily substances changed into rocks and markings”. Furthermore, individual landforms are associated with specific Dreamings (creation stories) and spiritual concerns. To take one example, Layton speaks of “a hill called Wiputa, associated with the legend of the Two Boys who built Uluru from mud during the tjukurpa” (Layton 1986: 3). These Dreamings also help form a system of placenames (see e.g. Hercus 2010;).

Despite the spiritual beginnings of the landforms, Pitjantjatjara/Yankunytjatjara words for kinds of places can have more prosaic, down-to-earth meanings. Layton writes in his book chapter “Relating to the Country in the Western Desert”, “When the landscape appears as an ‘object’ of subsistence activities in indigenous discourse, there is much in common with Western ecological understanding, even if indigenous discussions are more fine-grained than ours” (Layton 1995: 212). Pitjantjatjara/Yankunytjatjara eco-zone words such as putji and apu/puli3 appear “as an ‘object’ of subsistence as they are kinds of places where one can find plant food and game (see chapter 7).

I would suggest that the origins of many Pitjantjatjara/Yankunytjatjara landscape features are not part of the lexical meanings of the terms, especially
since all landscape is said to have its genesis in the Tjukurpa. Therefore these origins are not expressed in most of the semantic explications in the current study. Everyday words can be just as culturally revealing and worthy of examination as spiritual ones. To take an example from artefact vocabulary, while the semantics of the ecclesiastic expression *communion chalice* would reveal aspects of Christian practices, the meaning of the expression *tea cup* reveals Anglo social practices. However, the study of individual placenames and sacred sites would naturally include spiritual concerns.

Furthermore, a spiritual reference is required in the explications of certain landscape terms, one of which, *tjukuJa*, will be treated in 4.6.1. ‘TjukuJa’ (glossed as ‘rockholes’) are intimately connected with ‘wanampi’ ‘water snakes, Rainbow serpent’, which are “a class of legendary beings who carry water underground from one available source to another” (Layton 1986: 25; see also Young 2006). (Similar beliefs are found in other areas of Australia. For the case in Yindjibarndi, see Mark et al. 2007: 13-14).¹

### 2.5 Collins Wordbanks corpus of English

I will now say a few words on the main corpus used in this thesis – Collins Wordbanks corpus of English. This corpus is continually being added to and currently stands at 553, 171, 489. Because of the changing size of the corpus, throughout the text I indicate the date on which I performed a particular search to obtain linguistic evidence. I used this corpus to find frequencies of use and the word sketch function was used a lot (which I detailed in section 2.2.5).

The Collins Wordbanks corpus of English is composed of a number of subcorpora. It will be indicated in the text from which subcorpus an example is taken. Subcorpora used are the following:
2.6 Fieldwork

I did my fieldwork among Pitjantjatjara/Yankunytjatjara speakers in the community of Ernabella (Pukatja), Anangu Pitjantjatjara Yankunytjatjara Lands (APY Lands), South Australia, for six weeks in May-June 2009. I had previously studied Pitjantjatjara/Yankunytjatjara on my own in Canberra using *Wangka Kulintjaku: Introductory self-instruction course in basic conversational Pitjantjatjara* (Kirke 1987), *Wangka Wiru: A handbook for the Pitjantjatjara language learner* (Eckert and Hudson 1988) and *Pitjantjatjara/Yankunytjatjara to English Dictionary* (PYED 1996). I then improved my language knowledge in the field (although I am by no means a competent speaker of the language).

My five formal consultants (four of whose examples appear in this thesis) that I recorded were senior women, respected for their knowledge. Two younger women helped me with some of the transcription of the recordings, the remainder I did by myself. I also translated these transcriptions myself and my supervisor Cliff Goddard, the author of a grammar of Yankunytjatjara (Goddard 1996) and the compiler of the dictionary of Pitjantjatjara/Yankunytjatjara (PYED 1996), checked over these translations. The transcriptions were checked with my consultants when I returned for a follow-up fieldtrip in July 2010. The
recordings will be placed in the AIATSIS archive. In addition, during my field trips, I spoke to some younger women more informally.

While on the APY Lands, I accompanied language speakers on bush trips. These are expeditions into the surrounding country in a vehicle for the purposes of food gathering and land management. Bush trips were good opportunities to consult with speakers because it is appropriate to talk about the topic of landscape in the actual natural environment. In consulting Pitjantjatjara/Yankunytjatjara speakers, I asked questions about the landscape and recorded stories in which landscape features occurred. Questions were generally asked casually and could be enquiries along the lines of, “What do you call places like this?”, “What is the sand in a karu called?”, “What did you used to do in a karu?”. I also asked for stories, often from childhood, about experiences in the landscape.

I am the author of the explications of Pitjantjatjara/Yankunytjatjara words which appear in this thesis. However, I recieded valuable feedback on the explications from native speakers during my follow-up fieldtrip.
Notes

(1) NSM is able to handle wider spiritual associations of landscape. Cultural norms, values and practices can be articulated using the “cultural scripts” technique which uses the language of NSM (see, e.g., Goddard and Wierzbicka eds. 2004; Goddard ed. 2006). Some Jewish and Christian religious cultural scripts have been explored in Wierzbicka 2001. Formulating such scripts for Anangu spirituality is not a task which can be undertaken in the present study.
CHAPTER 3

RIVER, FLEUVE, KARU: LONG FLOWING-WATER PLACES

3.1 Introduction

One thing common to all human beings is the need for water, specifically fresh water. Places where there is water provide more than water to drink. They also give us a resource which can be used to prepare food and medicine, to wash, to fish and to travel. Places where there is water, too, form barriers and their banks are places where people can live (see e.g. Coker 1958: xi-xviii; Gibson 1979: 38).

One of the kinds of water places is the long flowing-water place, such as, in English, the ‘river’. According to zoologist and ecologist, Robert E. Coker, “The significance of rivers to human life cannot be overestimated” (Coker 1954: 122). It is hypothesized (based on empirical studies) in the NSM research program that the concept of “water” is found universally, and acts as a semantic molecule in many different concepts, including words for places in which there is water (see Goddard 2010a: 132, 140-141; 2.2.3). However, languages lexicalize concepts for water places differently. These concepts reflect particular geographies, and the speakers’ way of life and worldview.

In this chapter, I discuss a number of words for kinds of long flowing-water places, such as the English river. As Niclas Burenhult and Stephen Levinson write in the introduction of the “Special Issue” of Language Sciences “Language and landscape: geographical ontology in cross-linguistic perspective”, “Terms glossed as ‘river’ differ considerably as to what they denote”, with reference to the languages treated in the issue, such as Tzeltal, Yéli Dnye, and Lao (Burenhult and Levinson 2008: 141).
So-named “Standard Average European” languages also differ in this regard. In *From landscape to literature: The river and the myth of geography* (1986), Wyman H. Herendeen, writing of “rivers” in Western culture (using the word *river* for long flowing-water places across Europe), states that, “The river, in geography and as an image, takes on the characteristics of the culture of which it is a part” (Herendeen 1986: 5). Consider the comparison of the English and French “river” concepts. French, partially for reason of geography, makes a lexical distinction between large watercourses which flow into the ocean, ‘fleuve’, and those which do not, ‘rivière’ – a distinction which is not made in English. Differences of this kind lead one to a discussion of the meanings of such lexical items. As Herendeen writes, “Rivers seem to force us to ask certain basic questions, such as: What is a river?” (Herendeen 1986: 3).

In this chapter I ask what a selection of words for long flowing-water places mean. In 3.2, I will treat the the English *river* and *stream*, and the Australian English *creek*. In 3.3, I will turn to discuss the French *fleuve* and *rivière*. In 3.4 I will look at the Pitjantjatjara/Yankunytjatjara *karu*. In 3.5, I will offer some concluding remarks.

### 3.2 Long flowing-water places in English

#### 3.2.1 River (English)

The word *river* is the most general word for a long flowing-water place in English. In a study in which American undergraduate students were asked to name “geographic features”, *river* was the second most frequent kind of place named (Smith and Mark 2001: 607). To describe a *river* briefly, it is a kind of place where there is water, it is long in shape, and the water in it moves.
To begin with, I will look at collocational evidence indicating that 'rivers' are conceptualized as being "long" in shape. 'Rivers' have length, as shown in (1), they can be long in dimension, as in (2), they have a course, as in (3), and there is also the combination "along the river", as in (1). A number of dictionaries define river, in part, as a long line of water (e.g. Collins Cobuild English Language Dictionary (CCELD); Longman Dictionary of Contemporary English LDOCE).

(1) ... fortresses had been built along the lengths of the rivers ...
(Wordbanks Br Books)
(2) The Zaire is the seventh longest river on earth ...
(Wordbanks Br Books)
(3) ... castles overlook the river's twisting course ...
(Wordbanks Br Ephem)

An aspect of 'rivers' as "long places" is the fact that they have two sides. Phraseological support for this feature of 'rivers' includes the compounds riverbank and riverside (see (4)). 'Rivers' also have 'banks' and two 'edges'. Both bank and edge feature as frequent collocates of river in a wordsketch, as in (5) (Wordbanks wordsketch river, 26/10/12).

(4) ... walking by the riverside with honeyed breezes blowing over the Shannon. (Wordbanks Br Books)
(5) He stood at the river's edge and peered down into the water. (Wordbanks Br Books)

'Rivers' are also "big places". A word frequently included in definitions of river is large (e.g. AHDEL; OED). The adjective great commonly collocates with river, referring to the related attributes of size and importance, as in (6).

(6) The Arkansas is one of the great American rivers .... (Wordbanks US Books)
There is also a large amount of water in ‘rivers’. CCELD defines river, in part, as “a large amount of fresh water”.

Another aspect of ‘rivers’ is that they are relatively impassible. People cannot easily get from one side of a ‘river’ to another because of a river’s width and volume of water. ‘Rivers’ form natural borders (see e.g. Coker 1958: xi-xviii). They often split cities into distinct parts, for example, the Hudson River separates some boroughs of New York City. They can partition ethnic and linguistic groups, for example, the River Tamar separates the traditionally Cornish-speaking county of Cornwall from the English-speaking county of Devon in the U.K. Moreover, ‘rivers’ can divide political units, e.g. the Australian states of New South Wales and Victoria.

The wide expanse of water of ‘rivers’ and its depth prevents people from moving from one side of a ‘river’ to the other in a short amount of time. As the psychologist, James J. Gibson writes in his book The Ecological Approach to Visual Perception:

The margin between land and water stops the pedestrian. But animals can wade if the water is shallow, float if their specific gravity is not too high, or skitter over the surface if they are insects. Some terrestrial animals can swim on the surface of the water, as the human animal can after a fashion. and dive under the surface for a short time. But water does not afford respiration to terrestrial animals with lungs, and they are always in danger of drowning. (Gibson 1979: 38)

Rather, people must cross a river by using, for example, a bridge, or a boat, or by swimming (as mentioned by Gibson). Human concern with this aspect of rivers is reflected in the common collocation cross the river, as in (7). Cross is the most frequent verb of which river is the object in Wordbanks. Furthermore, the relevant verbs ford, swim (as in (8)), and span (referring to
bridges, see (9)) are among the ten most frequent verbs of which river is the object (Wordbanks wordsketch river, 26/10/12).

(7) ... they were crossing the great river on a creaking, paddle-driven ferry. (Wordbanks Br Books)
(8) ... I'd swim the river naked, with my clothes in a plastic bag. (Wordbanks US Books)
(9) ... the bridge that spanned the river. This great archway, with its stone pylons ... (Wordbanks US Books)

The water in a 'river' is constantly moving in one direction. River combines with many verbs which describe this movement. These include run (see (10)), meander, amble, tumble and flow (see (11)). Flow is the most frequent verb of which river is a subject in Wordbanks (Wordbanks wordsketch river, 26/10/12). River combines with many verbs which describe this movement.

(10) In one stretch where the river ran between vertical cliffs ... (Wordbanks US Books)
(11) The rivers flow to the sea ... (Wordbanks Br Books)

Drawing on the evidence presented above, the meaning of river is captured in [A].

[A] a river (English)

a. a place of one kind
b. there is a lot of water [m] in places of this kind
c. these places are long [m] places
d. places of this kind have two sides [m]
e. places of this kind are big places
f. at many times when someone is on one side of a place of this kind
   if this someone wants to be on the other side,
   this someone can't be on the other side after a very short time
g. the water [m] in places of this kind is always moving
h. when someone is somewhere on one side of a place of this kind, this someone can think like this:
   "some time before this, this water [m] was in a place far from this place here
   some time after this, this water [m] will be in another place far from this place here"
Component (a) "a place of one kind" appears as a first component, a
header so to speak, in all the explications of all landscape terms in this study as
was discussed in section 2.3.

The next component (b) states that a 'river' has a lot of water. Component
(c) treats the shape of a 'river' using the semantic molecule "long", that is, in
terms of it being a "long place" which was discussed in section 2.2.4 on
semantic molecules. The long shape of a 'river' is also covered in component
(d) concerning "two sides". Similar "shape components" to (c) and (d) appear in
the explications of other terms for long water-places treated in this chapter.

Component (e) "places of this kind are big places" captures the size of a
'river' (see 2.3 on "size" components).

The relative impassibility of 'river' is covered in component (f). The reader
could ask why a component accounting for the width of 'rivers' should be
phrased in terms of human movement instead of, for example, a visual
experience, or hearing. There is no general principle that bodily movement is
more salient than seeing or hearing in NSM analysis. One must consider what a
particular word implies, in the light of phraseological evidence. I will add a few
points about why component (f) includes a person's potential to cross a 'river'.

Firstly, the reader could ask if one could have a component stating that it
is hard to hear someone call across a 'river'. However, this would not fit in the
case of 'rivers' across which someone could not be heard at all. Secondly,
component (e) is not simply capturing the width of 'rivers', but also the fact that
they are difficult to traverse because of the water. Thirdly, it would seem that
moving across a 'river' is of greater importance and utility to humans than
looking across a 'river' (see Gibson 1979: 38). Fourthly, the language
surrounding rivers does not support the primacy of hearing or seeing a 'river'.

As mentioned in earlier, *cross* is the most common of the verbs of which *river* is a collocate in Wordbanks. There are 386 instances of *river* with *cross*, as against 34 examples of *river* with *look across*, and 7 examples of *river* with *look over* (in the relevant sense, rather than “a house looking over a river”) (Wordbanks, 16/7/10).

Components (g) and (h) describe the movement of a ‘river’. In component (h) the ‘river’ is thought of as traveling from a distant source to a destination far away. Terms associated with ‘rivers’, such as *upstream, downstream, mouth* and *source*, attest to this understanding. Also people can speak of the *course* of ‘rivers’, as in (3), and also, of rivers going *through* places.

Now I will turn to the question as to whether explication [A] would serve for the meaning of *river* in all varieties of English. The British English prototype of a *river* may be wider than an Australian English prototype. Nonetheless, I would argue that it is justified to say “these places are big places” in the semantic explication of *river* proposed: for both British English and Australian English speakers. To Australian English speakers their relatively narrow ‘rivers’ seem ‘big’ because they do not have bigger features with which to compare them. As mentioned in 2.4.2, the lexicographer of Australian English, Bruce Moore writes of Australian English speakers, “Their language is largely transported. For example, they know that antipodean rivers are not like European rivers, since Australian rivers are often dry, but in their minds and even in the dictionaries they produce into the twenty-first century, they will continue to define a river as: ‘a large natural stream of water flowing in a channel to a sea or lake’” (Moore 2008: 37)

In the more arid regions of Australia, what are named *rivers* do not always contain flowing surface water. But this does not invalidate the proposed
explication of the meaning of *river*. Often ‘rivers’ of this kind, such as the Todd River in Alice Springs, are locally referred to as a *creek* or *creekbed*.

Furthermore, as Mark, Turk and Stea (2007: 7) write, “English speakers normally indicate frequency of flow by adding adjectives such as ‘seasonal’, ‘intermittent’, or ‘ephemeral’ to nouns that canonically refer to flowing water features.”

### 3.2.2 Stream (English)

The next term I will discuss is *stream*, whose explication can be compared with the explication of *river*. A ‘stream’ differs from a ‘river’ in that a ‘stream’ is smaller and has less water, and this water moves unstoppably. Some examples of *stream* (12)-(14) and a semantic explication [B] follow.

(12) ... before noon he came to a **small stream** ... (Wordbanks US Books)
(13) Long ago, a group of people lived along a **stream**. (Wordbanks US Spoken)
(14) ... pretty camp spots beside **mountain streams** (Wordbanks Oz news)

[B]  

*a stream* (English)

- a. a place of one kind
- b. there is water [m] in places of this kind
- c. places of this kind are long [m] places
- d. these places have two sides [m]
- e. these places are not big places
- f. the water [m] in these places is always moving
- g. this water [m] can’t not be moving
- h. when someone is somewhere on one side of a place of this kind, this someone can think like this:
  - “some time before this, this water [m] was in a place near this place here,
  - some time after this, this water [m] will be in another place not far from this place here”

Component (b) differs from that in the explication of *river* in that it speaks only of “water”, rather than “a lot of water”. The size component (e) shows a ‘stream’ as smaller than a ‘river’, in that it is “not a big place” (see 2.3 for discussion of size components). The intuitively plausible differences in the sizes
of ‘streams’ and ‘rivers’ are backed up by collocational tendencies of the two terms. The combination *great stream* is neither well attested in corpora nor very acceptable to native speakers, as against the same adjective combined with *river*.

Explication [B] does not include a component relating to width and impassibility as does explication [A] of *river*. ‘Streams’ are narrow and can be crossed quickly, and without much difficulty.

The combination of components (f)–(h) articulates the idea of constantly moving water. In addition to the meaning of *stream* as a landscape term, the noun *stream* has a sense referring to the constant flowing movement of liquid, as in (15):

(15) Miguel had been immersing his head under the *stream* of water from the tap. (Wordbanks US Books)

One component in [B] with no counterpart in the explication for *river* is component (g), which portrays the insistant nature of the movement of water in a ‘stream’ – this water can’t not be moving. The word *stream* is particularly associated with “mountains”, as in the compounds *alpine streams* and *mountain streams*, as in (14). This association with *mountains* is the result of geography – as a children’s encyclopedia tells us, “Rivers begin in the hills as small streams” (McKie 2003). The fact that ‘streams’ flow down mountainous terrain explains their insistantly running water.

Component (h) of [B] which portrays the direction the water in a ‘stream’ flowing is worded slightly differently than the similar component in [A] of *river*. In [B], when someone is on one side of a ‘stream’, this person can think that some time before, the water was in a place near this place here, and also that some
time after, the water will be in another place not far from this place. In [A], by contrast, when someone is on one side of a ‘river’, this person can think that some time before, the water was in a place far from this place here, and also that some time after, the water will be in another place far from this place. This difference is due to the shorter course of a ‘stream’.

3.2.3 Creek (Australian English)

The meaning of creek in Australian English fits with the dry nature of the continent and its intermittent supply of water. Although the word creek is present in other varieties of English, it is particularly salient in Australian English. On Wordbanks, approximately 25 per cent of the hits of creek come from the Australian English Oz News subcorpus, yet this subcorpus only comprises only around 6 per cent of all the material in the whole Wordbanks corpus (Wordbanks, 24/10/12).

Creek is a term from British English which has been recruited for new uses in “New World” English varieties, such as American, Australian, Canadian, and New Zealand English. The word creek is used to refer to a kind of place which was, originally, unfamiliar to colonial settlers. The sense of creek has morphed from that of ‘coastal inlet’ in British English to, roughly, ‘small watercourse’ in “New World” Englishes. In this section, I will only treat creek in Australian English.

The amount of water in British ‘creeks’ (or ‘coastal inlets’) varies according to the tides. In his book The Road to Botany Bay: An essay in spatial history, the writer and artist Paul Carter states that it is because of this property of British ‘creeks’ that the word creek was applied to small watercourses in Australia whose supply of water is variable. However, the amount of water
present in Australian 'creeks' is not as predictable as that in British 'creeks'.

Carter writes:

Even the term 'creek' stemmed originally from an attempt to impose on an unpredictable object at least a semblance of periodicity, the word being derived from the English term for tidal reaches. (Carter 1987: 60)

Illustrative examples of creek in Australian English follow in (16)-(21).

(16) The property also includes ... fruit trees and a permanent creek. (Wordbanks Oz News)
(17) In the wet season the region becomes a huge catchment, filling the many usually dry creeks that flow from the higher country to the coast. (Wordbanks Oz News)
(18) A man died after his car ran off the road and into a creek bed ... (Wordbanks Oz News)
(19) In the Brisbane metropolitan area, Kedron Brook, Enogerra, Moggill and Oxley creeks overflowed. (Wordbanks Oz News)
(20) The creek come down a banker, I tied the car to a tree but it was submergered in the raging waters. (Australian National Dictionary (AND) 1977)
(21) The creek runs winding between two steep hills, and ends in a chain of ponds ... (AND 1799)

I propose that a 'creek' is a long place which can have water in it (hence, by implication, not always). 'Creeks' can at times be without a lot of water. To say a 'creek' "dried up" could be describing a commonplace occurrence (as in (17)), but to say that a 'river' or a 'stream' "dried up" would imply an ecological disaster. In her book The Default Country: A lexical cartography of twentieth-century Australia, writer and lexicographer Jay Arthur states that on the Australian National Dictionary database the adjective permanent collocates with creek, suggesting that 'creeks' may not be permanent by definition (see (16)). However, permanent does not combine with river, suggesting that a permanent river would be a tautology (Arthur 2003: 21-22).
That said, some presence of water is part of the meaning of *creek*. The term *creekbed*, as in example (18), refers to the dry surface of this kind of place. But the fact that people say *creekbed*, rather than simply *creek*, implies that the presence of some water at times is necessary for calling a place a *creek*.

Bearing in mind the discussion given above, the explication of *creek* [C] and some further discussion follow.

[C]  *a creek* (Australian English)

a. a place of one kind  
b. often there is water [m] in parts of places of this kind  
c. sometimes there is water [m] in all parts of places of this kind  
d. these places are long [m] places  
e. these places have two sides [m]  
f. these places are not big places  
g. often the water [m] in these places is moving  
h. often when someone is somewhere on one side of a place of this kind, this someone can think like this:  
"some time before this, this water [m] was in a place near this place here,  
some time after this, this water [m] will be in another place not far from this place here"

Components (b) and (c) convey the varying amount of water in a 'creek'.

Component (b) says that often there is some presence of water in a 'creek'. Component (c) adds the information that sometimes there can be a substantial amount of water there, with water being in all parts of the place. The varying amount of water in a 'creek' is attested too by the fact that the four most frequent verbs of which *creek* is a subject on Wordbanks are *overflow* (see (19)), *spill*, *swell* and *dry* (Wordbanks Oz News subcorpora wordsketch *creek*, 16/7/10). The Australian English word *banker* describes a 'river' or 'creek' when the water in it is swollen to the top, or overflowing, as in (20) (AND; Arthur 2003: 22).

In the explications of *river* and *stream*, only one component for water appears and it does not specify that the amount varies at different times. Component (b), phrased "parts of places of this kind", can account for the times
when a ‘creek’ has patches of water interspersed with dry areas (see also Arthur 2003: 22).

The water in a ‘creek’ is not always moving. There are descriptions of creeks, such as chain of pools and chain of ponds in Australian English which indicate this quality of ‘creeks’ (Arthur 2003: 22; Carter 1987: 60). AND defines one sense of chain in Australian English as, “In the collocation chain of billabongs (lagoons, lakes, ponds, pools, waterhole), a series of depressions in the bed of an intermittently flowing watercourse which continue to water after the connecting stream has dried up”. The earliest example of this use in the dictionary comes from 1799 (see (21)). AND also includes the intransitive use of the verb to chain, defined as: “Of pools: to form a chain”.

In components (g) and (h) the water moves often. In the explications of river and stream, however, the water is described as always moving. The cognitive scenario in (h) is the same as that for stream. Component (f) covers the size of a creek as being “not big”, as in the case of stream. Furthermore, like explication [B] of stream, [C] does not feature a component relating to the width of a ‘creek’ and its passibility. Like ‘streams’, many ‘creeks’ are narrow and can be crossed fairly easily, particularly when there is not much water in them.

3.3 Long flowing-water places in French
3.3.1 An introduction to long flowing-water places in French

As mentioned earlier in the chapter, French makes a lexical distinction between long flowing-water places on different grounds than do many other languages, including English. Places which would be called ‘rivers’ in English are classed as either ‘fleuves’ or ‘rivières’ in French. People have often stated the difference between a ‘fleuve’ and a ‘rivière’ by saying that ‘fleuves’ flow into
the sea but ‘rivières’ flow into another body of water (such as another ‘rivière’, a
‘fleuve’, or a ‘lake’). For example, in his book on Ferdinand de Saussure, literary
critic and theorist, Jonathan D. Culler, takes the difference between the fleuve-
rivière pairing in French, and the river-stream pairing in English to illustrate a
point (Culler 1976: 38). This point is Saussure’s proposal that not only are the
forms of words used for concepts arbitrary, but that also the concepts a
language chooses to signify with a word are arbitrary. (The latter point is being
shown in this thesis through the study of landscape terms).

On the matter of how to articulate the difference between fleuve and
rivière, some writers have taken a pessimistic view. Le Grand Robert
Dictionnaire de la Langue Française (GRDLF) quotes the 18th century French
scholar and encyclopedist, Louis de Jaucourt’s view that “Il n’est (…) pas
possible de fixer la distinction de ces deux mots, fleuve and rivière” “it is not
possible to set the distinction between the two words, fleuve and rivière”. (This
quotation is taken from the entry on fleuve in the great 18th century French
reference work the Encyclopédie.)

However, semantic analysis of the two words, beyond lexicographic
description, has in fact been proposed. Christoph Schwarze (2001), in his
introductory lexical semantics textbook Introduction à la semantique lexicale
provides semantic analyses of both fleuve and rivière using what he calls a
standardised language of representation. The book presents the following
semantic formulae. (English translations appear next to the French words).

**fleuve**
fleuve
classe ‘class’ = cours d’eau ‘watercourse’
dimensions ‘dimensions’ = importantes ‘large’
formation ‘formation’ = par la réunion de rivières ‘by the meeting of
rivières’
lieu d’aboutissement ‘outlet’ =o la mer ‘the sea’

rivière
classe ‘class’ = cours d'eau ‘watercourse’
dimensions ‘dimensions’ = faibles ou moyennes ‘small or medium’
lieu d’aboutissement = une masse d’eau plus importante ‘a larger body of ‘outlet’

(Schwarze 2001: 31)

Schwarze represents nouns according to their relevant “attributes” and gives “values” to these “attributes”. For example, one of the attributes of birds is ‘feathers’ and, in the case of the noun pigeon, the value of this attribute is “multicoloured”. The words which appear on the left of these semantic formulae are attributes, and those on the right after the equal signs are their values. The representations therefore class both ‘fleuves’ and ‘rivieres’ as watercourses. Presumably, this attribute accounts for all the similarities in the representations. They differ in that the dimensions of a ‘fleuve’ are large, whereas those of a ‘rivière’ are small or medium.

In addition, their outlets differ. The ‘outlet’ of fleuve is ‘the sea’, and the ‘outlet’ of rivière is a body of water more significant than itself. The symbol o is for the value of ‘outlet’ in fleuve indicates that typically ‘fleuves’ flow into ‘the sea’, but not always. (I will return to this matter later in 3.3.2). The formula for ‘fleuve’ also includes the attribute of ‘formation’, and the value of this attribute is the meeting of ‘rivieres’.

These formulae can be criticized on a number of counts. In the following sections, 3.3.2 and 3.3.3, I set out a more rigorous and comprehensive semantic analysis of fleuve and rivière. I will contrast my analysis with that of Schwarze.
3.3.2 Fleuve (French)

To begin with, I will discuss the sense of *fleuve*. In addition to its eventual destination, a ‘fleuve’ differs from a ‘rivière’ in size. First of all, a ‘fleuve’ is very long, longer than a ‘rivière’. For example, the Seine, a ‘fleuve’, runs for 774.7 kilometres before it flows into the English Channel.\(^2\) By contrast, a ‘rivière’, the Andelle, which is a tributary of the Seine, runs for 56.9 kilometres before it feeds into the Seine.\(^3\) French dictionaries describe a ‘fleuve’ as being of “très grande longueur” ‘very great length’, “remarquable par la longueur de son cours” ‘notable by the length of its course’, and a “long cours d’eau” ‘a long watercourse’ (*Dictionnaire de l’Académie française*, 9th ed. (DDLAF, 9th ed.); *Le Trésor de la Langue Française informatisé* (TLFi)).

As in the case of the previously described English terms, phraseology makes it clear that a ‘fleuve’ is conceived of as a “long place”. TLFi lists *le fleuve long* ‘long fleuve’, *le fleuve serpente* ‘the fleuve snakes’, *longer le fleuve* ‘go along the fleuve’, and *au long du fleuve* ‘along the fleuve’ (see (22)) as collocations of the word *fleuve*.

(22) ... des châteaux qui s’égrènent tout au long du fleuve ...
‘... castles that are scattered all along the fleuve ....’ (Aujoulat 2006: 163)

Furthermore, a ‘fleuve’ is characterized as being generally big, and bigger than a ‘rivière’. Definitions of ‘fleuve’ include a “grande cours d’eau” ‘large watercourse’, and “cours d’eau important” ‘large watercourse’ (TLFi, *Dictionnaire de l’Académie française*, 8th ed. (DDLAF, 8th ed.)). To illustrate, the width of the Seine, a ‘fleuve’ varies from 30 to 200 metres, whereas the Marne, a ‘rivière’, is, in parts, as narrow as 7.4 metres.\(^4\) TLFi defines *fleuve* as being of “très grande largeur” ‘very great width’ and in its definition of *rivière*
says that a ‘rivière’ is “moins large que le fleuve” ‘narrower than a fleuve’. Collocations of fleuve include profond ‘deep’, 'large ‘large’, vaste ‘deep’, and majesteux ‘majestic’, as in (23) (DDLAF, 9th ed; TLFi).

(23) Il se tenait debout, admirant le fleuve majestueux qu’il adorait. ‘He stood admiring the majestic fleuve he loved.’ (Pierrejean 2006: 16)

Phraseology also reveals that a ‘fleuve’ is conceived of as having two sides. Collocations of the word fleuve in French dictionaries include de l’autre côté du fleuve ‘on the other side of the fleuve’, as well as berges du fleuve, rives du fleuve (as in (24)), rivages du fleuve, and bords du fleuve, all roughly meaning ‘banks of the fleuve’ (DDLAF, 9th ed; TLFi).

(24) La dissymétrie entre les deux rives du fleuve ...
‘The assymetry between the two banks of the fleuve ... ’ (Bethemont 1972: 283)

As with the similar English terms, part of the meaning of fleuve pertains to the movement of water. Indicative collocates include rouler ‘roll’, courant ‘current’, and cours ‘course’ (DDLAF, 8th ed; TLFi). The movement of water in a ‘fleuve’ is fast and powerful, more so than that in a ‘rivière’ (TLFi). As the Larousse encyclopédie writes, a ‘fleuve’ is characterized by its “débit” ‘rate of flow’ and its “régime” ‘manner of flow’. The “débit”, or, rate of flow of a ‘fleuve’, is, described as “abondant” ‘abundant’ or “important” ‘great’ in dictionaries (DDLAF, 9th ed; TLFi).

As previously mentioned, ‘fleuves’ are characterized as flowing into the ocean, but ‘rivières’ are not. However, some dictionaries recognize that this is not always the case, and that some ‘fleuves’, important, large watercourses, do not flow into the sea. One of the reasons why this distinction should be made is
that, in France, in general, the large watercourses do flow into the sea. To illustrate what is reported in dictionaries, DDLAF, 9th ed. says that a ‘fleuve’ “le plus souvent, se jette directement dans une mer, dans un océan” ‘most often, flows directly into a sea, into an ocean’ (see also, TLFi).

Furthermore, some dictionaries report that a strict distinction is a specialist one of the discipline of geography, but not necessarily one in ordinary language (GRDLF; Le Nouveau Petit Robert Dictionnaire (NPRD)). Dictionnaire raisonné des difficultés grammaticales et littéraires de la langue française (DRD) cites cases of important watercourses which would be classified as ‘fleuves’, such as the Rhine, which do not feed into the sea. (The Rhine splits into three tributaries before it reaches the sea). The lexical semantics textbook quoted earlier also points to the example of the American river, the Missouri, which would still be called a ‘fleuve’ in French, although it does not reach the ocean (Schwarze 2001: 30). These observations will be born in mind in the explications of the words fleuve and rivière.

I weave the above observations into an explication of fleuve in [D].

[D] un fleuve (French)

a. a place of one kind
b. there is a lot of water [m] in places of this kind
c. these places are very long [m] places
d. these places have two sides [m]
e. these places are big places
f. at many times when someone is on one side of a place of this kind
   if this someone wants to be on the other side,
   this someone can’t be on the other side after a short time
g. the water [m] in places of this kind is always moving
h. this water [m] can’t not be moving
i. when someone is somewhere on one side of a place of this kind, this someone can think like this:
   “some time before this, this water [m] was in a place far from this place here
   some time after this, this water [m] will be in another place far from this place here”
j. when someone is somewhere on one side of a place of this kind, often this someone can think like this:
   “a long time after this, this water [m] will be in the sea [m] ‘la mer’ [m]”
Explication [D] shares many of the components seen in the previous explications included in this chapter. Components (b) and (e) are identical to components used in the explication of *river*. They specify the large size and the large amount of water in ‘fleuves’. Component (d), which treats the two sides of these places, appears in all the explications included in this chapter.

Component (g) specifying constant movement of water is also the same as in the explications of *river* and *stream*. All three words have their origins in languages traditionally spoken in relatively wet climates, unlike *creek* and *karu*, which are found in languages spoken in drier climates. One component unique to *fleuve* is (c) “these places are very long places”. Clearly, ‘rivers’ can be just as long, or longer, than ‘fleuves’. However, a ‘fleuve’ is conceptualized as being particularly long, especially in comparison with a ‘rivière’, whereas ‘rivers’ do not have to be “very long”.

Component (f), as with similar components used in previous explications, explicates the great width and relative impassibility of a ‘fleuve’. In the component, a person cannot be on the other side of a ‘fleuve’ “after a short time”, whereas, in the case of a ‘river’, a person cannot be on the other side “after a very short time”. Again, a ‘fleuve’ is not necessarily wider, or harder to get across, than a ‘river’. All ‘fleuves’ are very wide, whereas ‘river’ being the only large long flowing water-place category in English, encompasses a greater variety of widths.

Component (i) portraying the general direction of the water is identical to that used for *river*. The next component (j) is the biggest innovation in [D]. As with (i), component (j) shows the direction of the water in a ‘fleuve’. The cognitive scenario in its third line portrays someone’s thought that water in a ‘fleuve’ flows into ‘the sea. The framing of this thought is slightly different to that
contained in (i). The second line of (j) is qualified with the word “often”. This qualification accounts for the general idea that ‘fleuves’ flow into ‘the sea’, as indeed most do. However, it does not exclude those places called fleuves which do not continue as far as ‘the sea’.

The word “often” conveys the same sense as is indicated with the symbol $\theta$ in Schwarze’s formula for fleuve. However, a word from natural language is more easily comprehensible than a symbol. As Keith Allan argues, artificial semantic formalisms are a “degenerate form of natural language” (Allan 1986: 268). People must translate symbols of this kind back into natural language in order to interpret them.

3.3.3 Rivière (French)

Turning now to rivière, I will first discuss the size and shape of ‘rivières’. Naturally, ‘rivières’ are long in shape, although not as long as ‘fleuves’ in dimension. Rivière takes collocates indicating length which are similar to those found with fleuve and the other words treated in this chapter. To illustrate, there are combinations such as descendre la rivière ‘go down the rivière’, monter la rivière ‘go up the rivière’, longer la rivière ‘go along the rivière’ (see (25)), and la rivière charrie ‘the rivière carries’ (DDLAF, 9th ed; TLFi).

(25) ... il avait préféré suivre le sentier qui longe la rivière.
‘... he preferred to follow the path which went along the rivière.’ (Sonnay 1993: 90)

Dictionaries tell us that a ‘rivière’ is smaller in dimension that a ‘fleuve’, although it is still a place of significant size. To illustrate, TLFi characterizes a ‘rivière’ as “moins important et moins large que le fleuve” ‘less significant and smaller than a fleuve’. Yet, the dictionary says that a ‘rivière’ is “plus important”
'more significant' than a 'ruisseau' and a 'torrent'. These two words, *ruisseau* and *torrent*, denote small watercourses, and are often defined in English as *stream* (Larousse Online (LO)). However, I see 'rivière' as a descriptive category, not a relative one.

Like the other concepts treated in this chapter, 'rivières' are conceived of as having two sides. As with *fleuve*, *rivière* combines with *de l'autre côte* 'on the other side', as well as *berge* and *bord*, roughly 'bank', as in (26) (DDLAF, 9th ed; TLFi).

(26) ... un habitant riverain de l'Arve, près de Cluses, m'a signalé avoir jeté un jour des vieilles pommes ... sur la berge de la rivière et constaté que le tas diminuait progressivement chaque nuit. '... a resident bordering the Arve, near Cluses, told me that he had thrown me one day old apples he kept in the cellar, on the berge of the rivière and found that the pile progressively decreased each night.' (Mulatier 2007: 103)

Similarly to 'fleuve' and the other concepts covered, the movement of water in 'rivières' is suggested by collocates such as *cours*, *rouler* and *courant* (see (27)) (DDLAF, 9th ed; TLFi).

(27) En été, dans les rivières dont le courant ralentit ...

'In summer, in the rivières whose current slows ... (Chaumeton 2008: 201)

Drawing on the evidence presented above, *rivière* is explicated in [E].

[E]  *une rivière* (French)

a. a place of one kind
b. there is a lot of water [m] in places of this kind
c. these places are long [m] places
d. these places have two sides [m]
e. these places are big places
f. at many times when someone is on one side of a place of this kind
   if this someone wants to be on the other side,
   this someone can't be on the other side after a very short time
g. the water [m] in places of this kind is always moving
h. when someone is somewhere on one side of a place of this kind, this someone can think like this:
   "some time before this, this water [m] was in a place far from this place here
   some time after this, this water [m] will be in another place far from this place here"

The semantic explications [D] of *fleuve* and [E] of *rivière* elucidate the senses of the words in a way in which the semantic formulae reproduced in section 3.3 cannot. Explications [D] and [E] set out in simple terms the semantic features which the two words share. Schwarze’s formulae, by contrast, merely use the term *cours d’eau* to represent all these features. The phrase *cours d’eau* is more technical than either the words *fleuve* and *rivière*. It is harder to imagine someone saying “Allons au cours d’eau pour pêcher” ‘Let’s go to the watercourse to fish’ than the same sentence using either the words *rivière* or *fleuve* (James Grieve, p.c.).

Component (b) specifies, as with the explications of *river* and *fleuve*, the large amount of water in a ‘rivière’. In component (c) a ‘rivière’ is characterized as simply a “long place”, as opposed to a ‘fleuve’ which is a “very long place”. Component (e) states that a ‘rivière’ is a “big place”, as with a ‘fleuve’. In this way, the *fleuve-rivière* pair differs from the English *river-stream-creek* distinction, in which ‘rivers’ are characterized as “big places” and ‘streams’ and ‘creeks’ as “not big places”.

Component (d) relating to the “two sides” has the same wording as the one used for all the words treated in the chapter. Component (e) conveying the width and relative impassibility of this kind of place is the same as that used in the explication of *river*, as opposed to the greater amount of time needed to cross a ‘fleuve’ stated in [D]. Component (g) states that the water in a place of this kind is always moving, as is the case for the words from languages which
originate in places with relatively wet climates treated in this chapter: *fleuve*, *river*, and *stream*.

Component (h) portrays the direction and the long distance of a ‘rivière’, as in the explications of *river* and *fleuve*. Unlike in the explication of *fleuve*, there is not a component which specifies the eventual outlet of a ‘rivière’.

‘Rivières’ can flow into ‘fleuves’, other ‘rivières’, and ‘lacs’ (‘lakes’). Furthermore, specifying the ‘outlet’ of a ‘rivière’ is not necessary because all the components in [E] already convey the sense of the word. An explication should convey the conceptual minimum, rather than every possible property of the denotata.

3.4 A long water place in Pitjantjatjara/Yankunytjatjara: *karu*

I will now turn to discuss the Pitjantjatjara/Yankunytjatjara *karu*, glossed in English as “creekbed or creek” or “creekline”. An example of the word *karu* appears in (28).

(28) *Ka karungka uru pulka ukalingangi.*

<table>
<thead>
<tr>
<th>ka</th>
<th>karu-ngka</th>
<th>uru</th>
<th>pulka</th>
<th>ukalinga-ngi.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONJ</td>
<td>karu-LOC</td>
<td>surface.water</td>
<td>a.lot</td>
<td>come_down-PST.IPV</td>
</tr>
</tbody>
</table>

‘There was a lot of water flowing in the karu.’ (PYED: 203)

A ‘karu’ is a place long in shape, with a formed creek bed of soft sandy ground. After rain, a ‘karu’ can contain water, either in patches or as a stream of water, depending on the amount (see also Young 2006: 249-250). Even in dry times, ‘karu’ hold water beneath the ground. Because of this, strings of river red gum trees (‘apara/iṭara’ in Pitjantjatjara/Yankunytjatjara) grow along ‘karu’, drawing moisture from underground (Uluru Kaṭa-Tjuṯa National Park 2009: 1).
In English there is a distinction between words for long places which are depressions in the land, such as *gullies*, and words for long places which have water in them, like *rivers* and *creeks*. This distinction is not made in many Australian languages spoken in dry areas, a fact which has been notably discussed by Mark et al. (2007: 7-8) with reference to the similar Yindjibarndi term *wundu*.

Longitudinal depressions in the landscape are referred to as valleys, canyons, gorges, gullies, etc., in English. Normally, English seems to make a clear distinction between such concave topographic features and the watercourses that often run along them. However, in arid and semiarid regions, the distinction between topographic and hydrological features quite literally dries up. (Mark et al. 2007: 7)

The same situation is found in other Central Australian languages such as Arrernte, Anmatjarra and Kaytetye (Henderson and Dobson 1994; Harold Koch, p.c.). An example of a similar case on another continent comes from the Khoisan language #Akhoe Hai/om spoken in Namibia. In this language spoken in a dry bush area the word *lab* can be used as a generic term for rivers and river beds (Widlok 2008: 368-369). A further example from another arid part of the world is the Arabic word *wāḍi*. One sense of *wāḍi* is defined in an Arabic-English dictionary as “river-bed, river”, and, as in Australia, in the Arabic speaking world ‘wāḍi’ are important to people because of their ground water (Edmunds 2002: 23; Salmone 1972).

Explication [F] of *karu* reflects the lack of this distinction between places where there is water and places where there is not.

Pitjantjatjara/Yankunytjatjara versions of the semantic molecules also appear.

[F] *karu* (Pitjantjatjara/Yankunytjatjara)
Component (b) speaks of the water that can be found in a ‘karu’. In examples of karu the terms kapimina ‘water’ and uru, ‘surface water’ are used, as in (28), (29), (33), (34) and (36). The explication states that water is only present sometimes because, for most of the time, a typical ‘karu’ is dry.

(29) *Uru pulka karungka ngarinyangka, tjitji tjukutjuku tjuṯa tjartjarta kutju tjarpapai munuya ngaṯi wantipai ilunyṯjaku tawara.*

> surface water big karu-LOC lie.be-CIRC child
> small PL shallows-LOC only swim-CHAR
> CONJ-3.PL deep refrain-CHAR dead-PURP lest

‘When there’s a lot of water in a karu, little kids only play in the shallows, and keep away from the deep, or else they could drown.’

(Pitjantjatjara/Yankunytjatjara to English Dictionary (PYED: 174))

Components (c) and (d) are shape components shared with river, stream and creek. Component (c) states that a ‘karu’ is a long place. A ‘karu’ can be described as karu wara ‘long karu’ and river red gum trees can be said to follow (wananī) the ‘karu’ in a line, as in (30). Additionally, one can speak of karu kantilpa ‘edge of the karu’ and karu kampa ‘side of the karu’, as in (31).

(30) *Apara tjula ngarala wanani karungka.*
Component (e) covers the ‘puňu’ ‘trees/bushes’ which grow on the sides of ‘karu’ (the Pitjantjatjara/Yankunytjatjara semantic molecule “puňu” will be treated further in 7.3.1). These ‘puňu’ ‘trees/bushes’ are all ‘apara/i!ara’ so they are said to be “of one kind”. Component (f) portrays a ‘karu’ as a depression made from earth. The ground (manta/pana₁) in a ‘karu’ is described as being below the ground on both of its sides. In this way, ‘karu’ contrast with the English and French language water place concepts which have been discussed, such as ‘river’ and ‘fleuve’ which are conceived of as being composed of water itself. Therefore, in places of these kinds the surface over which the water flows is called a river bed, or le lit d’un fleuve ‘the bed of a fleuve’, or similar. Such a component is not used in the explications of the previously treated English and French words.

In discussions with Anangu in which I asked about what a ‘karu’ is like, some people who speak some English mentioned the word, sand. The earth (manta/pana₂) found in ‘karu’ has a specific name, paki, glossed in English as ‘creek sand’. Component (g) accounts for the soft, sandy nature of the earth in a ‘karu’, as distinct from the ground in other places. A dry ‘karu’ is a place in which a lot of human activity can take place. People can camp in dry ‘karu’, and
the first school lessons at Ernabella began in the dry ‘karu’ (Gale 1997: 108).

Children love to play in the soft sand or ‘paki’ ‘creek sand’ of ‘karu’, as in (32).

(32) Tjitji tjuta pakingka inkanyi.
child PL creek.sand-LOC play-PRS
‘Children play in the creek sand.’ (Field notes)

Component (h) speaks of the movement of water in a ‘karu’. In example
(28) the moving water in a ‘karu’ is spoken about using the verb ulkalinganyi
‘flow, run down’. Such an event is very occasional and only happens after a lot
of rain. Therefore, the description of the movement is qualified as being
“sometimes” and “when there is water in places of this kind”. Young writes of
this situation, “To have the creek in Ernabella flow, rather than merely half-fill
with a small static lake when paltry amounts of rain fall, is a matter of local
pride.” (Young 2006: 249). Example (33) depicts the flow of water in a ‘karu’
after two days of (heavy) rain.

(33) Saturday-ngka minangku tjaatarira puyiningi. Munu Sunday-ngka puyira
mungaringu ka uru pulka mulapa mungangka ukalingu.

Saturday-LOC mina-ngku tjaatari-ra puyini- ngi.
Saturday-LOC water-ERG start-SER rain-PST.IPFFV

Munu Sunday-LOC puyi-ra mungari-ngu ka
CONJ Sunday-LOC rain-SER get.dark-PST CONJ

uru pulka mulapa mungangka ukali-ngu
surface.water a.lot really night-LOC come.down- PST

‘It started raining on Saturday. On Sunday it rained all night and a big flow
of water came down (the creek) in the night.’ (PYED: 151)

A ‘karu’ is not only significant in the traditional desert lifestyle and culture
because people can use its surface water. Even when there is not water on the
surface of a 'karu', water can be uncovered beneath the ground by digging in a
soakage well, 'tjukitji' (e.g. Layton 1986: 18), as in (35) and (36). Example (34)
describes Anangu obtaining water in the earth (using the word for creek sand
paki) after surface water has dried up. The speaker tells of digging in ‘karu’
sand with a crowbar until ground water seeps out. Component (h) portrays the
water held in the ground in a ‘karu’. Ground water is talked about in
Pitjantjatjara/Yankunytjatjara using a number of terms, notably kapi tjunu ‘water
from underground’ and kapi mantangka (kapi/mina ‘water’, manta/pana
‘ground’, -ngka, locative suffix).

(34) Nyakupai ngurilpaila mina wiyaringkunyangka
nya-kupai nguri-lpail-la mina wiyaringku-nyangka
see-CHAR look.for-CHAR-1PL water finish-CIRC

mina pitjala ka karungka wiyaringkunyanka. Wirkara nyanganyi karu
mina pitja-la ka karu-ngka wiyaringku-nyanka wirka-ra
water come-SER CONJ karu-LOC finish-CIRC arrive-SER

Wirkara nyangnyi karu pulka nyaratja
wirk-a-ra nyanga-nyi karu pulka nyaratja
arrive-SER see-PRS karu big DEM

tjinguru mina ngari-nyi. Palu pitjala nyakupai.
tjinguru mina ngari-nyi palu pitja-la nyaku-pai
maybe water be-PRS CONJ come-SER see-CHAR

Kurupangka wakara ilalpai nyakulpai ngarinyi munu
kurupa-ngka waka-ra ilal-pai nyakul-pai ngari-nyi
crowbar-INS stick.into-SER pull.out-CHAR see-CHAR be-PRS

munu tjawal-pai. tjukitji mina tjukitji. Tjawara utilpai ka mina pulka pakalpai.
munu tjawal-pai tjukitji mina tjukitji tjawa-ra util-pai
CONJ dig-CHAR tjukitji water tjukitji dig-SER uncover-CHAR

‘We would go searching for water when the (surface) water was all
finished, (after) it came down and it was all finished in the karu. We get
there and look around. “That’s a big karu, maybe there’s water there
(below surface)”. So we’d go and see. We’d stick in a crowbar (in the
sand) and pull it out (to see): “It’s there”. Then we’d dig a tjukitji [soakage],
tjukitji well. We’d dig and uncover it and a lot of water would come up.’
(Field recording)
(35) Munuya karungka warmgalykura tjikilpai.
munu-ya karu-ngka warmgalyku-ra tjikil-pai
CONJ-3.PL karu-LOC get.water.from.a.soakage-SER drink-CHAR

'So they dug in the karu for soakage water.' (PYED: 225)

(36) Minyma-ngku karungka kapi tjunu walypayatangka twawani.
minyma-ngku karu-ngka kapi tjunu
woman-ERG karu-LOC water ground.water
walypayata-ngka tjawa-ni
tin-INS dig-PST

'The woman is digging a soakage in the karu with a tin.' (PYPD: 102)

A component mentioning ground water is not found in the explication for the Australian English creek. The same referent could be called a creek by Australian English speakers and a karu by Pitjantjatjara/Yankunytjatjara speakers. However, the fact that water is present under the ground in this place is not culturally salient for Australian English speakers, whereas it is for Pitjantjatjara/Yankunytjatjara speakers. As Myers writes of the neighbouring Western Desert group, the Pintupi:

For hunters and gatherers, the unavailability of water supplies poses the fundamental subsistence challenge. It is important to understand the nature of this resource. Although there are no permanent surface waters in the area, the Pintupi have found it possible to exploit other types of water supply. (…) Water is, then, a geographically specific resource, and Pintupi subsistence technology depends on knowledge of the location of water sources and the conditions under which they are likely to be usable as well as on movement to use them. (Myers 1991: 26-27)

Pitjantjatjara/Yankunytjatjara speakers, too, have traditionally used a number of other water resources, such as 'tjukula' 'rockholes', 'tjintjira' 'claypans', 'warku' 'rockpools', and 'tjukitji' 'soakages', mentioned above. Three of these concepts will be explored in chapter 4. One prominent feature of Pitjantjatjara/Yankunytjatjara water place concepts is the material make-up of a
type of place. These materials are “ground” ("manta/pana") and “rock” ("apu/pulj")). For example, ‘karu’ and ‘tjintjira’ are composed of “ground”, and ‘tjuku̱a’ consists of “rock”. Similar distinctions are made in other Aboriginal languages spoken in dry regions (see, e.g. Lowe and Pike 1990: 11-19 on Walmatjarri, Myers 1991: 26-27 on Pintupi).

3.5 Concluding remarks

To begin with, the cross-linguistic comparison in this chapter has uncovered, both differences and common factors in the conceptualization of long flowing-water places. People identify long places in the landscape in which there is water, but different languages and cultures label on the basis of different criteria. There is a rough conceptual and linguistic category which crosses the languages and cultures represented in this chapter that can be stated in universal language. This category is, roughly speaking, long places (stated in NSM as “places of this kind are long [m] places” and “places of this kind have two sides”), filled with water (stated in NSM as “there is water [m] in places of this kind”) which moves (stated in NSM as “the water in places of this kind is moving”). This category can be opposed to, say, hollows in the ground which can have water in them, such as ‘lakes’, ‘lacs’ (French), and ‘tjuku̱a’ (Pitjantjatjara/Yankunytjatjara), which I will treat in chapter 4.

In this chapter, I have demonstrated how the semantic differences between landscape terms in three languages, and one variety of English, can be captured and stated in precise detail using semantic explications composed according to the NSM. In section 3.3., I also contrasted my NSM analysis with Schwarze’s (2001) analysis of fleuve and rivière using his standardised language of representation. The NSM method of semantic explanation derives
its effectiveness from its reliance on simple terms, in contrast to more technical, opaque and language-specific ones, and the detailed explications provide a means of teasing out the differences the senses of individual landscape terms, both within and across languages.

The European languages examined in this chapter, English and French, the Australian variety of English, and the Australian Aboriginal Pitjantjatjara/Yankunytjatjara treat water in notably different ways. One cross-linguistic and cross-cultural difference which has been exemplified in the chapter regards the variability of the amount of ‘water’ present in long flowing-water places. Changing levels of water is not a feature of the English and French concepts. By contrast, the variation in the amount of water present in particular kinds of long flowing-water places is a feature of the Pitjantjatjara/Yankunytjatjara ‘karu’, and the Australian English ‘creek’, both from languages spoken in dry Australian environments.

The material make-up of kinds of places is clearly important in the meanings of terms for long flowing-water places. In French, English, and Australian English only ‘water’ is present in the senses of the words treated. By contrast, material composition is significant in the landscape categorization in Pitjantjatjara/Yankunytjatjara, including that of the long flowing-water place, ‘karu’. The substances ‘water’ (‘kapi/mina’), and ‘earth’ (‘manta/pana2’) are part of the concept and meaning of the word karu.

The fact that ‘earth’ and the water under the ‘earth’ are part of the sense of the Pitjantjatjara/Yankunytjatjara karu but not part of the sense of the Australian English creek is a notable finding. In the arid Anangu country of Central Australia, the exact same place can be called a karu by Pitjantjatjara/Yankunytjatjara speakers, and either a creek or a creekbed by
Australian English speakers. This fact indicates that culture and human affordance play roles in the meaning of words for long flowing-water places. Australian English speakers do not have the same history of using the sandy surface of this kind of place for various activities, and digging in the earth for water, as do Pitjantjatjara/Yankunytjatjara speakers.

Understanding the cultural factors in the meanings of individual lexical items, such as creek and karu, makes it possible to see the relationships between lexical semantics and categorization, on the one hand, and wider cultural models of land use, on the other; for instance the traditional water-gathering practices of Anangu (see, e.g., Strauss and Quinn 1997; Maffé ed., 2001).

Moreover, I have demonstrated that even well-described related European languages, spoken in neighbouring countries, and different varieties of the same language, English, can differ in their landscape categorization and meanings of landscape terms, using the examples of a number of words for long flowing-water places.

Firstly, English and French employ some size distinctions in their long flowing-water place words (cf. river vs. stream, fleuve vs. rivière), whereas Pitjantjatjara/Yankunytjatjara identify long flowing-water places with one word, karu, no matter what size they are. Secondly, French has two categories of kinds of big long flowing-water place, whereas English has only one category. This difference is due to the fact that in France, all the major long flowing water places feed into ‘the sea’. Thirdly, Australian English possesses a long flowing-water place concept which British English does not — ‘creek’. The adoption of this concept in Australian English is a result of of colonial settlers, from wetter parts of the world, coming to terms with a new kind of place in an unfamiliar
landscape. Nonetheless, Australian English still contains the word *river*, because this concept is also found in Australia, as in Britain.
Notes

1) As well as covering their relatively impassible nature, component (f) also conveys the width of ‘rivers’. It could be asked why width is not expressed in a component like that used in the explication of lake, component (d) (see 4.2.1):

when someone is on one side of a place of this kind, this someone can think like this:
“I am on one side of this place now
places on some other sides of this place are far from here”

This reason for this is that component (d) of the explication of lake also conveys the shape of ‘lakes’. By contrast, the shape of ‘rivers’ is covered is components (c) and (d) which convey the facts that ‘rivers’ are long places and that they have two sides. While people are able to go around ‘lakes’, people must cross ‘rivers’ in order to be on the other side. Therefore, component (f) is used in the explication of river.


5) Karu is the word form traditionally used in Yankunytjatjara, and angkuwai is the word form traditionally used in Pitjantjatjara. I only use the word from karu in this thesis because today it is the usual form used by Anangu who identify as Pitjantjatjara speakers (as opposed to Yankunytjatjara speakers). By contrast, in my discussion of elevated places in chapter 5, I use both the Yankunytjatjara form apu and the Pitjantjatjara form pulji because both these variants are used.

6) The word manta/paña is polysemous. The subscript 1 will be used to distinguish manta/paña₁ in the sense of ‘ground’ from manta/paña₂ in the sense of ‘earth’.

7) Nowadays Anangu drink water from rainwater tanks and bores, but the collection of water in the desert is well within living memory (Lester 1993: 54). Furthermore, as Young notes, “The holes dug in creek beds to extract the river red gum roots are perhaps the nearest contemporary equivalent [to digging soakage wells, H.B.] (…). The process of digging them is similar to that used to maintain soaks, as one digs downwards and water wells up from below.” (Young 2006: 249–250).
CHAPTER 4

LAKE, LAC, TJUKULA: STANDING-WATER PLACES

4.1 Introduction

In this chapter, I treat the semantics of words for standing-water places. One well known example of diversity in the meanings of landscape terms across languages from the same language family and from neighbouring countries is the case of the English words *lake* and *pond*, as compared with their French “translation equivalents”, *lac* and *étang*. As Mark and Turk write:

Mark (1993) discussed differences in water body categorization between French and English ... French appears to distinguish *étangs* [trans. as *ponds*, H.B.] from *lacs* [trans. as *lakes*, H.B.] based on water quality and a lack of a surface outlet, rather than giving priority to the size difference that ... separates *ponds* from *lakes* in English. (Mark and Turk 2003a)

This chapter takes this observation as a starting point for a deeper investigation into the precise semantics of the English terms *lake* and *pond*, and the French terms *lac* and *étang*, and their cultural, geographic, and historical underpinnings. Furthermore, the semantics of a selection words for standing-water places in the Australian Aboriginal Pitjantjatjara/Yankunytjatjara are examined.

The chapter is structured in the following manner. In 4.2, I will examine the English words *lake* and *pond*, and in 4.3, the French “translation equivalents” *lac* and *étang* are discussed. Then, 4.4, I will offer some ideas about why the words *pond* and *étang* have different senses, as well as their relationship with the terms *basin* (English) and *bassin* (French). Further, in 4.5, I will treat the Australian English word *billabong*. The next section, 4.6, deals with the
4.2 English words for standing-water places

4.2.1 Lake (English)

A ‘lake’ is a big area of still water surrounded by land. A word frequently included in definitions of lake is large (e.g. McKie 2003: 132). Furthermore, ‘lakes’ are deep. As the children’s science book Lakes and Ponds says, “Lakes are bigger and deeper than ponds” (Howard 2006: 4). Deep more frequently collocates with lake than with pond.

The water in a ‘lake’ is still or standing (e.g. Cumming 1995: 12). Both tranquil and still appear as frequent adjective modifiers on the wordsketch of lake, as in (1) and (2). This still quality is also reflected in place names, such as Lake Placid, and in in the simile “as calm as a lake”.

(1) ... magnificent landscape of snow-capped mountains, tranquil lakes ... (Wordbanks Br Ephem)
(2) Before them stretched a dark still lake. (Wordbanks Br Books)

There are places around ‘lakes’ – ‘shores’ – where people can do things (see also 6.4). Definitions of lake commonly include the phrase “surrounded by land” (e.g. Oxford English Dictionary Online (OED)). Due to this feature of ‘lakes’, the word lake has some phraseology which it does not share with pond. Shore and shoreline appear on the Wordsketch for lake, but not for pond (see (3) and (4)), and the word edge collocates more with lake than pond. In (3) someone keeps a boat on a lake shore, and in (4) a woman washes at a lake’s edge.
The concept of a ‘shore’ is based on the concept of ‘land’, or, in simpler terms, “places where people can live”. A place must also be of sufficient size for people to perceive that its edges be of some use as a ‘shore’. A ‘shore’ can be used by people to enter or exit the water, for activities like swimming or boating.

The water in ‘lakes’ is clear. Although ‘lakes’ are, for the most part, still, there is some changeover of water in ‘lakes’, unlike in ‘ponds’. On the wordsketch of lake the modifier crystal-clear appears, but does not on the wordsketch of pond (see (5)).

(5) Floating in the water of a crystal-clear lake.... (Wordbanks Br Reg News)

Drawing on the evidence presented above, lake is explicated in [A].

[A] a lake (English)

a. a place of one kind
b. there is a lot of water [m] in places of this kind
c. there are places where people can live on all sides of places of this kind
d. when someone is on one side of a place of this kind, this someone can think like this:
   “I am on one side of this place now
   places on some other sides of this place are far from here”
e. the water [m] does not move much in a place of this kind
f. places of this kind are big places
g. the bottom [m] of a place of this kind is far below the ground [m] in the places on all sides of this place

Component (a), which appears in all the explications in this chapter, is the standard “place” component used in NSM work on landscape terms.

Component (b) states that there is a lot of water in places of this kind.

The phrasing in semantic primes “places where people can live” is used to account for the ‘land’ concept when it is required in semantic explications of
landscape terms (see 6.1). Component (c) speaks of the “places where people
can live” which surround a ‘lake’.

Component (d) of [A] presents a human perspective on a ‘lake’. In
Wierzbicka’s preliminary remarks on topographic concepts, she noted that the
surface of ‘lakes’ “constitutes a large part of the “landscape” (i.e. of the part of
the surface of the Earth which one can see from one place)” (Wierzbicka 1989:
54). She also observed the same about the size of ‘mountains’ and ‘hills’. I
agree that the size of kinds of places can be measured with reference to the
human range of vision. However, I propose that the semantic components
which relate to a person experiencing a ‘lake’, or another expanse of water,
differ from those relating to a person seeing a ‘mountain’ or a ‘hill’. ‘Mountains’
and ‘hills’ are visually prominent, not only because of their size, but also
because they are elevated (see 5.2.1 and 5.2.2). On the other hand, ‘lakes’ are
not elevated, and, most of the time, a person needs to be beside an expanse of
water in order to judge its size.

Therefore, in (d), a ‘lake’ is presented as being experienced by a person
on one side of this place. By contrast, components which describe someone
seeing a ‘mountain’ or a ‘hill’ do not specify that this person is on one side of
this place because places of these kinds can be seen from a distance (see
5.2.1 and 5.2.2). The size of a ‘lake’ is explained in component (d) by the
person’s thought that they are on one side of this place and that places on
some other sides of the lake are far from here. Component (f) “places of this
kind are big places” also treats the big size of a ‘lake’.

In (e), the still nature of the water is portrayed. The water is said not to
move much. This qualification “much”, in part, distinguishes ‘lakes’ from ‘ponds’.
As the previously mentioned children’s science book tells us, “Lakes get their
water from springs, streams, and rivers", and therefore there is some movement
and changeover of water in 'lakes' (Howard 2006: 4).

The depth of a 'lake' is conveyed in (g). The concept of 'depth' implies the
point of view of person looking from top to bottom, whereas the concept of
'height' implies the perspective of a person looking from bottom to top
(Wierzbicka 2006b: 144). However, the two concepts are not symmetrical.
People are often able to see more parts of a 'high' place, such as a 'mountain',
than they can of a 'deep' place', such as a 'lake'. Often the 'bottom' of a 'lake'
cannot be seen, and its surface is not conceptualized as the 'top' (Wierzbicka
2006b: 147). For this reason, 'depth' can be portrayed by the relationship
between the ground in the places on all sides of a 'lake', where a human
observer would be at the 'bottom' of the place. As psychologist of ecological
and visual perception James J. Gibson points out, the ground serves as "the
reference surface for all other surfaces" (Gibson 1979: 33). Therefore, the depth
of 'lakes' is portrayed in the explication by stating that the bottom of a place of
this kind is far below the ground in the places on all sides of this place.

4.2.2 Pond (English)

A 'pond' is a place where there is a small amount of still water. 'Ponds' are
created by people, rather than occurring naturally, unlike 'lakes', which tend not
to be artificial.

Pond is explicated in explication [B] and the components are justified
below.

[B] a pond (English)

a. a place of one kind
b. there is water [m] in places of this kind
c. when someone is on one side of a place of this kind, this someone can think like this:
   "I am on one side of this place now
   places on all other sides of this place are near here"
d. the water [m] in these places does not move
e. places of this kind are small places
f. the bottom [m] of a place of this kind is not far below the ground [m]
   in the places on all sides of this place

Size is an important factor in determining what is classed as a 'lake' and what is
classed as a 'pond' in English (Mark 1993: 277). Many definitions and
discussions of the word pond mention the word lake, and specifically say that a
'pond' is the smaller of the two (e.g. Longman Dictionary of Contemporary
English (LDOCE)). The difference in the size of a 'pond' versus a 'lake' is
reflected in the differences between the explications of the two words.
Component (b) of [B] differs from that in the explication of lake in that it speaks
only of "water", rather than "a lot of water".

Components (c) and (e) also capture the smaller size of 'ponds' as
compared to 'lakes'. Component (e) describes 'ponds' as "small places" and
contrasts with component (f) of lake which describes 'lakes' as "big places". In
(c) the experience of someone on one side of a 'pond' is captured. It is similar to
component (d) of the explication of lake. However, in the scenario in [B], a
person can think that places on all other sides of a 'pond' are near the place
where this person is, because of a 'pond's smaller size.

Component (c) used to explicate lake ("there are places where people can
live on all sides of places of this kind") is not included in explication [B] of pond.
It sounds unnatural to say that a 'pond' is water "surrounded by land", or
surrounded by "places where people can live", because a 'pond' is too small.
This kind of description is not found in any definition of pond I have consulted.
The absence of the phrase pond shore on Wordbanks suggests that the edges
of a ‘pond’ are not very significant. Unlike the land on the edges of a ‘lake’, they do not act as a ‘shore’ for people entering or exiting the water.

Many of the occurrences of the word pond in the corpus refer to places which were created by people for specific purposes. Frequent compounds on a wordsketch include fish pond, lily pond, duck pond, and goldfish pond, as in (6) and (7). Similar compounds are not found on the wordsketch of lake. The creatures and plants which live in ‘ponds’ are, fittingly, and unsurprisingly, small, and thrive in shallow water.

(6) ... I sat by the goldfish pond ... (Wordbanks Times)

It is, however, not just size which separates ‘ponds’ from ‘lakes’. Water quality is also a factor in English standing-water place categorization. As is the case for ‘lakes’, water in ‘ponds’ does not move a lot. Wordsketches give tranquil and still as frequent adjective modifiers for both words (see (7)). However, the quality of a ‘pond’s’ still water is different to that of a ‘lake’s. As mentioned in the discussion of ‘lake’, ‘ponds’ have a closed environment, receiving water from rainfall, or, sometimes, springs. (A frequent collocate of pond is spring-fed). Stagnant, muddy, and murky, frequently occur with pond, but not often with lake (see (8)). Therefore in component (d) of the explication of pond, is phrased “the water in these places does not move”, instead of “the water in these places does not move much”, as in the explication of lake.

(7) ... a ... tranquil duck pond in the gardens. (Wordbanks Times)
(8) ...there was a stagnant pond for tadpoles ... (Wordbanks Br Reg News)

Depth is also a difference between ‘lakes’ and ‘ponds’. A children’s science books characterizes ‘lakes’ as “deeper than ponds”, and says that
“ponds are small and shallow” (Howard 2006: 4). Component (f) of the explication of pond portrays the shallowness of a ‘pond’. It states that “the bottom of these places is not far below the ground on all sides of these places”. By contrast, the depth component of lake (g) states that the bottom is far below the ground on all sides of these places.

4.3 French words for standing-water places

4.3.1 Lac (French)

I now turn to look at two French words for standing-water places, beginning with lac, as in (9).

(9) Le château surplombe le grand lac profond ... ‘The castle overlooks the large, deep lac ...’ (Hamié 2010: 259)

I propose that the meaning of the French lac can be explicated using the same explication as the English lake [A]. I will repeat this explication in [C], and I will include some discussion below.

[C] un lac (French)

a. a place of one kind
b. there is a lot of water [m] in places of this kind
c. there are places where people can live on all sides of places of this kind
d. when someone is on one side of a place of this kind, this someone can think like this:
   “I am on one side of this place now
   places on some other sides of this place are far from here”
e. the water [m] does not move much in a place of this kind
f. places of this kind are big places
g. the bottom [m] of a place of this kind is far below the ground [m] in the places on all sides of this place

Just as English ‘lakes’ are described as large, so too are French ‘lacs’ described as grand ‘large’. For example, Dictionnaire de l'Académie française, 9th ed. (DDLAF, 9th ed.) defines lac, in part, as “grande étendue d'eau” 'large
expanse of water'. Le Trésor de la Langue Française informatisé (TLFi) includes the collocations *lac immense* 'huge lake' and *lac profond* 'deep lake' (see (11)). In [C], component (b) accounts for the large amount of water in a 'lac'. The big size of a 'lac' is captured in component (f).

Like a 'lake', a 'lac' can be said to be "surrounded by land", or "entourée de terres" (e.g. Larousse Online (DL)). Component (c) portrays the 'land' (or "places where people can live") on all side of a 'lac'.

French phraseology relevant to the 'land' which surrounds a 'lac' includes *les bords d'un lac* 'edges of a lac', *le rivage d'un lac* 'shore of a lac', and *les rives d'un lac* 'shores of a lac', as in (10) (Le Nouveau Petit Robert Dictionnaire (NPRD); TLFi).

(10) Un camping «nature» au bord d'un lac. La chaîne Huttopia, soucieuse de l'environnement, a installé depuis 2005 ce camping sur les rives d'un lac au sein d'une réserve ornithologique. ‘“Nature” camping beside a lac. The environmentally friendly Huttopia chain, installed in 2005 this campsite on the shores of a lac within a bird sanctuary.’ (Gillet and Tassel 2011: 187)

As in a 'lake', the water in a 'lac' is, in most places, still. The water can be described as *eaux dormantes* 'still water' (*Dictionnaire de l'Académie française*, 4th ed. (DDLAF, 4th ed.)). *Calme* 'calm', *immobile* 'still', *dort* 'still' and *tranquille* 'tranquil' are found as collocations in TLFi, as in (11). There is also the place name Lac Tranquille.

(11) En tout, 50 chambres spacieuses et claires au bord d'un lac tranquille. ‘In all, 50 bright and spacious rooms beside a tranquil lac.’ (Paris 2007: 510)
Water quality is also a factor in the meaning of lac, as in the meaning the English lake. The adjectives pur ‘pure’ and limpide ‘clear’ are collocates, as in (12) (TLFi).

(12) Ils se retrouvèrent au bord du lac limpide où la belle aventure avait commencé.... ‘They met beside the clear lac where the great adventure began....’ (Roze 2010: 83)

The water in a ‘lac’ can be described as clear because there is some changeover of the water, as written about by the environmental protection organization Rappel:

Le lac est alimenté par différents cours d’eau (ruisseaux, rivières et sources souterraines) ...

‘A lac is fed by different watercourses (ruisseaux (roughly, streams), rivières (roughly, rivers) and underground springs ...’ (<http://www.rappel.qc.ca/lac/composantes.html>, accessed 18/11/2011)

For this reason, component (e) which describes the still nature of the water in a ‘lac’ does not simply say that the water does not move. Rather, the component qualifies this statement by saying “in many parts of places of this kind” and “at many times”.

4.3.2 Étang (French)

I now turn to look at the other word in the French pair, étang. An ‘étang’ is a place where there is shallow, still water. ‘Étangs’ vary in dimension and lack a surface outlet. For example, DL states that an ‘étang’ is an “étendue d’eau stagnante, naturelle ou artificielle” ‘expanse of stagnant water, natural or artificial’. In Le Grand Robert Dictionnaire de la Langue Française (GRDLF), the word étang is defined, in part, as “étendue d’eau reposant dans une cuvette à
fond imperméable” ‘expanse of water resting in a basin with an impermeable bottom’.

Furthermore, although dictionary definitions say that an ‘étang’ is not as large as a ‘lac’, this statement is qualified with the word généralement ‘generally’. However, hedges are not used in the definitions of the English word pond which speak of the relative sizes of ‘ponds’ and ‘lakes’. ‘Étangs’ come in a range of sizes, so to speak. They vary in size from a “petit étang” ‘small étang’ of an area of around 200 to 400 metres squared, to a body of water of a several hundreds of hectares, or to something in between (Brillard 2010: 3, 13, 53). However, ‘étangs’ of all types are shallow (Brillard 2010: 13; TLFi).

Many ‘étangs’ used for aquaculture were established in the Dombes region of France in the late Middle Ages (Arthaud et al 2011: np.; Pinchemel 1969: 291). These ‘étangs’, like ‘ponds’, are less than a few metres deep. However, because the ‘étangs’ are so much larger in area than ‘ponds’, alternative English translations are often given, such as rain-water pools or shallow lakes (Arthaud et al 2011: no page no.; Encyclopædia Britannica; Pinchemel 1969: 291).

There is French phraseology concerning the land which surrounds ‘étangs’. As in the case of ‘lacs’, ‘étangs’ can have la rivage ‘shore’, les rives ‘shores’ and les bords ‘edges’ (see (16)) (TLFi). Because some ‘étangs’ have a large diameter, people speak about this land similarly to how they speak about the land which borders ‘lakes’ and ‘lacs’. Places such as the rives ‘shores’ of an ‘étang’ can be used for acquacultural and recreational activities. In this way, ‘étangs’ differ from ‘ponds’, which do not have ‘shores’ (see section 3.2).

(16) Les deux enseignants organisateurs ... s'étaient fixé deux objectifs: ... et bien sûr, s'intéresser à la faune et à la flore des rives d'un étang.
‘The two teacher organizers ... had two objectives: ... and, of course, to interest them in the fauna and flora of the shores of an étang.’

I will now weave the evidence presented above into an explication of étang in [D].

[D]    un étang (French)
   a. a place of one kind
   b. there is water [m] in places of this kind
   c. when someone is on one side of a place of this kind, this someone can think like this:
      “I am on one side of this place now
       places on some other sides of this place are far from here”
   d. at many times, in all parts of these places the water [m] does not move
   e. places of this kind are not small places
   f. the bottom [m] of a place of this kind is not far below the ground [m]
      in the places on all sides of this place

Component (b) states that there is water in places of this kind. As in the explication of pond, the word “water” is simply used, as opposed to the phrasing “a lot of water” used for lake and lac.

Component (c) captures the human perspective on an ‘étang’. This component differs from the one used in explication [B] of pond, which uses the phrasing “I am on one side of this place now, places on all other sides of this place are near the place here”. Instead, the same component used for lake and lake, “when someone is on one side of a place of this kind, this someone can think like this: “places on some other sides of this place are far from the place where I am” ” is employed because an ‘étang’ is larger in diameter than a ‘pond’.

Component (d) is identical to that in [B] of pond. The stagnant nature of the water in an ‘étang’ is portrayed by stating that “the water [m] does not move in a place of this kind”. In his book on ‘étangs’ based on historical sources
Derrière chez moi, il y’a un étang: Les étangs, textes d’hier, regards d’aujourd’hui et de demain ‘Behind my House there is a Pond: Ponds – Yesterday’s Texts, Observations of Today and Tomorrow’, fish biologist and writer Roland Brillard characterizes the sources of water in ‘étangs’:

Leur remplissage se fait par gravité à partir des eaux venant des versants et de l’amont du bassin, ou par pompage soit en rivière soit dans la nappe phréatique. ‘Their filling is done by gravity from the waters from the slopes and the upper basin, or by pumping a rivière (roughly, ‘river’) or ground water.’ (Brillard 2010: 13)

Component (e) conveys the size of an ‘étang’, as “not a small place”. Although ‘étangs’ vary in size, they are not small like a ‘pond’. Component (f) depicts the shallow depth of an ‘étang’ using the same wording as is used in component (f) of the explication of pond.

A final word is needed on a further use of the word étang in French. The largest place in France which features the word étang in its proper name is Étang de Berre near Marseilles. This place features on Wikipedia’s “List of largest lakes of Europe” as the second largest French lake, as well as on French Wikipedia’s ‘Liste de lacs d’Europe’ ‘List of the lacs of Europe’. In English, Étang de Berre can be called, variously, a ‘lagoon’, a ‘tidal lake’, or an ‘inland sea’ (Mark 1993: 281).

In the department of Landes on the Atlantic Ocean and in the region of Bas Languedoc on the Mediterranean Sea, there are further bodies of water which use the word étang in their proper names. Some English language sources call them “lagoons”, or “coastal lagoons”, or “coastal lakes”, such as Étang de Cazaux et de Sanguinet in Landes (e.g. Mark 1993: 277; Williams and Roddis 2009: 135).
Mark puts forward the suggestion that the French word étang refers to places of three different geographic entity types, and proposes that they be categorized étang-pond, étang-lake, and étang-lagoon (Mark 1993: 280-281). As seen in [D], the first two “types” of ‘étangs’ can be accounted for with a unitary meaning. Furthermore, many French sources suggest that “coastal lagoons” are not “real” ‘étangs’. For example, the entry on étang in Larousse Encyclopédie offers the caveat “Les lagunes côtières sont parfois appelées étangs” roughly, ‘Coastal lagoons are sometimes called étangs’.4 (See also Brillard 2010: 3; DDLAF, 9th ed. GRBLF). For this reason, explication [D] fits the typical French ‘étang’, rather than a place such as Étang de Berre.

I suggest two possible scenarios to account for the use of étang in reference to what could be called a “lagoon” or “coastal lake”. Firstly, the word étang could be polysemous, and have two meanings. In this case, one of these meanings is the one given in [D], and the other, the sense of a “coastal lake”, would have to be explicated separately. Secondly, the use of the word étang in proper names, such as Étang de Berre, could simply be part of the toponym but not the categorization of the place. People could think of Étang de Berre as being a ‘lagune’ or a ‘lac littoral’ in the same way that people usually think of the approximately 250m tall Black Mountain in Canberra, Australia, as being a ‘hill’, as opposed to a ‘mountain’, in spite of its place name. This issue will not be pursued further in this chapter beyond this brief discussion.

4.4 The difference between pond, étang, basin, and bassin

Some light can be shed on the difference between the meanings of the words pond and étang by looking at the different histories of standing-water places in England and France, particularly, those in gardens. In Medieval times,
'ponds' or 'étangs' were established for the purpose of raising fish (for food) on the grounds of monasteries, country estates, castles, and in cities and towns, both in England and France (Bond and Tiller: 32-37; Brillard 2010: 18; Hoffmann 1996: 658-669; McLean 1981: 56, 60, 112). I propose that at this point in time, the referents for the words pond and étang were, most likely, similar, if not the same (based on examples in the OED).

During the late Middle Ages and the Renaissance period, the gardens of both England and France had a similar formal style based on straight lines, symmetry, and the order and control of nature (Thacker 1979: 121-137). Formal gardens contained man-made ornamental water features, such as what is called a ‘bassin’ in French, and a ‘basin’ (often spelt ‘bason’) in English (Thacker 1979: 144-145). A ‘bassin’ or a ‘basin’ was either a raised or sunken concave structure filled with water (Knight 1857: 305).

Later, from the early 18th century onwards in England there was a movement towards a more naturalistic garden, based on the wild and agricultural landscapes, which became known as the natural, landscape or English garden (Helmreich 2002: 135-154). These English gardens often included decorative ‘ponds’ which looked like smaller versions of the traditional practical ‘pond’ for the raising of fish (Haber 2004: 102). Places of this kind contrasted with the previous formal “bodies of water disciplined to the regular contours of basins” (Panofsky 1963: 273-274). That said, ‘basins’ continued to be found in English gardens, especially those which incorporated more formal elements (McIntosh 1853: 614-615).

A distinction was made in England between ‘ponds’ and ‘basins’. One English gardening book from the 18th century says that ‘basins’ are constructed from clay, cement or lead in geometric shapes, and describes them as smaller
than ponds (Miller 1768; see also Holme 1908). A key difference between ‘basins’ and ‘ponds’ is the extent to which they mimic nature. An early 20th century English garden book writes that the irregular growth of plants, while acceptable in ‘lakes’ and ‘ponds’, should not be permitted in ‘basins’ (Cook 1911: 122).

Elements of the naturalistic style of gardening, including natural-looking ‘ponds’, continue in contemporary garden design in England (Gaston et al. 2005: 3338; Thacker 1979: 253-280). In the present day, the naturalistic style of gardening is also practiced in France. Places similar to English garden ‘ponds’ are found in French gardens, but they are still categorized as ‘bassins’, as opposed to ‘étangs’. (They would be too small to be considered ‘étangs’.) To illustrate, an English book about garden ponds has been translated into French under the title *Bassins de jardin* (Bird 2010). In a 2007 French book on the construction of ‘bassins de jardin’, an overview of the different types of ‘bassins de jardin’ mentions the geometric ‘bassins’ of formal gardens, but says that the most frequently found type of ‘bassin’ in France today is found in *les jardins paysagers* ‘landscape gardens’. These ‘bassins’ blend in with the natural landscape, and incorporate water plants (Guillet 2007: 12).

I propose that the semantics of *basin* (English) and *bassin* (French) would include components not found in the explications of *pond* and *étang*. One component would portray the fact that they are made by people because they want there to be a little water in another place, say, a garden. It could be phrased (at least provisionally), as “people make [m] places of this kind in some other places, because they want there to be a little water [m] in these other places”. Another component would treat the fact that they are purely decorative. It could be phrased, “people can think about these places like this:
"someone can feel something good, when they see a place of this kind". Given that ‘basins’ and ‘basins’ can be raised about the ground, a component conveying depth by way of the relationship between the ‘ground’ and the bottom of the place would not necessarily be appropriate. However, one could refer to the ‘top’ of a ‘basin’ or a ‘bassin’, unlike a ‘lake’, ‘lac’, ‘pond’, or ‘étang’.

4.5 Billabong (Australian English)

Like the sense of creek in Australian English, the meaning of the word billabong reflects the dry nature of Australia and its intermittent supply of water (see 3.2.3). However, unlike creek, the word billabong originated in Australia, and is only used for places in Australia. Billabong comes from the Wiradjuri language of Central New South Wales, and is formed via the morphemes, bila ‘river’, -bang, a suffix signifying a continuation in time or space (Australian National Dictionary (AND); Ludowyk 2004). It was originally used as a place name with reference to the Bell River in Central New South Wales (AND). The first citation of billabong in AND, not used as a place name, is dated 1853 (AND).

A ‘billabong’ is a kind of place formed from the old channel or a bend of a river or a creek. When there is a lot of water in the river or the creek, water flows into this part. After the volume of water in a river and a creek goes down, the water in in this part can be cut off from the rest of the river or creek by earth. For the most part, the water in ‘billabongs’ is still, but it can move during flood (AND). Like the case of Australian creeks, the level of water in ‘billabongs’ varies, depending on the rainfall. A ‘billabong’ is curved and can also be described as an ‘oxbow lake’ (Jones 2004).

After the ‘flood’ the evidence remains: a ‘drift’ is deposit of sand and gravel left by floodwaters; a ‘billabong’, ‘blind creek’ or ‘anabranch’ is formed by the greatly varying water levels and volumes of most Australian watercourses. An increased volume of water will form a braided pattern of stream; when the volume is reduced, water is left in a hydrological cul de sac. (Arthur 2003: 145)

A ‘billabong’ is considered a uniquely Australian kind of place, and occupies a special role in Australian culture. *Billabong* is not an everyday Australian landscape term, but rather, a word associated with folklore. The Australian bush ballad (folk song) and “unofficial national anthem”, “Waltzing Matilda” tells the tale of events which happen “by a billabong” (see (17)); see also, 8.4). The song is a tragic, anti-authoritarian story of a swagman ‘itinerant labourer’ who prefers to drown himself in a ‘billabong’ rather than to surrender to the police. The word *billabong* appears four times in the song: “once a jolly swagman camped by a billabong”, “down came a jumbuck ‘sheep’ to drink at the billabong”, “up jumped the swagman and sprang into the billabong’, and “his ghost may be heard as you pass by that billabong”. It is in the context of this song that the word *billabong* is, for the most part, known by Australians (Richardson 2006: 73-74).

‘Billabongs’ are also closely associated with “bunyips”, a kind of monster, originally from South Eastern Australian Aboriginal belief, that lives in freshwater places in Australia but can move onto land (AND). In their book, *Bunyips: Australia’s Folklore of Fear*, Robert Holden and Nicholas Holden write of the bunyip as “a lurking presence in the depths of the billabong” (Holden and Holden 2001: 11). The idea of the ‘bunyip’ was taken up by non-Indigenous
Australians in the early 19th century, and has appeared in popular culture, particularly in children’s stories (Holden and Holden 2001: 16).

Moreover, there is a series of children’s books called the Billabong books by Mary Grant Bruce, set as at station (‘ranch’) named Billabong after the ‘billabong’ on the property. These books appeared between the 1910s and the 1940s, and were popular into the 1960s with Australian, New Zealand, and British children. There is also an Australian-based surfware and wetsuit brand called Billabong which is popular internationally (Warshaw 2005: 61).

Illustrative examples of billabong in Australian English follow in (17)-(21).

(17) Once a jolly swagman camped by a billabong
Under the shade of a coolibah tree ... (Waltzing Matilda, 1895, by A.B. ‘Banjo’ Paterson, cited in Treloar 2008: 47)

(18) 1896 ‘Billabong’ ... is the aboriginal equivalent of ‘anabranch’ – a natural by-wash or secondary channel, running, as a rule only in flood-time. The Billabong Creek is a billabong of the Murray; so are the Edwards, the Gulpa, the Wakool, and a host of minor intermittent streams. A billabong may form the flood-connection of two separate rivers ...

(19) 1925 Where one finds a disused channel of a river, holding water and filled during flood the term ‘billabong’ is used. A billabong may be a backwash, blocked by debris at its mouth, or an old detour, abandoned after a new course has been found by the stream.

(20) Droving cattle ... was the only task that Long Creek’s ringers had been doing since the drought had dried up the billabongs. And a dry billabong was something that happened long after the creeks had stopped running. (Nicolson 2010: 325)

(21) The fence cut off our access to the sandy billabong on the German’s land, which we regarded as our own. It had flooded severely some years earlier ...

Drawing on the previous discussion, the explication of billabong [E] and some further discussion follow.

[E]   a billabong (Australian English)

a. a place of one kind
b. often there is water [m] in places of this kind
c. sometimes there is a lot of water [m] in places of this kind
d. when someone is on one side of a place of this kind, this someone can think like this:
"I am on one side of this place
places on some other sides of this place are not far from here"

e. places of this kind are not big places
f. people can think about a place of this kind like this:
   "this place is near a long [m] place where there is water
   this place is not a long [m], not like places of other kinds where there is water
   this place is like part of something round [m]
   the water [m] in this place doesn't move much,
   not like the water in places of other kinds where there is water"
g. places of this kind are in one country [m], this country is Australia [m]

As with the components in the explication of creek, components (b) and (c) portray the varying amount of water in a ‘billabong’. Component (b) depicts the fact that often there is some presence of water in ‘billabongs’. Component (c) states that sometimes there can be a substantial amount of water there. The differing amount of water in a ‘billabong’ is shown in examples (20) and (21). In (20) drought dries up the ‘billabongs’, and in (21) a ‘billabong’ has flooded severely. In the explications of the previous English and French words, only one component for water appears and it does not specify that the amount varies at different times (see 4.2; 4.3).

Components (d) and (e) are the size components of the explication of ‘billabong’. A ‘billabong’ is not a big place, like a ‘lake’, but not always as small as a ‘pond’. Therefore ‘billabongs’ are said to be “not big places” in component (e). Component (d) depicts the thought of a person on one side of a ‘billabong’ that places of some other sides of the ‘billabong’ are not far from here.

In component (f), the contrast between a ‘billabong’ and the river or creek from which it is formed is depicted. A ‘billabong’ is near a long place where there is water. However, a ‘billabong’ is not a long place, but it is like something round due to its curved shape. It also differs from rivers and creeks in that its water does not move much.

Component (g) gives us the unique location of ‘billabongs’ – in Australia. Country concepts can appear in the explications of kinds of places which are
considered to be distinctly associated with one particular country (see also, chapter 8 on the bush). “Country” and “Australia” as semantic molecules are also needed to explicate other “Australia-specific” words, such as kangaroo and bush (in the relevant sense).

4.6 Pitjantjatjara/Yankunytjatjara words for standing-water places

I will now turn to look at words for standing-water places in Pitjantjatjara/Yankunytjatjara. Although these kinds of places can contain still fresh water, they could not be classified as either ‘lakes’, or ‘lacs’, or ‘ponds’, or ‘étangs’. Places of these kinds may not even be recognized as places of any particular kind by English or French speakers used to ‘lakes’ or ‘étangs’, or by speakers of many other languages. Untrained eyes might not notice that these places are even physically part of the landscape. I will treat the terms tjukula (glossed as ‘rockhole’), warku (glossed as ‘rockpool’), and tjintjira (glossed as ‘claypan’).

I will first make some general comments on water in desert Australia. Writers Pat Lowe and Jimmy Pike, a Walmatjarri man, speak of standing-water place concepts in Walmatjarri, an Aboriginal language of the Great Sandy Desert, “Because water was so precious in the lives of desert people, they paid particular attention to places where it could be found at different times of the year, and had special names for the various kinds of holes or cavities in which water might collect” (Lowe and Pike 1990: 11). The same applies to Anangu, whose concepts of water sources are similar to those of Walmatjarri people.

As mentioned earlier, the nomadic movement of Anangu was dictated by the availability of water. Anthropologist of Aboriginal Australia, Ian Keen, reports that Western Desert people, “moved according to the direction in which they
could see rain falling, the location of known staples, and the trend of known lines of waterholes” (Keen 2004: 110-111).

4.6.1  *Tjukula* (Pitjantjatjara/Yankunytjatjara)

The first Pitjantjatjara/Yankunytjatjara word I will treat is *tjukula*, defined as “a deep rockhole, hollow or hole in rock that holds water” in the *Pitjantjatjara/Yankunytjatjara to English Dictionary* (PYED). A wide variety of places are labelled with the word *tjukula*. As anthropologist of the visual culture of Anangu, Diana Young writes, “*Tjukula* rockholes range from tiny scoops a few feet across, to pools large enough for many children to swim in” (Young 2006: 246). One ‘tjukula’ could be a deep hole in the middle of the bush (*puṭi*) with a small stony opening. Another ‘tjukula’ could be a large, rocky pool, set in the rocky, hilly country (*apu/puli*) such as the well-known and visited ‘tjukula’, Muṯijulu waterhole at Uluru (Ayers Rock) (Layton 1986: 28).

As mentioned in 2.4.3, ‘tjukula’ are particularly associated with ‘wanampi’ ‘water snakes, Rainbow serpents’, which are, as previously quoted, “a class of legendary beings who carry water underground from one available source to another” (Layton 1986: 25). Young also writes that “reliable water sources, usually deep dark rock holes and *waḷa* springs are regarded as *Wanampijara* having *Wanampi*” (Young 2006: 248). Therefore, unlike the other Pitjantjatjara/Yankunytjatjara words treated in this thesis, a reference to a spiritual being is needed in the explication of *tjukula*.

*Tjukula* is explicated in [F]:

[F]  *tjukula* (Pitjantjatjara/Yankunytjatjara)

a. a place of one kind
b. often there is water [m] (*kapi/mina[m]*) in places of this kind
c. sometimes there is a lot of water (kapi/mina) in places of this kind
d. the bottom of this place is below the (kapi/mina) in the places on all sides of this place
e. when people see a place of this kind they can think like this:
   “the bottom of this place is rock (apu/pulji)”
f. beings of one kind can live in these places

There are two components, (b) and (c), which treat the water in ‘tjuku’a’. Component (b) “often there is water in places of this kind” conveys the fact that, most of the time, ‘tjuku’a’ have some amount of water, although they may not be full. The qualifier “often” is used because it is possible for ‘tjuku’a’ to be completely dry (Layton 1986: 34). Component (c) captures the situation in which a ‘tjuku’a’ is an abundant source of water. This state happens after a lot of rain, as is reported in (22).

(22) Kapingku puyinnyangka kutju kapi puŋka tjukulangka ngaripai.

Kapi-ngku puyin-nyangka kutju kapi puŋka
water-LOC rain-CIRC only water a.lot

‘Only when it rains is there lots of water in the rockholes (tjuku’a)’. (PYPD: 102)

Component (d), “the bottom [m] of this place is below the ground [m] in the places on all sides of this place” portrays the shape of ‘tjuku’a’. This component is quite general in comparison with components in explications of previous terms, such as (g) of the explication of the lake and French lac, which specifies that “the bottom of this place is far below the ground [m] in the places on all sides of this place”. Because ‘tjuku’a’ have a variety of depths, a more general component is used.

Material make-up is an important component of

Pitjantjatjara/Yankunytjatjara place concepts (Bromhead 2011a: 68, 72; see
also Myers 1991: 27 on Pintupi). ‘Tjukuła’ are composed of rock, or, in Pijantjatjara/Yankunytjatjara, apu/pulji (see 5.2.3 on apu/pulji). In response to a question about the differences between ‘tjukuła’ and ‘tjintjira’, two native speakers answered that ‘tjukuła’ are “pulingka” (pul ‘rock’, -ngka locative case suffix), but ‘tjintjira’ are “mantangka” (manta ‘earth’, -ngka locative case suffix). Component (e) covers the “rock” (“apu/pulji”) from which a ‘tjukuła’ is formed. The component brings in a human perspective on ‘tjukuła’. It is framed in terms of what people can think when they see a place of this kind. The fact that the component refers to the bottom of a ‘tjukuła’ being made of “rock” is important because it is this property which explains why a ‘tjukuła’ holds water for so long. The water can’t seep away into the ground because it is held in a rocky basin, so to speak.

Component (f), “beings of one kind can live in these places”, accounts for the ‘wanampi’ ‘water snakes’ which can live in ‘tjukuła’. The component uses the new semantic prime BEING that is necessary to explicate words for spiritual and religious beings such as angel (English) and malā ‘ika (Arabic) (see Habib forthcoming). Furthermore, the phrasing “can live in these places” does not rule out a dry ‘tjukuła’ which a ‘wanampi’ may have left, or the case in which an Anangu person does not believe in ‘wanampi’. (However, today many Anangu hold Christian and traditional beliefs systems side by side. (Young 2006: 246)).

4.6.2 **Warku (Pitjantjatjara/Yankunytjatjara)**

I will next discuss the word warku, defined as “hollow in rock, where water collects after rain” in PYED. A consultant too describes a ‘warku’ as a little hollow in which there is water following rain in (23).
Munu papulanguru minangku puyinnyangka ngati tjuku-tjuku ini warku. Warkungka ngaripai mina.

‘And when it rained there was a little hollow called a warku. There would be water in warku’. (Field Recording)

A further description of ‘warku’ comes from Young, “Warku is the water that collects in shallow puddles on rock surfaces during rain” (Young 2006: 250). ‘Warku’ are also very temporary. They are “ephemeral, remaining perhaps for only a few days or hours” (Young 2006: 250).

‘Warku’ vary less than ‘tjukula.’ Unlike ‘tjukula’, which come in a range of sizes, ‘warku’ are all small. ‘Warku’ are hollows in a larger expanse of rock, and therefore they are mostly found in the rocky, hilly country (‘apu/puli3’) (Young 2006: 250). By contrast, as discussed, ‘tjukula’ can be located both in the bush (‘puši’), and the rocky, hilly country (‘apu/puli3’).

Because ‘warku’ are so small, they can only hold a small amount of water. On the other hand, ‘tjukula’ sometimes contain a lot of water. In (24) a consultant talks about how Anangu used to move around the country, according to the water sources available. Once a group has finished the small amount of water in a ‘warku’, they move to a ‘tjukula’ where there is a lot of water.

(23) Munu papulanguru minangku puyinnyangka ngati tjuku-tjuku ini warku. Warkungka ngaripai mina.

Munu palula-nguru CONJ mina-ngku water-LOC puyin-nyangka rain-PURP ngati hollow

Tjuku-tjuku ini warku. Warku-ngka ngari-pai mina. small name warku warku-LOC be_lie-CHAR water

(24) Ka nyara palunya tjiki-ra wantikatipai – mina tjuku-tjukutjara, munu mina pulka-kutu ankupai tjukulakutu.

Ka nyara palunya tjiki-ra wantikatipai – mina tjuku-tjukutjara, munu mina pulka-kutu ankupai tjukulakutu.

Ka nyara palunya tjiki-ra wantikatipai – mina tjuku-tjukutjara, munu mina pulka-kutu ankupai tjukulakutu.
They drank that water and then left it (the warku) – it only had a little water. They went to (a place with) a lot of water, to a tjukula. (Field Recording)

The group’s movement is typical for Western Desert Aborigines (Gould 1969: 266; Keen 2004: 110-111):

Like ‘tjukula’, a ‘warku’ are composed of “rock”. Example (25) illustrates the material make-up of ‘warku’. In a book on traditional plant use, a woman describes using the water in ‘warku’ to soak some sweet sap collected from mulga trees (‘kurku’). She speaks of the ‘warku’ being hot because the sun has heated the rock (‘apu’), in which it is set.


They get plenty of water in mimpu bowls, and then go soak the mulga honey in water, in shallow little depressions (‘warku’) in the rocks. Where it’s really hot because the sun’s heated up the rock. After soaking it a while we’d drink it really hot .... From the hot rock.’

(Goddard et al. 1995: 41)

Warku is explicated in [G]:
[G]  *warku* (Pitjantjatjara/Yankunytjatjara)

a. a place of one kind
b. sometimes there is a little water [m] in places of this kind
c. the places on all sides [m] of places of this kind are rock[m] (apu/pulį₁[m])
d. the bottom [m] of these places is very near the ground [m] in the places on all sides of these places
e. places of this kind are small
f. when people see a place of this kind they can think like this:
   "the bottom of this place is rock[m] (apu/pulį₁[m])"

Component (b) treats the small amount of water sometimes found in ‘warku’.
Component (c) states that ‘warku’ are located “in” ‘rock’. Component (d) portrays the shape of ‘warku’. As in (29), a ‘warku’ can be described in Pitjantjatjara/Yankunytjatjara as *ngatį tjuku-tjuku* ‘a small hollow’. The word *shallow* is used to describe ‘warku’ (Young 2006: 250; Goddard et al. 1995: 41).
Component (c) is more specific than the shape component used in the explication of *tjuku* (component (d) of explication [F]). The bottom of a ‘warku’ is “very near” the ground, as opposed to the bottom of a ‘tjukula’, which is “below” the ground.

In component (e) the small size of ‘warku’ is covered. The explication of *tjuku*, by contrast does not have a component treating size. In terms of the shape component (d) and the size component (e), the explication of *warku* more closely resembles the explications of *lake, lac, pond* and *étang* than it resembles the explication of *tjuku*. Explications of the four English and French terms contain a size component. In addition, these explications specify whether or not the bottom of these places is far below the ground.

Component (f) depicts the composition of ‘warku’ as “rock” (“apu/pulį₁”). This component is identical to (e) of *tjuku*, which treats its material make-up.

4.6.3  *Tjintjira* (Pitjantjatjara/Yankunytjatjara)
The next word I will discuss is *tjintjira*, which is glossed as 'claypan'.

'Tjintjira' are very shallow indentations in the earth of various sizes. A thin layer of water lies in 'tjintjira' after rain. The term *tjintjira* appears in (26), along with *tjukula* and *warku*, as one of the kinds of standing-water places filled after rain.

(26) *Kapi uwankaralta ngaringi, tjukulangka, warkungka, tjintjirangka, winkingka.*

Kapi uwankara-lta ngari-ngi, tjukula-ngka,
Water everywhere-PRT lie.be-PST.IPFV tjukula-LOC
warku-ngka, tjintjira-ngka, winki-ngka.
warku-LOC tjintjira-LOC whole-LOC

'There was water everywhere, in *tjukula*, in *warku*, in *tjintjira*, all over.'
(PYED)

*Tjintjira* is explicated in [G].

[H] *tjintjira* (Pitjantjatjara/Yankunytjatjara)

a. a place of one kind  
b. sometimes there is a little water [m] *(kapi/mina [m])* in places of this kind  
c. often there is no water [m] *(kapi/mina[m])* (in places of this kind  
d. all parts of a place of this kind are earth [m] *(“manta/pana”)*  
e. when there is water [m] in places of this kind,  
   the ground [m] *(“manta/pana”)* in these places is not like the ground [m]  
   on all sides of places of this kind

In [H] two components treat the varying amount of water in ‘tjintjira’.

Component (b) covers the times when there is a little water in a ‘tjintjira’.

Component (c) portrays the usual state of a ‘tjintjira’, which is one without water.

Anthropologist of Anangu, Robert Layton writes of the very temporary nature of ‘tjintjira’, and compares them with ‘tjukula’ (using the English phrase *rock hole*).
The most transient of water sources is the claypan, *tjintjira*. Claypans have a large surface area in relation to their depth – the opposite of rock holes – so they are particularly vulnerable to evaporation. (Layton 1989: 28)

Example (27) illustrates the presence of water in ‘*tjintjira*’ after rain.

(27) *Takataka tjuta pitjala tjintjirangka nyinapai kuwari*
takataka tjuta pitja-la tjintjirangka nyina-pai kuwari
duck PL come-SER tjintjira-LOC sit-CHAR

*puyintjitjangka.*
puyi-ntjitjangka
rain- SEQ.CIRC

‘Ducks come and sit on the water in *tjintjira* after it’s rained.’ (PYPD)

Unlike ‘*tjukuLA*’ and ‘*warku*’, ‘*tjintjira*’ are composed of ‘earth’ (‘*manta/pana2*’). This property is accounted for in component (d). As mentioned previously, consultants described differences between ‘*tjukuLA*’ and ‘*tjintjira*’, in terms of ‘*tjintjira*’ as “mantangka” (*manta2* ‘earth’, -ngka, locative suffix), and ‘*tjukuLA*’ as “pulingka” (*puli1* ‘rock’, -ngka, locative suffix). Naturally, the earth of ‘*tjintjira*’ is particularly soft and moist when there is water in it, as compared with the earth in the area which surrounds it. This earth can be described in English as “clay”. Component (f) treats the nature of the earth in ‘*tjintjira*’, and specifies that “when there is water in places of this kind, the ground in these places is not like the ground on all sides of places of this kind”.

4.7 Concluding remarks

Standing-water place words reveal crucial factors in landscape categorization and semantics, both universally, and from the perspective of cross-linguistic and cross-cultural comparison.

To begin with, the chapter’s cross-linguistic comparison has revealed, along with differences, certain shared elements in the conceptualization of
standing-water places. People identify places in the landscape in which there is water, but different languages and cultures use different factors in this identification. There is a rough conceptual and linguistic category which crosses the languages and cultures represented in this study that can be stated in universal language. This category is, roughly speaking, hollows in the ground (stated in NSM as “the bottom of a place of this kind is below the ground in the places on all sides of this place”) which also have water in them (stated in NSM as “there is water in these places”). This category can be opposed to, say, ‘long places’ with flowing water, such as ‘rivers’, ‘fleuves’ (French), and ‘karu’ (Pitjantjatjara/Yankunytjatjara) (see chapter 3). (For standing-water places from more languages, see Enfield 2008; Heyes 2011; Johnson 2011; Mark 1993; O’Meara and Bohnemeyer 2008).

The European languages discussed in this chapter, English and French, treat water in markedly different ways to the Australian Aboriginal Pitjantjatjara/Yankunytjatjara. Cross-linguistic and cross-cultural differences which have been exemplified in the present study include, for example, the fact that what can be thought of as “a lot of water” can differ, depending on the geographic environment in which languages are spoken. To illustrate, the desert language Pitjantjatjara/Yankunytjatjara can identify a ‘tjukuja’ as, at times, having a lot of water, whereas in British English and French French it is only larger places, such as ‘lakes’ and ‘lacs’ which could be seen as such. In addition, places such as ‘warku’ and ‘tjintjiira’, which have small amounts of ephemeral water, would not have enough water to be picked out as significant by English and French speakers. The variability of the amount of ‘water’ present in a particular standing-water place is also a feature of the
Pitjantjatjara/Yankuny tjatjara concepts and the Australian English ‘billabong’, but not of the words from the European languages.

The material composition of kinds of places is significant to the senses of words for standing-water places. In French and English, only ‘water’ is present in the meanings of the selected terms. By contrast, as in a number of other languages (e.g. the Mexican language isolate Seri, see O’Meara and Bohnemeyer 2008), material composition is a leitmotif of landscape categorization in Pitjantjatjara/Yankunytjatjara, including that of standing-water places. The substances ‘water’ (‘kapi/mina’), ‘earth’ (‘manta/pana₂’), and ‘rock’ (‘apu/pu!h’ ) are part of the concepts and meanings of the words for standing-water places in Pitjantjatjara/Yankunytjatjara. The present study has exemplified the distinction made between water places located in ‘rock’ versus those located in ‘earth’, and, in the case of ‘tjintjira’, the quality of the ‘earth’ (see also on Australian Aboriginal languages, Lowe and Pike 1990: 11-19 on Walmatjarri; Myers 1991: 26-27 on Pintupi).

Furthermore, I have shown that, in some cases, a reference to Anangu spirituality is needed in the explications of Pitjantjatjara/Yankunytjatjara landscape terms by way of the explication of tjukuJa. Particular places of other kinds, such as ‘apu/pu!i₂’ ‘hill, rocky outcrop’ (see 5.2.3) can have spiritual associations. For example, Layton writes of an “a hill called Wiputa, associated with the legend of the Two Boys who built Uluru from mud during the tjukurpa” (Layton 1986: 3). But ‘tjukuJa’ have a particular association with the spiritual beings, ‘wañampi’ ‘water serpents’, whereas the places of other kinds treated in this thesis do not have such specific spiritual associations. Also, the meanings of the English and French covered are rooted in the concrete and human worlds, as opposed to the spiritual.
Moreover, I have shown, in agreement with Mark (1993), that even well-described related European languages, spoken in neighbouring countries, can differ in their landscape categorization and meanings of words for kinds of places, using the examples of a number of words for standing-water places. However, I have gone further than the brief survey study of Mark (1993) by deeply exploring the semantics of a selection of words for standing-water places and the conceptual categories of an area of landscape classification in English and French. The study has revealed that the English lake and the French lac have the same meaning. Furthermore, I have explicated the precise differences between the English pond and the French étang and the words' historical and cultural underpinnings, as well as their relationship with another category of standing-water place in English and French, the purely decorative, 'basin' or 'bassin'. In addition, this chapter has shown that, contra Mark (1993), so named large "coastal lakes" do not belong to the category of 'étang' in French (at least not in the same category of 'étang' as inland 'étangs').
Notes


5) The status of “make” as a semantic molecule is currently under investigation.


7) “A lot of” is a so-called portmanteau construction and is equivalent to the primes VERY and MUCH.
CHAPTER 5

MOUNTAIN, HILL, APU: ELEVATED PLACES

5.1 Introduction to Elevated Places

In this chapter I examine some terms for kinds of elevated places, such as *mountain* in English and *apu/pulji2* in Pitjantjatjara/Yankunytjatjara. As pointed out by philosopher Barry Smith and cognitive geographer David M. Mark in their paper on the ontology of landforms, “Do Mountains Exist?” (2003), one physical reality of the Earth is that the elevation of its surface varies. To humans, these variations are often visually prominent, and also affect how people can move in the environment. We make sense of these distinctions in the landscape by creating categories, like ‘hill’ or ‘apu/pulji2’ (Pitjantjatjara/Yankunytjatjara), which appear lexicalized in our languages (Smith and Mark 2003: 419-420).

As briefly discussed in the introductory chapter, some have suggested that the concept of a ‘mountain’ is universal (see 1.4; see also Smith and Mark 2003 for discussion on the existence of ‘mountains’). “Mountain” was included by Morris Swadesh as his 86th item on the 100-word list of Basic Vocabulary Items. The Swadesh list is used in work on language change and linguistic reconstruction, as well as being used for elicitation by field linguists (Swadesh 1972: 283). The words on the list were chosen on the grounds that they are high frequency items which one would expect to find in all languages (Trask 1996: 23). Furthermore, the philosopher John Searle uses the category of a ‘mountain’ as an exemplar of a completely objective physical reality, what he calls a “brute fact” (Searle 1995). However, words and categories of kinds of elevated places do vary across languages and cultures as was briefly touched
on in the introductory chapter with reference to English, Spanish, and Pitjantjatjara/Yankunytjatjara (see 1.1).

Previous cross-linguistic studies too come to this conclusion. In papers in Burenhult and Levinson eds. (2008), one finds a lot of diversity in terms for elevated places (Burenhult 2008: 140-141). For example, some languages do not make the same size distinction that English makes with its terms mountain and hill. The Mayan language Tzeltal has the one term for an individual elevated place, witz (Brown 2008: 162). The same is the case for Lowland Chontal, a language isolate of Mexico which uses the term ijwala; Yéli Dnye, a language isolate of Papua New Guinea which uses the term mbu; and the Austronesian Kilivila which uses the term koya (Levinson 2008: 261; O’Connor and Kroefges 2008: 298; Senft 2008: 351).

In other languages elevated places are categorized according to the material from which they are composed. One case is the Mexican language isolate Seri which has the term hast cop glossed as ‘mountain’ but formally analyzable as “stone DEF.ART.SG stand” (O’Meara and Bohnemeyer 2008: 322). Languages also vary in their number of terms for elevated places. On the one hand, Lao has the sole term phuu2, meaning ‘mountainous terrain’, but not a dedicated term for an individual elevated place. On the other hand, as I will detail further in this chapter, Spanish is rich in terms for elevated places (see 5.4).

The documentation of terms for elevated places in a number of languages, and work on some of their semantic and syntactic properties is valuable (see papers cited from Burenhult and Levinson eds. 2008; also Mark and Turk 2003a). However, obscure terms, such as “eminence” and “convex topographic feature”, are often used in description. In cases of these kinds the technical
terms are more complex than the words which are themselves being described. For example, the ethnophysiography school proposes the concept “convex” as a category to be used in a geographic ontology which would provide a framework in which to define landscape terms (Mark and Turk 2003b). Despite the existence of this previous work, even the precise semantic details of everyday English terms such as *mountain* and *hill* are not well set out in the literature.

For example, D.A. Cruse in his book *Lexical Semantics* (1986) proposes the following componential analysis of the English terms *mountain, hill, hillock,* and *mound*:

- **mountain**: extremely large earth-protuberance
- **hill**: very large earth-protuberance
- **hillock**: fairly large earth-protuberance
- **mound**: moderately large earth-protuberance (Cruse 1986: 195):

This analysis can be criticized not only on the grounds that the phrasing “earth-protuberance” is highly obscure, but also because it implies that the four terms are all on a par with one another, varying only in size. In fact, *mountain* and *hill* are frequent ordinary landscape terms and can be considered a pair. On the other hand, a ‘mound’ implies something made by people or animals, and the term *hillock*, mostly confined to British English, seems to have a direct relationship with the term *hill*, but this is not indicated in the definitions (Goddard 2011: 419). Brief analyses of this kind also cannot include other aspects of the meanings of these terms, such as the visibility of these kinds of places, and the way in which people can move in these places. The NSM semantic explications contained in this chapter spell out the semantic details of a selection of terms for elevated places.
A further piece of evidence of the importance of inclines and elevations to human beings comes from another area of language. In some languages space is conceptualized on an uphill-downhill axis. Speakers of these languages talk of people, things, and actions in terms of their location on a mountain cline, for example, “my uphill leg”. Some Tibeto-Burman languages of the Kiranti family spoken in Nepal even incorporate the uphill-downhill dimension into their grammar (Bickel and Gaenszle 1999: 15).

For example, in Rai languages of the Kiranti family relative altitude is indicated in adverbs, as well as marked on demonstratives, and, uniquely among languages, featured in the locative case system (Ebert 1999: 105). The following illustration comes from the creation myth of the Camling language in which the first beings Salapa and Simnima are brother and sister. The example (1) describes how Salapa leaves his sister and goes up to Wabuma, a place in the high mountains, so as to prevent incest. The high altitudinal locative case marker -di appears on the place name Wabuma and the low altitudinal locative case marker -i appear on tyukh ‘there’.

(1) Wabuma-di wan-khata, tyukh-i m-nicho
    W. -highLOC climb-go there-lowLOC his-y.sibling
    chit-yi-dyo ...
    leave-3PAT V2:TELIC:3PAT

‘He went up to Wabuma (a holy place) and left his younger sibling down there ... ’ (Ebert 1999: 108)

That said, in this chapter, I confine myself to looking at landscape categories and words for these categories. To begin with, in 5.2, I will examine the senses of some basic terms for kinds of elevated places, mountain and hill in English, and apu/puli in Pitjantjatjara/Yankunytjatjara. Next, in 5.3, I will turn
to look at some English words for larger places in which there are many elevated places congregated together, *the mountains, the hills, and mountain range*. In 5.4, I will discuss some Spanish words for kinds of elevated places, *montaña, cordillera,* and *sierra*. In 5.5, I will discuss the English language “cliff” words of *cliff* and *precipice*, and related Spanish terms *acantilado, precipio* and *despeñadero*.

5.2 *Mountain, hill, apu/pul*í³

5.2.1 *Mountain* (English)

A ‘mountain’ is a large area of land which is higher than the land that surrounds it and has steeply sloping sides. The top part of a ‘mountain’ is often a distinctly shaped summit or peak. The use of the word *mountain* is illustrated in (2)–(8).

(2) One morning ... a Buddhist monk began to **climb a tall mountain**. (Wordbanks US Books)
(3) Erwin looked back up at the **mountaintop**... (Wordbanks Br Books)
(4) ... he peered out the window at a **distant mountain** ... (Wordbanks US Books)
(5) ... the wispy band of cloud kissing the **distant mountain peaks** ... (Wordbanks Br Books)
(6) ... snowboarding down **steep mountain slopes**. (Wordbanks Oz News)
(7) ... **soaring, snow-capped mountains** against deep-blue sky ... (Wordbanks US News)
(8) ... **majestic mountains** that ring the lake like jagged jewels. (Wordbanks Oz News)

To describe a ‘mountain’ in more detail, firstly, it is a very big place. When a person looks at a ‘mountain’ up close it takes up a large amount of their frame of vision. There is the metaphorical use of the phrase “a mountain of”, which describes something physically large of a certain shape, e.g. “a mountain of washing”, “a mountain of presents”, or even something large which does not
have a physical form, e.g. “a mountain of debt”, “a mountain of good will”. A big, bulky man can be described as “a mountain of a man”.

Secondly, a ‘mountain’ is high above the places around it. Frequent collocations found on a wordsketch of *mountain* include *towering* and *tall*, as in (2) (Wordbanks wordsketch *mountain*, 28/10/12). As well as being elevated, a ‘mountain’ has a certain shape. ‘Mountains’ frequently have a well-defined top part in the form of a ‘summit’ or a ‘peak’, as demonstrated by combinations such as *mountain summit* and *mountain peak* (see (5)). One can also speak of ‘mountains’ as being *snow-capped*, as in (7).

Importantly, a slope of varying degrees of steepness is required for a land formation to be called a *mountain* or a *hill*. For example, the Australian landmark Uluru (Ayers Rock), with its long flat top and relatively sheer sides, is described in English as a *rock*, rather than as a *mountain* or a *hill*. In response to the question “What makes Ayers Rock a rock and not a mountain?” posted on Yahoo Answers, a respondent wrote in part, “They [mountains] are a different shape and are a lot higher”.¹ A Wordbanks wordsketch lists *steep mountain*, not *flat mountain*, and *mountain slope*, not *mountain flat* (see (6)) (Wordbanks wordsketch *mountain*, 28/10/12). Furthermore, a piece of ethnographic, but non-linguistic, evidence for the shape of a ‘mountain’ is that people tend to represent ‘mountains’ in drawings with steeply sloping sides and a defined peak (see Trend et al. 2000).

Throughout this thesis, I propose that ethnogeographical concepts are anchored in a human-centred perspective, based on human vision and experience in space. I am drawing on the psychologist James J. Gibson’s idea of “the affordances of the environment”. These are the activities that humans’ natural surroundings allow them to do. According to Gibson, one of the main
Concerns of humans in the environment is locomotion. People notice terrain features which influence how easily they can move around in a particular place. Gibson identifies one of these terrain features as a “slope”.

A *slope* is a terrain feature that may or may not afford pedestrian locomotion depending on its angle from the surface of the level ground and its texture. A ramp with low inclination can be negotiated; a cliff face with high inclination cannot. (Gibson 1979: 37)

Furthermore, people must use different kinds of locomotion for varying degrees of gradient. As Gibson writes, “Slopes between vertical and horizontal afford walking, if easy, but only climbing, if steep” (Gibson 1979: 132). To climb a ‘mountain’ requires moving with more effort than one uses when walking on the flat.

Linguistic evidence suggests that when people conceive of the sloping sides of elevated places they do so in terms of how someone can move on them. To illustrate, in a children’s encyclopedia definition of a ‘hill’ as “a small mountain with gently sloping sides” a ‘hill’s’ sides are assessed as ‘gentle’. What ‘gentle’ means in the context of a slope is that it is easy for someone to move up this hillside. *Gentle* is an adjective which relates to human bodily experience. For example, “gentle cloth” (arch.) is soft to touch and yields to pressure (*Oxford English Dictionary Online* (OED)); a “gentle breeze”, which can contrast with a “biting wind”, does not greatly affect someone’s skin; a “gentle heat” is one which could not harm humans; and a “gentle walk” is one which is not too taxing on a person’s body.

One of the striking characteristics of some elevated places is the fact that people can see them from afar. This is not the case with the previously explored freshwater places, such as ‘rivers’ and ‘lakes’. While *nearby* is a frequent
collocate for river, lake, mountain and hill, only mountain and hill frequently take the adjective distant (see (4)) (Wordbanks wordsketches mountain and hill, 28/10/12). A 'mountain' is particularly prominent because of its height, size, and shape. Visible is a frequent collocate of mountain, but not of hill (loc.cit).


The conspicuous aspect of a 'mountain' is connected to the relative nature of landscape concepts. A common example of this issue is the fact that in Australia people label certain elevated places as 'mountains' which in New Zealand, or other more mountainous areas, would only be called 'hills' (e.g. Stock 2008). As Peattie goes on to write in his definition of a 'mountain':

Conspicuity, like height, is a relative matter, and depends upon the personal evaluation or the standard by which it is measured. Many eminences but a few hundred feet high are termed mountains by dwellers on flat plains. (Peattie 1936: 3, cited in Jerome 1978: 22-23)

Since some English speakers live in rather flat landscapes with relatively low elevated kinds of places, such as Australia, they do not have bigger kinds of places with which to compare them. To Australian English speakers, these 'mountains' are high and conspicuous. Accordingly, even though the referents of the term mountain may be slightly different in various English-speaking countries, I propose that the concept of a 'mountain' to Australian English speakers remains the same.

As the writer and lexicographer Jay Arthur writes in The Default Country: A lexical cartography of twentieth-century Australia, “The flatness of Australia has bothered many colonists ... ” (Arthur 2003: 90). A number of early colonial
explorers of Australia wrote, often ruefully, that Australia lacked real 'mountains'. However, this did not prevent early explorers from using words such as *mount, mountain, and hill* in the toponyms which they applied to places in Australia. Indeed, the British preference for variation in the elevation of the landscape, or, as Arthur puts it, their hilly "default country" propelled explorers to speak about places in Australia as 'mountains' and 'hills', even though these places did not measure up to 'mountains' and 'hills' elsewhere (Arthur 2003: 90; Carter 1993: 48).

In his book, *The Road to Botany Bay: An essay in spatial history*, historian and writer Paul Carter suggests that the application of the words *mount* and *hill* to places in Australia was necessary for colonists to speak about the landscape. Carter writes:

> In applying the class term 'mount' or 'hill', the observer was not describing a geographical object, he was attempting to differentiate the landscape in such a way that he could write about it and get on. Mountains or hills were essential in bringing space into the realm of communication. They transformed spatial extension into a spatial text, a succession of conceivable places that could be read. Whether they existed or not was by the way: they were necessary differences without which a distinct idea of the landscape could not be formed. The early travellers, then, invented places, rather than found them. ... Geographical class names created a difference that made a difference. They rendered the world visible, bringing it within the horizon of discourse. (Carter 1993: 50-51)

In our times, Australians do not conceptualize many places which include the words *Mountain, or Mount*, in their proper names as actual 'mountains' – they often prefer to call them 'hills' (see the case of Black Mountain in the ACT in 4.3.2). For example, playwright Louis Nowra says in his memoir, *The Twelfth of Never*, that Mount Sugarloaf in Victoria is "not really a mountain but a hill":

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Mount Sugarloaf is not really a mountain but a hill that dramatically rises straight out of the paddocks, but like all landscape eruptions in Australia it has been eroded over time, so it doesn't call attention to itself. (Nowra 2000: 177)

However, this is not to say that there are not any places in Australia which people would regard as 'mountains'. Looking at a few geography books, some written for school students, and some for the general reader, published in Australia, the USA, and the UK, one finds that, while the relatively flat nature of Australia is often pointed out, these books do in fact categorize some Australian places as 'mountains', without using caveats such as "not really a mountain" (Chicola and English 1999: 127; Debenham 1960: 448-449; Haggett 2002: 3209; Heintzelman and Highsmith 1961: 300; Parker et al. 2009: 20; Rayburn 1995: 57).

I would suggest that when Australian English speakers use the word *mountain* in relation to some places in Australia, they are conceptualizing these places as very big, peaked elevated kind of places which are very conspicuous and difficult to ascend. Therefore, explication [A] could serve for *mountain* in Australian English. Indeed, the reluctance of Australian English speakers to apply the word *mountain* to many places with *Mountain* or *Mount* in their names reflects that Australians do share the same concept of 'mountain' as speakers of other varieties of English.

I will now weave together my observations into an explication of *mountain* in [A]:

[A]  *a mountain* (English)

a. a place of one kind  
b. places of this kind are very big places  
c. the top [m] of a place of this kind is very far above the places on all sides of this place  
d. the top [m] of a place of this kind is not like all the other parts of these places  
e. often when people are far from a place of this kind they can see this place
f. when people see a place of this kind they can think like this:
'someone can't be at the top [m] of this place if some time before it is not like this: this someone does some things for a long time, not like people do in many other places because of this, this someone's body moves in this place as this someone wants during this time this someone can feel something bad in their body because of this'

Component (b) accounts for the large size of a 'mountain'. Component (c), "the top [m] of a place of this kind is very far above the places on all sides of this place", covers the elevation of a 'mountain'. Similar components are used in the explications of other elevated features, such as hill and apu/pu/ʃi2. In this case, a 'mountain' is characterized as being "very" far above, as opposed to simply "far" above. The phrasing accounts for the great height of 'mountains':

The semantic molecule "top" is used in explications of kinds of elevated places in this thesis. Its significance to the conceptualization of these places can be seen in compounds such as mountain top (or mountaintop) (see (3)), hill top, and cliff top. Component (d) captures the idea that 'mountains' have summits which are distinct from the rest of the place.

In component (f) the steep nature of a 'mountain' is portrayed. This component is framed in the first line in terms of a judgement which people can make when they see this place. The judgement is about how someone would have to move in this place. In the second line the assessment is phrased by saying that someone cannot be at the top of a 'mountain' without there having been a certain chain of events some time earlier. Lines three to five contain the necessary scenario. In lines three and four someone moves for some time in a way which is different to how people move in many other places. The greater effort involved in moving up a slope is accounted for in line five which says that this person can feel something bad in their body because of the ascent. Component (e) covers the visibility of 'mountains' to people from afar on account of their size, height, and shape.
There are other connotations of the term *mountain* which are not, I argue, part of the semantic invariant and are therefore not included in the semantic explication. ‘Mountains’, because of their great height, are more likely to have snow on them than places of other kinds. One sees this connotation in frequent collocates of *mountain* such as *snowy* and *snow-covered* (Wordbanks wordsketch *mountain*, 28/10/12). These collocates appear more frequently with *mountain* than with *hill*. There is a specific term *snow line* which is “the height above which there is snow all year round on a mountain” (Wilkes 1980: 3). Secondly, ‘mountains’ are often described on Wordbanks as ‘rocky’, ‘rugged’, ‘craggy’ or ‘jagged’ and this ties in with their steep nature.

Finally, as the writer Bill McKibben observes, a ‘mountain’ is “not simply higher than a hill; the very word mountain also implies a brand of majesty” (Lopez and Gwartney 2006: 236). Due to the extremes of ‘mountains’ in terms of their size, height and shape, the adjectives *majestic* and *spectacular* commonly occur with *mountain*, but not with the term *hill* (see (8)). Moreover, particularly because of their visibility, ‘mountains’ can be said to dramatically *soar* and *loom* (e.g. “the mountain soared rose-red into the sky”, see also example (7)). By contrast, ‘hills’ are not frequently described in that manner (Wordbanks wordsketches *mountain* and *hill*, 28/10/12).

5.2.2 *Hill* (English)

I will now move down from a ‘mountain’ to discuss the concept of a ‘hill’. A ‘hill’ is smaller than ‘mountain’ and not as high above the land that surrounds it. Combinations such as *tall hill* and *towering hill* sound a lot less natural to native speakers than those where the same adjectives joined with *mountain*, and do not appear in the Collins Wordbanks wordsketch for *hill*. Conversely, the
collocation *low-lying hill* is found in the wordsketch (Wordbanks wordsketch *hill*, 28/10/12).

Examples of *hill* follow in (9)–(13).

(9) ... a tightly packed community at the foot of a **steep hill** (Wordbanks Br Books)
(10) Beneath them lies a broad and **gentle hill** ... (Wordbanks OzNews)
(11) A cold wind had whipped up over the **rolling** brown hills. (Wordbanks US News)
(12) I walk my dog on the **hill** every morning. (Wordbanks Canadian News)
(13) ... on a wooded, gently **rounded hill**, is the imposing castle. (Wordbanks Br Reg News)

A ‘hill’ not only differs from a ‘mountain’ in size, but also in shape. The sloping sides of a ‘hill’ are easier for a person to ascend than a ‘mountain’. While **steep mountain** and **steep hill** are both frequent collocations, the descriptor **gentle** is only commonly found with **hill**. One can speak just as easily of ‘climbing’ a ‘hill’, as ‘climbing’ a ‘mountain’, but only ‘mountain’ has the dedicated category of a **mountain climber** on its wordsketch. The term **hill** also modifies **walker** and **walking** more frequently than does the term **mountain**. The verbs **scale**, **conquer** and **tackle** appear frequently in the corpus to refer to going up a ‘mountain’, but do not appear frequently to refer to going up a ‘hill’. This pattern suggests that people think of climbing to the top of a ‘mountain’ as requiring more effort than climbing to the top of a ‘hill’ (Wordbanks wordsketches **mountain** and **hill**, 28/10/12).

The tops of ‘hills’ are not distinct from the rest of the place as is the case with ‘mountains’. Therefore, because of this property and their more gentle gradient ‘hills’ are described as ‘rounded’, ‘undulating’, and ‘rolling’ in a wordsketch (see (11) and (13)). By contrast, **rounded**, **undulating** and **rolling** are
not among the common collocates of *mountain* (Wordbanks wordsketches *mountain* and *hill*, 28/10/12).

Drawing on the evidence presented above, *hill* is explicated in [B].

[B] *a hill* (English)

a. a place of one kind
b. places of this kind are big places
c. the top[m] of a place of this kind is far above the places on all sides of this place
d. when people see a place of this kind they can think like this:
   "if someone wants to be at the top[m] of this place,
    this someone can do some things for some time like people do in many other places
    because of this, this someone's body can move in this place as they want"

Much of the analysis of the meaning of *hill* found in explication [B] reads as a "scaled down" version of that for *mountain* in [A]. In component (b), places of this kind are "big places", as opposed to being "very big places". In component (c) the "top" of the place is characterized as "far" above other places, unlike a *mountain* for which the comparable component is "very far".

The fact that a 'hill' is an elevated, yet relatively easily navigable place is specified in component (d). Like component (f) of explication [A] of *mountain*, it is framed in the first line in terms of an assessment people can make when they see this place. This assessment is about how someone can move in this place. In the case of a 'hill', the assessment which proceeds in lines 2-4 is that people can reach the top of this place by moving in the way people move in many other places. Moving in a special way with a lot of effort is not required, as it is in the case of a 'mountain'.

A 'hill' is not said to be visible from far away as is said for a 'mountain' in [A]. This is because a 'hill' lacks the conspicuous size, height and shape.

Anna Wierzbicka's paper "Baudoin de Courtenay and the theory of linguistic relativity" (1989) treats, in part, the human-centred nature of
landscapes terms, as is being explored in this thesis. The paper contains sketches of the senses of a number of English landscape terms, but not semantic explications of these terms. In this paper, she writes of hill:

... every native speaker of English will know that an anthill is not a hill. How does he know it? There must be something in the meaning of the word hill which makes it clearly incompatible with the size of an anthill. ... This suggests that all these words contain in their meaning some hidden standard which the speakers intuitively recognise. What could this standard be? (Wierzbicka 1989: 54)

She suggests that this standard reflects the anthropocentrism of human language, and that, in the case of landscape terms, this standard is the human range of vision.

[B] explicates the sense of hill, and this explication could not apply to anthill. To begin with, from a human point of view, component (a) "a place of one kind" is, I believe, incompatible with anthill, because an 'anthill' is a "thing of one kind", not a "place of one kind". Dictionaries implicitly support my proposal. For example, Collins Cobuild English Language Dictionary (CCELD) defines anthill, in part, as "a mound of earth formed by ants" (see also, American Heritage Dictionary of the English Language (AHDEL)). Also, in the same dictionary, the definition of mound is "a pile of earth or stones that looks like a small hill". A 'pile' is not a "place" but a "thing", and the phrasing "like a small hill" indicates that a 'mound' is not actually a 'hill' (see also, AHDEL).

Next, even if we were to suppose that an 'anthill' was a "place", component (b) would not apply to anthill. The component "places of this kind are big places" contains within it a reference to human vision, a point which I made in 3.2.1 in my discussion of river. The phrasing "places of this kind are big places", rather than "places of this kind are big" has built into it the standard
that “when people see this place they can think about it like this: this place is big”. Naturally, even if someone wanted to argue that an ‘anthill’ is a “place”, when people see an ‘anthill’, they would not think “this place is big”.

Furthermore, component (d) rules out an ‘anthill’. When someone is “on top of” an ‘anthill’, this situation is like someone being “on top of” an object like a table. In addition, if someone were to move so they were on top of ‘anthill’, this person would most likely step on or stand on an ‘anthill’, as opposed to walk up, as in the case of a ‘hill’. Even if stepping on an ‘anthill’ were to be construed as walking, the wording in component (d) “this someone can do some things for some time” would not apply to an ‘anthill’, for which the phrasing “a short time” or “a very short time” would be appropriate.

5.2.3  Apulpuji (Pitjantjatjara/Yankunytjatjara)

Now, I will turn to look at the Pitjantjatjara/Yankunytjatjara term, apulpuji, a polysemous word. The lexical forms of a number of vocabulary items in the two language varieties, Pitjantjatjara and Yankunytjatjara, differ, and the terms apu (Yankunytjatjara) and pulji (Pitjantjatjara) are one example. Here the form apulpuji is used. Some examples given use the Yankunytjatjara version, apu, and others the Pitjantjatjara pulji.

Apu or pulji can mean ‘rock’, as in example (13), translated as “killed a snake with a stone”. This meaning will be called apulpuji. In this section, I will examine the geographic meaning of apulpuji (apulpuji), which is glossed as ‘hills, mountain’ or ‘rocky outcrops’. Examples of apulpuji in both its senses follow in (14)-(20).
Examples with the meaning *apu/пу́лъ1*

(14) *апу*: (1) rock, stone:

*Mungarti ngayulu liru atunu *apungka.*

mungarti ngayulu liru atu-nu apu-ngka.
yesterday 1.s snake hit.with.a.stone-PST apu-INS

‘Yesterday I killed a snake with a stone.’ (PYED: 11)

(15) *Аpu* pitjiltjunanyi, pakalpaingka, *пули липи ngaranytjala.*

apu pile.rocks-put-PRS come.out-CHAR-LOC hole wide be-CIRC-LOC

‘You pile up rocks, so it (perentie lizard) can’t get out where the burrow’s wide.’ (PYED: 139)

Examples with the meaning *apu/пу́лъ2*

(16) *апу*: (2) hills, mountain:

*Kala Mulga Parkala wirkaра ngaringu. Аpu pulка itingka ngaringi.*

ka-la Mulga Park-ala wirka-ra ngari-nga
CONJ-1.PL Mulga Park-LOC arrive-SER camp-PST

apu пулка itingka ngari-ngi.
apu big near camp-PST.IMPV

‘When we arrived at Mulga Park Station we camped. We were camping near the big hill (there).’ (PYED: 11)

(17) *Пули nyara katu nyawa. Валу ngaranyi ka tjukuла ngaranyi tjukutjuku.*

пули дем top see-IMP rockface be-PRS CONJ

тжукула be-PRS small

‘Look up at the top of the hill. There’s a rockface and there’s a rockhole, a small (one).’ (PYED: 184)

(18) *Munula palulanguru ruta wiya anu tali пулкangka – тали palуру пулка mulapa, паня пули пурунъу.*

Munu-la palulanguru ruta wiya a-nu tali
CONJ-1.PL from.there road no go-PST sandhill

пулка-ngka – тали palуру пулка mulapa,
big-LOC sandhill 3.s big really

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panya pulি purunypa.
DEM pulি like

'From there on we went cross-country, through the sandhills – the sandhills are really big, like hills.' (PYED: 158)

(19) Pulি panya nyara taan nyinanyi, palula ngura ngaranyi.

panya pulি nyara taan nyina-nyi palula ngura be-PRS there place be-PRS

'In the hills, where that hump is, that's where the place is.' (PYED: 157)

(20) Pulি nyangatja lalpa. Mapalku ma-tatira ma-ukalingku-ku.

panya nyangatja lalpa. mapalku ma-tati-ra be-PRS in.no.time towards-climb-SER

mapalku ma-ukalingku-ku towards-go.down-FUT

'This is a hill that's easily climbed. You can climb up and down (the other side) in no time.' (PYED: 60)

Firstly, in my discussion I will consider the polysemy of apu/pulি. The NSM test for polysemy applied here follows the traditional 'definitional' approach (Geeraerts 1994). To begin with, one assumes there is a single meaning of a term and tries to form a single paraphrase which predicts the correct range of use (Goddard 2000: 132-133). In the case of apu/pulি a paraphrase such as "something very hard (or witu-witu in Pitjantjatjara/Yankunytjatjara)" would be too broad for its range of use. It would not take into account the use of ‘apu/pulি’ as "a place of one kind", rather than as "something". In examining the use of the word apu/pulি in this selection of examples, the two meanings emerge. Some examples show the apu/pulি meaning is something one can do things with, such as kill a snake, as in (14), or pile up, as in (15). Based on the discussion above, I will propose explication [C] for the meaning of apu/pulি.
[C]  *apulpují*1 (Pitjantjatjara/Yankunytjatjara)

a. something of one kind  
b. things of this kind are very hard [m]  
c. people can do things of many kinds with things of this kind (e.g. kill snakes, make tools, pile up)

Other examples show *apulpují*2 as a place where one can do things, such as camp near (′ngarinyi′), as in (15), and climb (′tatini′), as in (20). Another illustration of the specific “place” meaning of *apulpují*2 is the contrast between *apulpují*2 and terms for places of other kinds, such as *taan(pa)′rise, hump, outcrop′*, as in (17), and *tali′sandhill′*, as in (18).

I will bring together the evidence presented into an explication of *apulpují*2 in [D].

[D]  *apulpují*2 (Pitjantjatjara/Yankunytjatjara)

a. a place of one kind  
b. places of this kind are big places  
c. the top[m] of a place of this kind is far above the places on all sides of this place  
d. when someone sees a place of this kind they can think like this:
   “there is a lot of rock[m] (apulpují1 [m]) in this place”

Component (b) gives the idea that to be an ‘*apulpují*2′ a place must be of a reasonable size. Example (18) shows how ‘*apulpují*2′ are thought of as big, when ‘tali′ (′sandhills′) are likened to ‘*apulpují*2′ because of their large size. Component (c) is the same as that used in the explication of *hill* to convey the elevation of this kind of place. An ‘*apulpují*2′ is described as being “far above the places on all sides of this place”. Evidence for component (c) can be found in the use of *apulpují*2 with the spatial adverb *katu*, which can mean ‘above, on top of′ and ‘high, high in′, as in (17). One can also use the verb *tatini′climb, get up on′* with *apulpují*2 as in (20).
There is no ‘steepness’ component in the explication of *apu/pulji₂*, as there is in the explications of *hill* and *mountain*. This is because the term covers places with a wide range of gradients. A specific level of steepness is not part of the criteria for calling a place an *apu/pulji₂*. For example, Uluru (Ayers Rock) is an ‘apu/pulji₂’ but it would not be classified as a ‘mountain’ in English, as previously discussed (see 5.2.1).

Component (e) covers the material from which an ‘apu/pulji₂’ must be made – rock. In this component “apu/pulj₁” (‘rock’) is used as a semantic molecule. It is the material of an ‘apu/pulji₂’, not simply its elevation, which distinguishes it from the land around it.

Unlike in English, there is no size-differentiation in the terms for elevated features in Pitjantjatjara/Yankunytjatjara. Similar cases such as the term *ijwala’* in the language isolate Lowland Chontal spoken in Mexico were mentioned earlier in 5.1 (see O’Connor and Kroefges 2008: 298). In Pitjantjatjara/Yankunytjatjara, places ranging in size from a modest rock outcrop, a rocky formation protruding above the ground, to South Australia’s highest peak, Mt Woodroffe, are called *apu/pulji₂*.

In some languages, elevated places for which size is not a primary defining factor have a specific shape definition (such as conical, in the case of the Yéli Dnye *mbu*, Levinson 2008: 261). However, in Pitjantjatjara/Yankunytjatjara the material make-up of the place is crucial to the meaning of the term, rather than a particular shape (beyond elevation) (for a similar case in Seri, see O’Meara and Bohnemeyer 2008: 224-225).

Other Pitjantjatjara/Yankunytjatjara terms for elevated places include *apu/pulji murpu* ‘mountain range’, *warara* ‘cliff’, and *tali* ‘sandhill’. As is the case with water sources, the material from which a feature is composed is important
in the conceptualization of elevated places. The lexical form *tali* resembles *apu/pulji* in that it is polysemous between a geographic meaning ‘sandhill’ and a substance meaning of ‘sand’.

The lexical form *apu/pulji* has other meanings apart from *apu/pulji*₁ and *apu/pulji*₂, which are not discussed in detail here. *Apu/pulji* also has the senses, roughly, of “tool made from stone” and “coins”. Similar “rock” polysemies operate in many other Australian Aboriginal languages. One example is Warlpiri, which has the term *pirli*, whose meanings are proposed as ‘rock’, ‘mountain’ and ‘money’ (Nash 1983-1984). One further meaning of *apu/pulji* is as a particular type of eco-zone, glossed as ‘rocky, hilly country’. This sense of *apu/pulji*, *apu/pulji*₃ will be discussed in chapter 7 also with other Pitjantjatjara/Yankunytjatjara eco-zone terms, such as *puti* and *pila*.

5.3 More than one ‘mountain’

5.3.1 *The mountains, the hills* (English)

A notable way in which some words for kinds of elevated places differ from those for kinds of freshwater places, such as *river* and *lake*, is their propensity to occur in the plural. People tend to talk about ‘the river’ or ‘a lake’, but often speak of ‘mountains’ or ‘hills’ because of the way these kind of places are distributed in the natural world. ‘Mountains’, ‘hills’, and the like are often found next to one another in particularly elevated, high altitude regions. To illustrate, areas in which there are a lot of ‘mountains’ can be referred to, somewhat semi-scientifically, as *mountain regions*, as in “Mountain Watch”, a United Nations environmental report released for “the International Year of the Mountains” in 2002. As the report notes, “Mountain regions cover one quarter of the Earth’s terrestrial surface”, and they can be considered to be a specific kind of
‘environment’ or ‘ecosystem’ as seen in the use of the compounds mountain environment and mountain ecosystems (Blyth ed. 2002: 3).

In Wordbanks, at least 40% of all occurrences of the nouns mountain and hill are found in the plural, yet the figures for river and lake are less than 25%. One also finds the fixed expressions the mountains and the hills. These account for approximately a fifth of all instances of the nouns mountain and hill. By contrast, fixed expressions of this kind do not occur with river and occur much less frequently with lake (as in examples such as “We’d go for trips to the lakes” referring to the lakes of the Lake District in Northern England). Under a twentieth of all cases of the nouns river and lake are found in the constructions the rivers and the lakes (Wordbanks, accessed 21/9/11).

‘The mountains’ and ‘the hills’ are kinds of places where there are many ‘mountains’ and ‘hills’. OED tells us that “The pl. hills is often applied to a region of hills or highland; esp. to the highlands of northern and interior India” (OED). In (21) ‘the mountains’ is put on par with another variety of environment, ‘the beach’. One can talk of places of other kinds as being “in the mountains” or “in the hills”, as in (22), in which a village is “up in the hills”.

(21) By life-style, we don’t mean whether you like to vacation at the beach or in the mountains ... (Wordbanks US Books)

(22) It was a nice little village up in the hills. (Wordbanks Br Books)

One could explicate the mountains and the hills in [D] and [E].

[D] the mountains (English)

a. a place of one kind
b. there are many mountains [d] in this place
c. many places are part of this place
d. at many times when someone is in one of these places if this someone wants to be in another part of this place,
Components (b) of explications [D] and [E] state that there are many ‘mountains’ and ‘hills’ respectively in these places. In this component, “mountains” and “hills” appear as derivational bases (see 2.2.5). Therefore, they bring all the components of the senses of mountain and hill contained in explications (a) and (b) (see 5.2.1 and 5.2.2).

Components (c) and (d) describe ‘the mountains’ and ‘the hills’ as composed of many places (e.g. villages, country towns, farms) spread over a large geographic area. Component (c) states that there are many places. The spread out aspect of ‘the mountains’ and ‘the hills’ is captured in (d), which represents these places as taking some time to travel around.

One further component could be added to the explications of the hills and the mountains. The tentative component (e) “not many people live in this place” appears in brackets. However, this component may be part of older meanings of the terms. OED reports that the mountains was “formerly often used poet. with connotations of a region remote from civilization” (OED). This use can be seen in (23) from Shakespeare’s Twelfth Night in which the character of Olivia insults Sir Toby Belch by essentially calling him uncivilized or “fit for the mountains”.
Olivia: Will it be ever thus? Ungracious wretch!
    Fit for the mountains and the barbarous caves,  
    Where manners ne’er were preach’d. Out of my sight!
(Shakespeare, Twelfth Night, Act 4, Scene 1)

One sees this sense of "not many people live in this place" in the idiom
"take to the hills". This expression means ‘to leave civilization’, whether literally,
as in (24), or figuratively, as in (25):

(24) On their march through Greece, the Nazis overpowered the small Allied
    expeditionary forces ... Many took to the hills. (Wordbanks NZ News)
(25) I was terrified of school, " he says, " I hated it. ... I was very afraid of the
    teachers and I just took to the hills. (Wordbanks Times)

5.3.2 Mountain range (English)

In the children’s educational book Mountains (Blaxland 2000), on the first
page under the heading “What are mountains?”, the third fact one reads about
is “Mountains are usually clustered together in ranges” (Blaxland 2000: 4). The
next word for a kind of place formed by many ‘mountains’ which I will examine is
mountain range, a singular compound noun rather than a plural like the
mountains. A ‘mountain range’ is a long formation of many mountains which
acts as a natural barrier.

In geography and geology there are formal grades of long formations of
‘mountains’. According to writer John Jerome, the smallest form is a ‘mountain
range’. The next size up is a ‘mountain system’, which is a parallel alignment of
‘mountain ranges’. Several ‘mountain systems’ make up a ‘mountain chain’, and
a series of ‘mountain chains’ composes the largest category, the ‘mountain belt’
(Jerome 1978: 17). In ordinary English the terms mountain system, mountain
chain, and mountain belt are generally not used. To illustrate, in Wordbanks
mountain range is approximately nine times as common as mountain chain,
eleven times as common as *mountain belt*, and 43 times as common as *mountain system* (Wordbanks, 22/9/11).

The term *mountain range* is often used in ordinary English as a general term to refer to what might be called a ‘mountain chain’ or a ‘mountain belt’ by a geologist or geographer. For example, the Great Dividing Range of South Eastern Australia is described as a ‘mountain range’ by the *Random House Dictionary* (RHD), and in a travel guide (Rowthorn et al. 2002). By contrast, in the “earth science” section of the eNotes study notes website, the Great Dividing Ranges is called a ‘mountain belt’.²

Often the terms *range* and *ranges* are also used in English, presumably with a very similar or identical sense to *mountain range*. However, I will only treat the compound *mountain range* in this section. Illustrations of the use of *mountain range* appear in (26)-(33).

(26) .... the miles and **mountain ranges separating** Tibet from Central China .... (Wordbanks Br Books)
(27) They had already **crossed** the Toba Kakar **mountain range** from Pakistan ... (Wordbanks Br Books)
(28) He had ... rambled all over the **sprawling mountain ranges** ... (Wordbanks Br Books)
(29) .... cut off from the rest of the continent by a **long mountain range**. (Wordbanks US Books)
(30) ... the **mountain ranges run** from north to south. (Wordbanks Br Books)
(31) ... ragged **rows of mountain ranges** and volcanoes join a seemingly endless coast of bays, channels, inlets ... (Wordbanks Br Books)
(32) .... a wild, desolate Eastern Siberian landscape containing a **vast mountain range stretching** for 500 miles ... (Wordbanks US Books)
(33) I marvelled at the sight of a soaring eagle ... a tiny speck against the **distant mountain range**. (Wordbanks Br Books)

A ‘mountain range’ spreads over a certain distance and is also long in shape. One can describe a ‘mountain range’ as long in dimension, as in (29). A ‘mountain range’ can be a “row”, as illustrated by (31), and the combination “along the mountain” can be found. Furthermore ‘mountain ranges’ can “run”,
“sprawl” or “stretch”, also suggesting that they are conceptualized as long in shape and covering some distance, as in (28), (30), and (32).

Moreover, a ‘mountain range’ can be described as a physical geographical boundary. They are hard to cross because of the height, incline and size of mountains, and the vastness of the chain. ‘Mountain ranges’ can be borders between political units such as nation states (e.g. Norway and Sweden are separated by the Scandinavian Mountains or the Scandes) or “states” within states (e.g. the Drakensberg mountain range in South Africa separates KwaZulu-Natal and Free State provinces). Places of this kind can also divide ethnic and linguistic groups, for example, in Australia the Great Dividing Range separates Southeast Aboriginal groups and languages from Riverine groups and languages. Moving from one side of a ‘mountain range’ to another is described as ‘crossing’ (as in (27)), ‘traversing’, or even ‘trekking across’.

The important features of the meaning of mountain range are a large size, long shape, the fact that it are composed of mountains, and its potential to act as a barrier. These features are brought together in explication [F]:

[F]  

mountain range (English)

a. a place of one kind
b. many mountains [d] are parts of places of this kind
c. some of these mountains [d] are far from others of these mountains [d]
d. places of this kind are long places [m]
e. at many times when someone is on one side of a place of this kind, if this someone wants to be on the other side, this someone can’t be on the other side after some time

Component (b) tells us that a ‘mountain range’ is composed of many mountains. The distance that a ‘mountain range’ covers is accounted for in component (c). This component describes some of the ‘mountains’ as being far from some others. Component (d) describes a ‘mountain range’ as a “long
place". The same length component is used to explicate the meanings of words for long flowing-water places, such as river and creek, in chapter 3 (see 2.2.4 for more description of the molecule 'long place').

Component (e) conveys that it is hard for people to go from one side of a 'mountain range' to another because of all the physical properties previously mentioned. This component is similar to those used in the explications of words for particularly impassible long flowing water places, river, rivière, and fleuve. However, because a 'mountain range' is harder, and takes longer to cross than these long flowing-water places, it is worded slightly differently. Component (e) states that someone cannot be on the other side of a 'mountain range' "after some time". By contrast, the explications of river and rivière state that someone cannot be on the other side of these places after "a very short time", and the explication of fleuve states that someone cannot be on the other side of this place after "a short time" (see 3.2.1, 3.3.2, 3.3.2).

As in explication [D] of the mountains, "mountain" is used as a derivational base in a number of the components of this explication. The use of this base carries with it all the features of meaning of mountain included in explication [A], such as a very big size, height, visibility and steepness. For this reason, mountain range has a lot of the same collocational possibilities as mountain, such as the use of the attributive adjectives high, great, tall and distant, as in (33).
5.4 Spain – almost one mountain: montaña, cordillera, sierra in Spanish

5.4.1 Introduction to Spain – almost one mountain: montaña, cordillera, sierra in Spanish

Later in this section, I will look at the Spanish words montaña, sierra, and cordillera. But firstly, I will say a few words about terms for elevated places in Spanish. The 19th century British traveller and hispanophile, Richard Ford, wrote that “the geological construction of Spain is very peculiar, and unlike that of most other countries; it is almost one mountain or agglomeration of mountains” (Ford 1852: 9). As it is put on the website IberiaNature:

24% [of Spain] is above 1000m and 76% between 300 and 1000m. Spain has an average altitude of 660 metres. In Europe only Switzerland is higher ... (http://www.iberianature.com/material/spaingeology.html, accessed 23/9/11)

The website IberiaNature is primarily a source of information on the nature and geography of Spain, rather than a source of information on the Spanish language. Despite this fact, the page devoted to the physical geography and geology of Spain comments on the vocabulary for elevated places in Spanish, “it should come as no surprise that Castilian is so rich in words for mountains, hills, cliffs and plateaus”. ³

Provided on IberiaNature is a list entitled “Synonyms for mountain and hill in Spanish”, which includes some fifty words, the majority of which have entries in the Diccionario Clave (DC), a dictionary which only contains words currently in use. ⁴ For example, the following eight Spanish terms all contain the English term hill in their glosses, and all are currently in use (as indicated by the fact that they have entries in Diccionario Clave (DC), and confirmed by a native speaker):
Learners of Spanish and, especially, people interested in translation sometimes ask about differences between some of these terms. There are a number of threads on the WordReference.com language forums on this topic. Some of the categories for kinds of elevated places in Spanish vary in terms of the shape, size, and isolation of the kind of place. The precise distinctions between the words above could be investigated and semantic explications could be proposed. However, I will not pursue this matter in the current chapter.

There is also a wealth of Spanish terms which can be glossed by the English cliff. Some of these words will be explored in 5.5.

In 5.3.2, I covered the English term mountain range and commented on the fact that mountain range and range are the only usual ordinary English terms for this concept of a line of mountains. This is not the case in Spanish. When one looks up mountain range in the English-Spanish section of a bilingual dictionary, one finds two terms in the definition which reads “cordillera; (shorter) sierra”. In the Spanish-English section of the dictionary both cordillera and sierra are rendered as mountain range (Oxford Spanish Dictionary). Some Spanish language students and people interested in translation have asked questions about the difference between the two words cordillera and sierra. Not all monolingual Spanish dictionaries answer these questions completely adequately as some contain entries which define one of the words in terms of
the other, such as the following (see also definition of *sierra* in *Diccionario Clave* (DC)):


In sections 5.4.3 and 5.4.4, I will tease out the differences between the two terms and present their meanings in semantic explications formed in simple NSM primes and semantic molecules. But before discussing *sierra* and *cordillera* in depth I will look at a molecule which will appear in their explication, ‘*montaña*’.

### 5.4.2 *Montaña* (Spanish)

The Spanish word *montaña* is the translation equivalent of the English *mountain*. In many bilingual dictionaries, the two words are used to define each other, e.g. *mountain*: *montaña*; *montaña*: mountain. Based on looking at examples of use and consultations with Spanish native speakers, I propose that same explication for *montaña* as I have presented for *mountain* (see 5.2.1). Possibly some details vary, but they are, I believe, very close in meaning. In any case, my primary aim in this chapter is to examine *sierra* and *cordillera*. I will present some of my reasons for this tentative conclusion about ‘*montaña*’ below. But firstly I will present the explication of *montaña* in explication [G] (the same explication as [A] of *mountain*) to refresh the reader’s memory.

[G] *una montaña* (Spanish)

a. a place of one kind  
b. places of this kind are very big places  
c. the top[m] of a place of this kind is very far above the places on all sides of this place

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d. the top[m] of a place of this kind is not like all the other parts of these places

e. when people are far from this place they can see this place

f. when people see a place of this kind they can think like this:
   "someone can't be at the top[m] of this place if some time before it is not like this:
   this someone does some things for a long time, not like people do in many other places
   because of this, this someone's body moves in this place as this someone wants
   during this time this someone can feel something bad in their body because of this"

Firstly, 'mountains' in English are often described as large, as in part of the
definition of mountain in CCEL D, "a mountain is a very large raised part of the
Earth's surface". Similarly, 'montañas' are said to be grande 'big, large' as in the
definition "gran elevación natural del terreno" 'large elevation in the land' (Real
Academia Española Diccionario de la lengua española (RAEDLE.). There is
also the same metaphorical use of the term montaña to refer to a large amount
of something, e.g. "una montaña de plancha" 'a mountain of ironing'. The large
size of a 'montaña' and a 'mountain' is conveyed in component (b)

There is another meaning of montaña besides that as a large elevation of
the land. DC also gives montaña the sense of "Territorio en el que abundan
estas elevaciones" 'Area in which these elevations [montañas] abound'. An
example of this sense is "El clima de montaña es fresco" 'The mountain climate
is cool'. This meaning is similar to that of the English the mountains (see 5.3.1).
However, here I will only cover the first meaning.

The collocational possibilities of montaña are extremely similar to those of
mountain. Some of these collocations are seen in the following examples (34)-
(38):

(34) ... el Aconcagua (6.959 m), en Argentina, la montaña más alta del
continente americano. '...Aconcagua, in Argentina, the highest montaña
on the American continent.' (Corpus del Español)
(35) ... cuando llega a la cima de una montaña... '... when one reaches the
top of a montaña...' (Corpus del Español)
(36) La península del Sinaí consta de un desierto arenoso en el norte y de
montañas escarpadas en el sur... 'The Sinai Peninsula consists of
sandy desert in the North and rugged montañas in the South ...’ (Corpus del Español)

(37) ... en anfiteatros en la pendiente de la montaña. ‘... in amphitheatres on the slope of the montaña.’ (Corpus del Español)

(38) ... los rayos del sol lo deshacen y muestran el paisaje envuelto en brumas suaves, que flotan como jirones de un velo de novia, sobre el azul de las montañas lejanas ... ‘... the sun’s rays dissolve and show the landscape covered in soft mist, floating like a torn bridal veil, the blue of the faraway montañas ...’ (Corpus del Español)

Like a ‘mountain’, a ‘montaña’ is high above the places which surround it, as is depicted in component (c). In (34) we see the use of the adjective alta with montaña. The word alto/a is translated in English as ‘high’ or ‘tall’. On Corpus del Español alta is the second most frequent collocate of montaña. (The most frequent is the definite article). Of the 557 occurrences of the term montaña in the 20th century section of the Corpus del Español 6% (33 occurrences) are with alta (Corpus del Español, accessed 27/9/11).

The top of a ‘montaña’ is a distinctive part of this kind of place, unlike the other parts, as is the case with a ‘mountain’. This feature is portrayed in component (d). There are a number of terms which are used for the top of a ‘montaña’, la cumbre de una montaña, la cúspide de una montaña, and la cima de una montaña, as in (35). These expressions can be translated into English as mountain summit, mountain top, or mountain peak. The general term in Spanish for the top part of something, “parte superior”, will be used as a semantic molecule in the explication of montaña as an equivalent (or near equivalent) to the English semantic molecule “top”.

Steeply sloping sides are an important feature of both a ‘montaña’ and a ‘mountain’. A ‘montaña’ can be described as empinada ‘steep’ or escarpada ‘steep, rugged’ in Corpus del Español. However, there are no corresponding examples with antonyms such as plana ‘flat’ or suave ‘gentle’. Moreover,
phrases which can be translated as *mountain slope, pendiente de la montaña* and *cuesta de la montaña* (see (37)), are attested in the corpus but the phrase *plana de la montaña, mountain flat* is not found (Corpus del Español, accessed 27/9/11). One native speaker testifies that a ‘colina’ (roughly, ‘hill’) is a place where one can walk, but one must climb a ‘montaña’. The steep sloping shape of both a ‘montaña’ and a ‘mountain’ is captured in component (f).

Because of their size, height, and shape the two kinds of places a ‘montaña’ and a ‘mountain’ are visible even from a distance which is accounted for in component (e). Corpus del Español includes examples of *montaña distante* ‘distant montaña’ and *montaña lejana* ‘faraway montaña’, but no instances of *montaña cercana* ‘close montaña’ and *montaña próxima* ‘nearby montaña’ (Corpus del Español, accessed 27/9/11). I will now move to look at the words *cordillera* and *sierra*, the explications of which include “montaña” as a semantic molecule.

5.4.3 **Cordillera (Spanish)**

*Cordillera* is defined by *Diccionario Clave* as “Serie de montañas unidas entre sí y con características comunes” ‘Series of connected mountains with common characteristics’. The dictionary gives the example “La cordillera de los Andes recorre la parte occidental de América del Sur” ‘The Andes crosses the Eastern part of South America’. The Andes are often simply referred to as *la Cordillera*. The word *cordillera* is etymologically derived from the noun *cordel* (m.) which means ‘cord, string’. Examples of *cordillera* appear in (39)-(44):

(39) La otra parte del Perú, que llaman Andes, es una cordillera muy larga ... ‘The other part of Peru, which is called the Andes, is a very long cordillera ... ’ (Perú 1906: 117)
(40) ... la cordillera del Atlas, que se extiende de forma más o menos paralela hasta la costa por el noroeste y el norte ... 'the Atlas Mountains, extending more or less parallel to the coast to the northwest and north ...' (Corpus del Español)

(41) La otra cordillera corre sin interrupción ... 'The other cordillera runs without interruption ...' (Solano n.d.: 3)

(42) La cordillera Carpetana arranca de la Ibérica ... , separando a León y Castilla la Vieja de Extremadura y Castilla la Nueva. Sus sierras más importantes son: Sierra Ministra, sierra Ayllón, Somosierra, ... la cordillera continúa por el sur de Salamanca, ... termina en Portugal con la sierra de la Estrella. (Álvarez 2009: 327-328)

(43) ... la Cordillera como un límite natural, como un muro, una barrera infranqueable ... '... The Andes as a natural boundary, as a wall, an impassable barrier ...' (Hevila 2007: 68)

(44) ¿Cómo para hacerte cruzar la cordillera con mulas y todo? 'How do you cross the cordillera with mules and all?' (Corpus del Español)

A 'cordillera' is long in shape and spreads over a great distance. One can speak of a 'cordillera' in a similar way to how one speaks of the English 'mountain range'. A 'cordillera' can be described as larga 'long' in dimension, as in (39), and one can say a lo largo de la cordillera 'along the cordillera'. The verbs se extender 'stretch' and correr 'run' can also be used with cordillera, suggesting length and extension, as in (40) and (41). In (40), a 'cordillera' stretches paralela 'parallel' to la costa 'the coast'.

*Enciclopedia Álvarez*, a simple Spanish language encyclopedia, provides a list of descriptions of 'cordilleras' of Spain. Each entry tells of where the 'cordillera' begins (using either the verb arrancar 'originate' or comenzar 'begin'), to what place the 'cordillera' continues (using the verb continuar), and where the 'cordillera' ends (using the verb terminar 'finish'), as in (42) describing "La cordillera Carpetana". A 'cordillera' is so long that it can consist of many 'sierras'. *Enciclopedia Álvarez* mentions the important 'sierras' of each 'cordillera' listed, as in (42). One can say that a particular 'sierra' pertenece a 'belongs to' a certain 'cordillera'.

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Like a ‘mountain range’, a ‘cordillera’ acts as a barrier. The descriptions of ‘cordilleras’ in *Enciclopedia Álvarez* state which regions each ‘cordillera’ separates, using verbs such as *separar* ‘separate’, *limitar* ‘border’ and *dividir* ‘divide’, as in (42). Writings about ‘cordilleras’ often include terms such as *impenetrable* ‘impenetrable’, *infranqueable* ‘impassable’, *intransitable* ‘impassable’, *muro* ‘wall’, *muralla* ‘wall’, *límite* ‘boundary’, *barrera* ‘barrier’, and *frontera* ‘border’, as in (43).

When one searches for instances of the term *cordillera* with antonyms such as *transitable* ‘passable’ one finds examples such as “la cordillera nevada, transitable sólo en cuatro meses del año” ‘the snowy cordillera, passable only during four months of the year’. Examples of this kind simply confirm the difficulty of getting from one side of a ‘cordillera’ to another. As in the case of a ‘mountain range’, travelling from one side of a ‘cordillera’ to another is described using verbs such as *cruzar* ‘cross’ or *atravesar* ‘cross’, as in (44) (Corpus del Español, Google Books, accessed 5/10/11).

I will use the evidence presented above to explicate *cordillera* in [H].

[H]  
*cordillera* (Spanish)  

a. a place of one kind  
b. many montañas [m] are parts of places of this kind  
c. some of these montañas [m] are very far from others of these montañas [m]  
d. places of this kind are long places [m]  
e. at many times when someone is on one side of a place of this kind,  
   if this someone wants to be on the other side, this someone can’t be on the other side  
f. people can’t see many parts of this place at the same time

Component (b) presents a ‘cordillera’ as being composed of many ‘montañas’. The distance that a ‘cordillera’ spans is portrayed in component (c). This component describes some of the ‘montañas’ as being very far from some others. It differs from component (c) of the explication of ‘mountain range’ in that...
the intensifier “very” is used. The wording “very far” conveys the vast distances that ‘cordilleras’ cover in comparison to ‘mountain ranges’. Component (d) describes a ‘cordillera’ as a “long place” as in explication [F] of ‘mountain range’.

Component (e) is identical to component (e) of mountain range. It says that it is difficult for people to go from one side of a ‘cordillera’ to another because of all the physical properties mentioned above. Component (f) is not found in the explication of mountain range. This component conveys the immense nature of ‘cordilleras’. They are so long that many parts of them cannot be seen at the same time. According to a Spanish informant, ‘cordilleras’ are not places in the landscape which one sees. Rather, they are vast concepts which people must learn about at school or in children’s books, such as Enciclopedia Álvarez cited earlier.

Explication [H] differs in another notable respect from explication [D] of the mountains and explication [F] of mountain range. [H] uses “montaña” as a semantic molecule, whereas in [D] and [F], “mountain” is used as a derivational base. The reason for this difference is that there a genuine relationship of semantic derivation between mountain, and the mountains and mountain range. By contrast, the word form cordillera is not derived from montaña, but cordillera must be explained in terms of “montaña”. Therefore, “montaña” is used as a semantic molecule in its explication. The same is true for the word sierra.

5.4.4 Sierra (Spanish)

I will now move to talk about the partner of cordillera, the term sierra. Like the English ‘mountain range’, a ‘sierra’ is a long formation of many mountains. What is distinctive about a ‘sierra’ is its particular shape. The word sierra is
polysemous. It also has the sense of “saw”, as in the tool. This meaning is defined in *Diccionario Clave* as the following:

Herramienta formada por una hoja de acero dentada provista de una empuñada, que sirve para cortar madera u otros objetos duros. ‘Tool consisting of a toothed steel blade fitted with a handle, that is used to cut wood or other hard objects’. (*Diccionario Clave*)

The noun *sierra* is derived from the verb *serrar* ‘to saw’. Important to the sense of *sierra* as a place under consideration in this section is the concept of a blade consisting of teeth. *Sierra* in its sense as a kind of place came about via a metaphor – a ‘sierra’ is a place which looks like a ‘sierra’ ‘saw’ (*Campbell* 2004: 257; *Penny* 2002: 311).

The ‘montañas’ which compose a ‘sierra’ have distinctive pointed summits which are visible to people from a distance. In their definitions of *sierra* as a kind of place *Diccionario de la lengua española* speaks of “cimas picudas” ‘sharp peaks’, and *Diccionario Clave* uses the expression “peñascos cortados” ‘cut rocky crags’. One Spanish native speaker says that when people see a ‘sierra’ they can see many peaks. Example (45) below speaks of the *cimas* ‘peaks’ of Sierra Nevada.

Similar to *montaña*, *sierra* also has the meaning of a mountainous area. In this case it appears with the definite article, *la sierra*. *Diccionario Espasa concise inglés-español* gives the definition of “*la sierra*: (región montañosa) the mountains pl.”. I will only cover the meaning of *sierra* as a long series of ‘montañas’. Examples of *sierra* in this sense follow in (45)-(48):

(45) Las enhiestas *cimas de la Sierra Nevada*, las más altas y majestuosas de toda España, cubiertas de nieves y de hielos ... ‘The soaring peaks of the Sierra Nevada, the highest and most majestic of all Spain, covered with snow and ice ...’ (*de Dios de la Rada y Delgado* 2002: 12)
Like a 'cordillera', a 'sierra' is long in shape. The two terms share telling collocations such as the use of *sierra* with *se extender* 'stretch', as in (46), and the use of *a lo largo* 'along' with *sierra*, as in (47). There are also some examples of *sierra* with the adjective *larga* 'long', as in (48). However, a place which is called a *sierra larga* does not cover as much distance as a place described as a *cordillera larga*. The adjectives *gran* and *grande* 'large' appear on the list of frequent collocates of *cordillera* on Corpus del Español, but not on the list of frequent collocates of *sierra* (Corpus del Español, accessed 5/10/11).

Drawing on the discussion above, *sierra* is explicated in [I].

[I]  

*sierra* (Spanish)  

a. a place of one kind  
b. many montañas [m] are parts of places of this kind  
c. some of these montañas [m] are far from others of these montañas [m]  
d. places of this kind are long places [m]  
e. if someone sees this place when they are far from it, they can see many tops [m] of montañas [m] because of this, they can think about this place like this:  
   "the tops [m] are like the sharp [m] parts of sierras [d]"

The explications of *sierra* and *cordillera* share a number of components. Component (b) accounts for the montañas of 'sierras'. Component (d) covers the long shape of a 'sierra'. The two explications differ in component (c). In explication [I] of *cordillera* some of the montañas are portrayed as be very far...
from one another. By contrast, in explication [H] of *sierra* the intensifier is not used due to the shorter length of ‘sierras’.

Component (e) is specific to explication [H] of *sierra*. The component conveys the visual impression which is given by the jagged summits of ‘sierra’ — they look like the sharp parts of a saw. “Sierra”, meaning ‘saw’ is used as a derivational base in the component. This sense of *sierra* is used as a derivational base, as opposed to a semantic molecule because of the zero derivation of *sierra* (a kind of place) from *sierra* ‘saw’.

5.5 “Cliff” words

5.5.1 Introduction to “cliff” words

In their article on Yindjibarndi ethnophysiography Mark et al. observe that “speakers of this language will use different words for the same physical feature depending on their ‘point-of-view’” (Mark et al.: 2007: 15). They then give the example of labels for “cliff” places which depend on the perspective of a viewer. *Gankangga* is the Yindjibarndi term used by a speaker when they are looking up at the place, and *gunkurr* is used when they are looking down at the place from the top. They also give a comparable example from the Amerindian language Navajo (Mark et al.: 2007: 15; see also Turk 2011: 49).

In this section 5.5, I will propose that visual perspective in the categorization of landscape features is important in two so-named “Standard Average European languages” (Whorf 1978 [1939]), English and Spanish, not only in indigenous languages. I will examine some “cliff” terms in English and Spanish – the English words *cliff* and *precipice* in sections 5.5.2 and 5.5.3, respectively, and the Spanish words *acantilado*, *precipicio*, and *despeñadero* in section 5.5.4. I will argue that the point-of-view of an observer, either on top of,
or at the bottom of a place, is part of the senses of these words. In addition, the risk of falling comes into the meanings of some English and Spanish words for “cliff” places.

### 5.5.2 Cliff (English)

To begin with, I will look at the English word *cliff*. A ‘cliff’ is a big area of rock, the top of which is much higher than the land or sea to one side of it. It has a flat, rocky side which cannot be easily negotiated. The use of *cliff* is illustrated in (49)-(56):

(49) A man plunged to his death from a 100ft cliff ... (Wordbanks SUNNOW)
(50) The *towering, vertical cliffs* had forced them to march west to find a route to my position. (Wordbanks Br Books)
(51) After a half-mile rise, the slope turned into *cliff face*—nothing but stone—and we began to climb. (Wordbanks US Books)
(52) ... wonder at *cliff walls* peppered with age-worn drawings. (Wordbanks CanNews)
(53) Two Alberta climbers spent the night on a *cliff ledge* in the Rocky Mountains ... (Wordbanks CanNews)
(54) ... the views don’t stop until they’ve plunged off the *cliff tops* at Seven Sisters ... (Wordbanks Times)
(55) Rescue technicians rappelled down a *rocky cliff* ... (Wordbanks OzNews)
(56) ... mangrove-lined shores backed by high *sandstone cliffs*. (Wordbanks Br Reg News)

To describe a ‘cliff’ in more detail, firstly, it is high above the places on one side of it, which can be either land or sea. Frequent collocations of *cliff* revealed on a Wordsketch include measurements of height, such as 100ft, as in (49), and the adjective *towering*, as in (50) (Wordbanks wordsketch cliff, 12/10/11).

A ‘cliff’ has a number of distinct parts because of its shape as a flat piece of rock, extending far above the ground. In the Wordsketch for *cliff* compound terms for these parts appear. The terms *cliff face* and *cliff wall* denote the rocky, flat, elevated side of a ‘cliff’, as in (51) and (52). *Cliff edge* and *cliff ledge* refer to
the part of the top of the place before it drops on one side, as in (53). One can also talk of the top of a ‘cliff’ generally using the compound cliff top, as in (54) (Wordbanks wordsketch cliff, 12/10/11). These compounds suggest that people conceptualize a ‘cliff’ from various physical points of view.

A ‘cliff’ is formed from rock. This rock is very visually prominent to someone on the lower side of a ‘cliff’ because of the high, flat face of a ‘cliff’. Rocky and craggy are two of the ten most frequent adjective modifiers which occur with cliff in the Wordbanks corpus, as in (55). Common noun modifiers for cliff include the names of varieties of rock, such as chalk, sandstone, and limestone as in (56) (Wordbanks wordsketch cliff, 12/10/11).

The shape of a ‘cliff face’ is flat. I will briefly treat this shape concept, broadly following Wierzbicka 2004. The prototype of places and things that can be described as “flat” is the ground and other horizontal surfaces, such as certain types of roofs. To say that a surface such as the ground is “flat” is to say that if someone sees this place they can think that no parts of this place are above the other parts. This sense of “flat” can be called flat₁.

A ‘cliff’ is not a horizontal surface like the ground. However, people also use the word “flat” to describe body parts, such as the forehead, or things like the front of trousers, which are not considered horizontal surfaces. To say that a forehead or a cliff face is “flat” is to say that if someone sees this thing or this place they can think that it is like something flat₁. The sense of “flat” relevant to the concept of a ‘cliff’ can be called flat₃. (There is a further common sense of flat, flat₂, as in flat objects which can be manipulated such as plates, frisbees, and coins.) Like a ‘mountain’, a ‘cliff’ can be described as steep, but, unlike a ‘mountain’, a ‘cliff’ is also described as sheer. Further indicative frequent
collocates of cliff are perpendicular and vertical, as in (50) (Wordbanks wordsketch cliff, 12/10/11).

In section 5.2.1 on mountain I invoked Gibson's notion of "the affordance of the environment" by speaking about the terrain feature of a "slope". The gradient of a surface is significant for people because it affects the way in which one can move in this area. In the explications of the terms mountain, montaña, and hill the slope of these places was captured with reference to the time and effort required to climb these places. In the case of a 'cliff', Gibson points out that while a gently sloping ramp can be easily negotiated, a sheer cliff face cannot (Gibson 1979: 27). A further terrain feature relevant to the discussion of 'cliffs' is the "barrier". As Gibson notes, "A vertical [emphasis in the original, H.B.], flat, extended, and rigid surface such as a wall or a cliff face is a barrier to pedestrian locomotion" (Gibson 1979: 132). To illustrate, (50) describes an exploration team having to change course due to the obstacle of 'cliffs'.

The movement needed for a person to scale a 'cliff' is somewhat different to that required to ascend a 'mountain'. In both kinds of places, a person must move for a long period of time with great effort in a way unlike they do on a flat horizontal surface. However, when someone climbs a 'cliff' they specifically have to use both their hands and legs.

I will now weave the observations given above into an explication of cliff in [J]:

[J] a cliff (English)

a. a place of one kind
b. places of this kind are big places
c. the top [m] of a place of this kind is far above the places on one side of this place
d. someone can be on the top [m] of this place
e. if someone is on one side of a place of this kind, when they see part of this place, they can see a lot of rock [m] in this part
f. this part is flat [m].
g. if people on one side of a place of this kind see this place they can think like this:

  "when someone is near the bottom [m] of this place
  this someone can't be on the top [m] after some time if it is not like this:
    this someone does things for a long time, not like someone does in many other kinds of places
    because of this, this someone's body moves in this place, as this someone wants
    because of this, this someone's legs [m] move as this someone wants
  at the same time, this someone's hands [m] move as this someone wants
  during this time, this someone can feel something bad in their body because of this"

Component (b) establishes 'cliffs' as big places. Component (c) captures the
elevation of a 'cliff'. The component differs from the elevation component used
for terms such as *mountain* and *apu/pulij* in that the top is said to be above
places on one side, rather than on all sides. The distinct parts of a 'cliff' which
were treated in the previous general discussion are covered in components (d)-(f). Component (d) presents the top of a 'cliff' as a place in which someone can be.

Component (e) portrays the cliff face as a visually prominent rocky part of
a 'cliff'. In component (f) the shape of the cliff wall is characterized using the
semantic molecule "flat₃". Component (g) captures the sheer nature of a 'cliff'
and accounts for how a 'cliff' can act as a barrier. It explains that a 'cliff' is only
able to be climbed if someone moves for a long time with effort using their
hands and legs. The component differs from component (d) of the explication of
*mountain* in that hands and legs are mentioned in particular. By contrast, the
explication of *mountain* refers to the body as a whole.

5.5.3 *Precipice* (English)

I will now turn to look at the word *precipice*. *Precipice* can be used to refer
to a part of what could be called a *cliff*. However, the element of human
perspective differs in the senses of the two terms. A 'precipice' can be a part of
kinds of elevated places. The word often is defined in terms of places of other
kinds. For example, the LDOCE provides the definition “a very steep side of a
high rock, mountain or cliff”. Both literal and figurative examples of *precipice* appear in (57)–(62).

(57) .... near the top of a **rocky precipice** ....  (Wordbanks Br Books)
(58) ... it was pretty scary stuff coming over the top of an **80ft precipice** with a sheer drop ...  (Wordbanks Sunnow)
(59) ... the mountain fell away in a **sheer precipice**.  (Wordbanks Br Books)
(60) ... the village of Habala built on a **rockface precipice**.  (Wordbanks Times)
(61) ... the “spendaholic” Jackson is $300 million in debt and “on the **precipice of bankruptcy**.”  (Wordbanks US News)
(62) ... Spix’s Macaw had reached the **precipice of extinction** in the wild ...  (Wordbanks Br Books)

*Precipice* shares many collocational possibilities with the word *cliff*. For example, the rocky material of a ‘precipice’ is shown in collocations such as *craggy precipice, stony precipice, and rocky precipice*, as in (57). The elevation of a ‘precipice’ is also indicated in collocations. *Precipice* can combine with measurements of height, such as *80ft precipice*, as in (58). The flat side of a ‘precipice’ is shown in collocations such as *steep, abrupt, and sheer*, as in (59)  (Wordbanks wordsketch *precipice, 12/10/11*).

The word *precipice* comes into English via the Middle French *précipe*, which in turn is from the Latin *praecipitium* ‘a steep place’, or, literally ‘a falling down headlong’. The Latin term is derived from *praeceps* ‘headforemost’, which is formed from *prae* ‘before’ and *caput* ‘head’ (*A Comprehensive Etymological Dictionary of the English Language*). A ‘precipice’ is not merely a high place with a steep or sheer side. What is vital to the meaning of the term is that it is a place from which people can fall. Relevant to the discussion of a ‘precipice’ and related kinds of places ‘is a further terrain feature identified by Gibson, a “brink”: 

A *brink* [emphasis in the original, H.B.], the edge of a cliff, is a very significant terrain feature. It is a falling-off place. It affords injury and therefore needs to be perceived by a pedestrian animal. (Gibson 1979: 37)
The word *precipice* is often used figuratively. The *Oxford English Dictionary* divides its examples of use of *precipice* into section (a) containing literal examples and section (b) containing figurative examples. The figurative examples of *precipice* denote the brink of a situation which is usually regarded as very bad, such as war, species extinction, or bankruptcy, as in examples (61) and (62).

Following on from the previous discussion, *precipice* is explicated in [K]:

[K]  *a precipice* (English)

a. a place
b. this place is part of places of some kinds
c. the top [m] of this place is far above the places on one side of this place
d. if someone is on one side of this place, when they see part of this place, they can see a lot of rock [m] in this part
e. this part is flat [m]
f. on one side of the top [m] there are no more parts of this place
g. when someone sees this place this someone can think like this

"if someone is very near the top [m] of this place, something very bad can happen to their body
when it happens, this someone's body can be moving for a short time not because this someone wants it
after this, this someone's body can be far below the top [m]
it can be at the bottom of this place"

The explication shares many of the components of the explication of *cliff*. However, a ‘precipice’ is not a “place of one kind” like a ‘cliff’ or a ‘mountain’. In component (a) a ‘precipice’ is classed as a “place” and in component (b) as “part of places of some kinds”, for example a ‘cliff’ or a ‘mountain’. Components (c), (d) and (e) are shared with the explication of *cliff*. They describe the shape and physical composition of a ‘precipice’ as for a ‘cliff’. Component (c) covers the elevation. Component (d) accounts for the rocky material of a ‘precipice’. In component (e) the sheer, flat side of a ‘precipice’ is captured.
Components (f) and (g) depict the dangerous nature of a 'precipice' as, in Gibson's words, a "falling-off place". Gibson characterized a brink as an "edge". In simpler terms to say that something or somewhere is an "edge" means, in part, that on one side of this thing or place there are no more parts of this thing or place (Wierzbicka 2006b: 134-135). Component (f) portrays a 'precipice' as an edge using these terms.

Component (g) depicts the thought that someone can have when they see this place, namely, that someone can fall from this place and hurt their body very badly as a consequence. One aspect of the wording of this component needs to be noted. The scenario begins with someone being at the top of this place, very near the side of this place. It is precarious to be near the edge of a 'precipice'. Gibson has noted the importance of proximity in the terrain feature of the brink:

The edge is dangerous, but the near surface is safe. Thus, there is a principle for the control of locomotion that involves what I will call the edge of danger and a gradient of danger, that is, the closer to the brink the greater the danger. (Gibson 1979: 37)

5.5.4 Spanish "cliff" words: acantilado, precipicio, despeñadero

As mentioned in section 5.4.1, Spanish has many terms for elevated places, and this extends to terms for what I will call, roughly, cliff concepts. Looking up the word cliff in an English-Spanish dictionary fails to yield a single translation equivalent. Entries in various dictionaries differ, but some terms occur again and again. I will mention the Spanish terms acantilado, precipicio, and despeñadero, although these are not the only terms related to cliff concepts in Spanish. I will not attempt a full semantic analysis of these terms in this thesis. However, I will point out some of the similarities and differences with the
English words, and make some suggestions for potential semantic components formed in NSM. Examples of the three words follow in (63)-(67).

(63) Desde el faro se veían las olas chocando con fuerza contra las paredes de los acantilados. ‘From the lighthouse the waves were crashing hard against the walls of the acantilados.’ (Diccionario Clave)

(64) El agua, como he indicado, desciende por la cara desnuda de un inmenso precipicio, diríamos que unos 600 pies (200 m.) de alto. ‘Water, as I have indicated, runs down the bare face of an immense precipicio, we would say some 600 feet (200 meters) high. (Universidad de Granada 2007: 259)


(66) Y se hallan tan pobladas de encinas, quejigos y pinos laricios que cuesta verlas hasta estar a un paso del despenadero. ‘And they are so populated by holm oaks, Portuguese oaks and European black pines it is hard to see until one is just a step away from the despenadero.’ (‘ Expediente X en Cuenca’ El Viajero El País 15 January 2011 <http://elviajero.elpais.com/articulo/viajes/Expediente/X/Cuenca/elpviavia/20110115elpviavje_19/Tes> accessed 6/11/2011)

(67) Las políticas que impuso durante su desempeño como presidente de aquel país lo están llevando al despenadero de la economía. ‘The policies imposed during his tenure as president of that country are leading to the despenadero of the economy.’ (Corpus del Español)

Firstly, an ‘acantilado’ is specifically a cliff on the sea, as seen in (63). A semantic explication of acantilado would therefore need to include a component which mentions its location. This component is not found in the explications of the English terms previously discussed. I propose the following component which uses “the sea” (“el mar” in Spanish) as a semantic molecule:

a place of this kind is near the sea ‘el mar’ [m]

Secondly, the word precipicio is cognate to the English precipice and therefore has the same Latin roots. Precipicio also has a morphological
relationship with the verb *precipitarse*, roughly, ‘to fall from a height’. One can see the literal use of the word *precipicio* in (64), in which a ‘precipicio’ is described as “immense” and “some 600 feet”. Like in the case of the English *precipice*, but unlike in the case of the English *cliff*, dictionaries mention the strong figurative use of *precipicio*. For example, *Diccionario de uso del español* gives under its meaning number 2:

> En frases como *estar al borde de un precipicio y tener alguien un precipicio abierto a sus pies,* *peligro muy grave que amenaza. ‘In phrases like *to be at the edge of a precipicio and to have someone open a precipicio at your feet*, [the word means, H.B.] a very serious danger which is threatening.’

In (65) the economic crisis is described as keeping some Catalan municipalities “al borde del precipicio” ‘at the edge of the precipicio’. The strong figurative use of the word *precipicio* is evidence of the fact that, as with the English word *precipice*, the potential for a human to fall from such a place is part of its lexical meaning. This potential human experience encoded in the meaning of the term means that it lends itself for use in the context of other dangerous situations, such as economic crises.

Thirdly, the less common word *despeñadero* also has the sense that it is a place from which a person can fall. Most contemporary examples found of *despeñadero* are figurative but I include one literal example given in (66). In *Diccionario de la lengua española* the first definition is “Precipicio, lugar escarpado ‘sheer place’” but the second definition is “Riesgo, peligro grande” ‘risk, great danger’. Example (67) describes the policies of a president leading to the ‘despeñadero’ of the economy. A bilingual dictionary, *Dictionary of the Spanish and English languages*, defines *despeñadero*, in part, from the perspective of the effect such a place can have on people, “a place where it is
not possible to stand firm". Despeñadero has a morphological relationship with the verb despeñarse, which means, roughly, "to fall from a height". It is etymologically derived from des- 'from' and peña 'rock, crag'.

I propose that the component included as component (g) of precipice would need to be included in explications of precipicio and despeñadero. This component describes the potential for people to fall and hurt themselves when they stand close to the edge of places of these kinds. I repeat the component below.

when someone sees this place this someone can think like this:
  "if someone is very near the top [m] of this place,
  something very bad can happen to their body
  when it happens, this someone's body can be moving for a short time
  not because this someone wants it
  after this, this someone's body can be far below the top [m] of this place
  it can be at the bottom of this place"

5.6 Concluding remarks

In this chapter, I have explored the senses of some words for kinds of elevated places in English, Pitjantjatjara/Yankunytjatjara, and Spanish. My study has revealed, contra Searle, that a mountain is not a brute fact, but that languages and cultures categorize elevated places, including what English speakers call 'mountains', in different ways.

That said, as with the other kinds of places I have examined in this thesis thus far, there are common semantic components in the senses of words for kinds of elevated places across the selected languages. People identify places in the landscape which are elevated, but different languages and cultures label kinds of places on the basis of different criteria. There are rough conceptual and linguistic categories across the languages and cultures discussed in this chapter that can be stated in universal language.
The first category examined in this chapter is, roughly speaking, elevated places (stated in the NSM component as “the top[m] of a place of this kind is far above the places on all sides of this place”). This component, or slight variations thereof, is found in the semantics of *hill* and *mountain* in English, *apu/pulji₂* in Pitjantjatjara/Yankunytjatjara, and *montaña* in Spanish. Moreover, this component makes its way into the semantics of words for places composed of many elevated places because “mountain”, “hill”, and “montaña” appear as either molecules or derivational bases in the explications of *the hills*, *the mountains*, and *mountain range* in English, and *sierra* and *cordillera* in Spanish.

Elevated places differ from the long flowing-water places and standing water places, which have previously been treated in this thesis, in important ways. They tend to be distributed in the environment next to one another, and also, they are, because of their height, visually conspicuous. One result of these properties of elevated places is a rough conceptual and linguistic category of long places (stated in NSM as “places of this kind are long places [m]”) formed by many ‘mountains’ in English and ‘montañas’ in Spanish next to one another (stated in NSM as “many mountains/montañas are parts of places of this kind”, and “if someone sees this place when they are far from this place, this someone can think like this about all these mountains/ montañas: “there are two mountains/montañas on both sides of one mountain/montaña”).

A further rough conceptual category is cliff places. (This category can be stated in NSM as “the top of this place is far above the places on one side of this place”).

However, the relative priority given to these common factors varies across languages. English and Spanish employ some size distinctions in their words for elevated places (cf. *mountain* vs. *hill*, *montaña* vs. *colina*), whereas in
Pitjantjatjara/Yankunytjatjara elevated place terms don't come in different sizes, so to speak. By contrast, as in a number of other languages (e.g. Seri, cf. O'Meara and Bohnemeyer, 2008), material composition is an important factor in landscape categorization in Pitjantjatjara/Yankunytjatjara as shown in the use of the molecule “apu/puli₁” “rock’ in the semantics of apu/puli₂ ‘hill, mountain, rocky outcrop’.

One prominent finding of this chapter concerns the anthropocentric nature of landscape concepts. Concepts for elevated places incorporate reference to how someone would move in these places (found in English and Spanish).

Another notable finding is that the sense of some elevated place terms have senses which refer to the negative interactions people can have with the natural environment. The kinds of places treated in the previous chapters, such as ‘rivers’ and ‘lakes’, are picked out, in part, because their water is of use to humans. By contrast, some cliff places such as ‘precipices’ in English and ‘precipicios’ and ‘despeñaderos’ in Spanish, are given categories because people are aware that humans can fall from them. The human interest in these kinds of places stems from the danger they pose to people.
Notes


CHAPTER 6

THE BEACH, THE COAST, THE SHORE:
SEMANTICS BY ‘THE SEA’

6.1 Introduction

Hitherto, I have been exploring what can be referred to as “landscape terms”. In this chapter, I will now turn to look at what I will call “seascape terms”. In 6.2, I will treat the English terms for wide areas of salt water, the sea and the ocean. In 6.3, I will discuss the terms for recreational places, the beach in both British English and Australian English, and the seaside in British English. English words for the boundaries between ‘land’ and ‘sea’, the coast and the shore will be examined in 6.4. In 6.5, I will look at words for places surrounded by ‘sea’. The English terms island and peninsula, and the Swedish terms holm and skär will be treated. Next, in 6.6, I will explore the meanings of terms for indentations of the sea into the land, bay, cove, inlet, and harbour in English, and zatoka in Polish. Finally, in 6.7, I will offer some concluding remarks. But, firstly, I will introduce the topic of this chapter – semantics by ‘the sea’.

Many cultural traditions think of ‘sea’ and ‘land’ as a pair. Norse, Polynesian, and Japanese creation stories (to name just a few) tell of the origins of ‘land’ and ‘sea’ (Adams Leeming and Adams Leeming 2009). The creation myth of the book of Genesis is prominent in the English-speaking world, and other traditionally Christian, Jewish, and Islamic parts of the world. The relevant passage reads:

9 And God said, “Let the water under the sky be gathered to one place, and let dry ground appear.” And it was so. 10 God called the dry ground “land,” and the gathered waters he called “seas.” And God saw that it was

In English the pairing of ‘land’ and ‘sea’ implies the Earth’s surface, as in

(1) The distributions of **land** and **sea** as they are today are just in passing, moments in the slow march of geological change. (Wordbanks Br Books)

In Vanuatu, the environmental body which monitors sea turtles, which live both in ‘sea’ and on ‘land’, is called “Vanua-tai”, meaning, roughly, *vanua* ‘land’ and *tai* ‘sea’ in some Melanesian languages (Johannes and Hickey 2004: 25). (*Vanua* is not identical in meaning to the English *land* and has a number of meanings, see Patterson 2006: 324-327)

‘Sea’ and ‘land’ have fundamentally different qualities and therefore humans have different relationships with each of them. The literary scholar Sebastian Sobecki, author of *The Sea in Medieval English Literature* (2008), comments on “the sea’s essential dissimilarity in kind to land” (Sobecki 2008: 5):

...: whereas land is immobile and stable, the sea is in constant movement. Land is permanent; it can be walked and built on (and rode upon). The sea, on the other hand, can merely be traversed by man or, for purposes of fishing, visited. (Sobecki 2008: 5)

‘Land’ is the place where people can live and do the activities mentioned by Sobecki (and, naturally, many others). I propose that, semantically, *land* is a word for a kind of default place for human beings. More specifically, the concept of a kind of place “on land”, such as a ‘hill’, need not be dependent on the concept ‘land’ itself. In other words, the semantic explication of the term *hill* does not contain any reference to ‘land’. However, the concept of ‘the sea’,
being a place where people can be only temporarily, is necessary to explain
seascape concepts such as ‘the beach’, ‘shore’, and ‘bay’. In practical terms,
the semantic molecule “the sea” forms part of the semantic explications of
seascape terms. The interplay between ‘land’ and ‘sea’ is often important for the
meaning of seascape words. However, “land” will not be used as a semantic
molecule. Instead, the semantic explications of these words will frequently
include the phrase “places where people can live” to form part of the distinction
with ‘the sea’.

One sees the importance of a land-sea opposition in some linguistic
devices, such as in Polynesian directional terms. Marquesan is one language in
which there is a land-sea axis in the geocentric system. In this system the terms
tai ‘sea’ and uta ‘inland, ashore’ can be used to place people and things
according to their location in relation to land and sea (Cablitz 2006: 542). For
example, people can speak of a horse as being seaward of a tree, or refer to a
cow as being inland of a tree, as in (2) and (3), rendered as they appear in

(2) Te horave ma tai o te tumu 'akau ti'o'ai atu 'i
ART horse PREP sea POSS ART trune wood look.at-PERF DIR LD
tai. sea
'The horse, (it) is seaward of the tree, looking seawards.'

(3) Ma uta o te=nei mou tumu 'akau e tahi piha.
PREP inland POSS ART-Dem DI. trune wood NUM one cow
'One cow is inland of these two trees.' (Cablitz 2006: 542)

The English language is the primary focus of this chapter. During the late
Middle Ages, the English began thinking of their land as “our island”. This
perception arose particularly after the Hundred Years’ War in which England
lost its French territories (Sobecki 2008: 2-3). Sobecki writes, “Someone writing
in sixteenth-century England might ... be more inclined to identify him- or herself as one of its English dwellers, who find themselves encircled by sea” (Sobecki 2008: 2-3). In his rousing speeches of 1940 the British Prime Minister Winston Churchill used the description of “island” for Britain, as in “we shall defend our Island, whatever the cost may be” (Churchill 1985[1949]: 104, cited in Sobecki 2008: 1). In late 18th century England opinion-makers began to believe that there was a relationship between the English national character and the position of England as separated by sea from continental Europe. A view emerged that the English people were unique and could be defined as an “Island race” (Wilson 2003: 5).

From the 16th century, Britain began to explore the globe and establish an empire. The exploration and subsequent frequent sea voyages also influenced English, or, more broadly, British identity. A shipping journal of 1919 states of the British people, “We are a maritime race. The sea is in our being” (Tabili 1996: 186).

The physical situation of Britain as an island surrounded by the sea has also made a mark on the English language. In comparing English to Polish and Ukrainian, cognitive linguists Adam Glaz and Serhiy Potapenko write, “The big number of English words denoting smaller water containers situated close to land [e.g. bay, cove, harbour, inlet, H.B] can be explained by the fact that the languages of the non-marine Slavic nations do not require minute differentiations of the coastline” (Glaz and Potapenko 2009: 4-5). Furthermore, classicist and philologist George Davis Chase notes the influence of nautical language on the figurative use of English (Chase 1980).
6.2 *The sea, the ocean*

English has the two terms *the sea* and *the ocean* to refer to the saltwater which covers most of the Earth. Danish does not make an *ocean-sea* distinction, and has the one term *hav* (Carsten Levisen, p.c.).¹ (There is also the word *verdenshav*, meaning ‘ocean’, which can be decomposed as ‘world’-‘sea’). There are also English count nouns, *a sea* and *an ocean*. Defined broadly, *an ocean* is a continuous very large body of water, and geographers recognize that there are six ‘oceans’. *A sea*, on the other hand, is a smaller body of water, partially enclosed by land, most of which are within an ‘ocean’. I will restrict my discussion to *the sea* and *the ocean*.

A word on the role of the definite article in the senses of the terms studied; *the sea* and *the ocean*. *The* is used because the places are conceived of as taken-for-granted and unique, as in *the beach, the sun* (Kaplan 1989: 167). This situation can be described as an instance of framed uniqueness, i.e. the referents are assumed to be unique within a given setting (Radden and Dirven 2007: 104-105).

*Ocean* is a Latinate term which came into English via Norman French, whereas sea is Germanic in origin. In keeping with its etymology, *ocean* belongs to a higher, more scientific register than does *sea*, at least in British English. This is not the case in American English. The United States lies between the Pacific and Atlantic Oceans, whereas Britain is surrounded, for the most part, by the English Channel, the North Sea, and the Irish Sea. Therefore, it makes sense that Americans would use the term *the ocean* in a colloquial register, and Britons would do the same with *the sea*. *Dictionary of Environment and Ecology* backs up this intuition and states that the word *ocean* is the American English preference and that the word *sea* is the British English preference.
preference (Collin 2011: 150). (Nonetheless, it is unlikely, from my point of view, that the semantics of *the sea* in British English and *the ocean* in American English are identical). The scientific nature of *ocean* is evident in terms such as *oceanography*, *ocean atmosphere interaction*, *ocean remote sensing data processing*. The *Oxford English Dictionary* (OED) writes that when only the one great mass of land, the Eastern hemisphere, with its islands, was known to Europeans, the ocean was the limitless ‘Great Outer Sea’, everywhere surrounding the land, as opposed to the Mediterranean and other inland seas. Unlike *a sea* and *an ocean*, *the sea* and *the ocean* are boundless terms. The opposition to ‘land’ is more important with the term *the sea* than it is with the term *the ocean*, as evidenced in the ‘sea’—‘land’ pairing discussed earlier.

(4) About 80km north of the Spanish coast *the shallow sea* on the continental shelf falls away dramatically to the Atlantic’s abyssal plain and depths of 4,000m. (Wordbanks Times)

(5) Scores of islands are scattered amid *vast, blue ocean* in every direction, as far as the eye can see. (Wordbanks Br Ephem)

In British English, ‘the sea’ and ‘the ocean’ are bodies of water which spread out over large distances, yet ‘the ocean’ is spread out over a larger distance. A frequent collocate of *ocean* which indicates this property is *vast* (Wordbanks UK subcorpora wordsketch *ocean*, 19/8/12). ‘The sea’ and ‘the ocean’ are both understood to be deep. *Deep sea* and *deep ocean* are common collocations (Wordbanks UK subcorpora wordsketches *ocean* and *sea*, 19/8/12). However, ‘the sea’ is conceived of as shallower than ‘the ocean’. A combination of *shallow* with *sea* is common (see (4)), but a combination of *shallow* with *ocean* is not.
The water in 'the sea' and 'the ocean' is of a particular type. It is salty, unlike the water in other places which often people can drink. Another aspect of 'the sea' and 'the ocean' is the movement of the water. Both kinds of places have currents, and waves, and move according to the weather. Collocations which reflect the salience of movement include stormy and calm (ibid.). There are more frequent collocations which emphasize the action (or lack thereof) of 'the sea' than 'the ocean'. Common collocations of sea include: choppy, rough, smooth and flat (ibid.).

'Sea'-type concepts can serve as prototypes for colour terms. One of the prototypes of the English blue is 'the sea' (Wierzbicka 1996: 309-310). The Polynesian term moana 'sea' in, for example, Cook Islands Māori, and lanumoana ('colour moana') in Samoan have the sense of 'deep blue' (Buse 1996; Milner 1993).

The explication of the sea appears in [A]

[A] the sea (English)

a. a place of one kind
b. many parts of this place are far from many other parts of this place
c. there is a lot of water [m] in all parts of this place
d. the bottom [m] of this place is far below the places on all sides of this place
e. this water [m] is not like the water [m] in places of many other kinds because something of one kind is part of this water [m] because of this, people do not want this water [m] in their bodies
f. often this water [m] moves, not like water [m] moves in places of some other kinds where there is a lot of water [m]
g. people can think about this place like this: "there are places of two kinds people can live in places of one of these kinds this place is a place of another kind this place is on all sides of places where people can live"

In component (b), the vast, spread out nature of 'the sea' is captured. The mass of water is covered in component (c), and the depth of the water in component (d). The special salty property of the water in 'the sea' as distinct
from freshwater in other water places is stated in component (e). Component (f) presents the water as moving in a particular way unlike the way water moves in places of other kinds where there is a lot of water. In component (g), the explication sets out the opposition of ‘the sea’ to places where people can live (roughly, ‘land’). The component also depicts ‘the sea’ as surrounding these places.

Next, the ocean in British English is explicated in [B].

[B] the ocean (British English)

a. a place of one kind
b. many parts of this place are very far from places where people can live
c. there is a lot of water [m] in all parts of this place
d. the bottom [m] of this place is very far below the places on all sides of this place
e. often this water [m] moves, not like the water [m] moves in places of some other kinds where there is a lot of water [m]

The explication of the ocean includes many of the same components as the explication of the sea. As discussed, ‘the ocean’ is perceived as spread out over a larger area than ‘the sea’ is. Accordingly, component (b) of the explication of the ocean depicts many parts of ‘the ocean’ as being “very” far from places where people can live. Similarly, [B] states that the bottom of the ocean is “very far” below the places on all sides of ‘the ocean’, whereas in the explication of the sea “far” is used. The movement component (e) is the same as the relevant components in [A]. The explication of the ocean does not contain a component like component (g) in the explication of the sea because there is not the same (linguistically attested) opposition between ‘the ocean’ and ‘land’ as there is in the case of ‘the sea’. Furthermore, because the ocean in British English, is more part of a geographic and scientific register than is the sea, no human-centric components appear.
6.3 The beach, the seaside

The seascape is a place of recreation as seen in the terms the beach and the seaside. Examples of the beach appear in 6-(8).

(6) ... you can look beyond the sandy beach ... (Wordbanks OzNews)
(7) In summer months the beach is crowded with holidaymakers. (Wordbanks Times)
(8) It was a long way from the icy, rocky shores of Nova Scotia to the sun-drenched beach of Darien ... (Wordbanks BrBooks)

'The beach' is a place which has significant cultural meanings in English-speaking, some European, and many other cultures (Mathewman 2004: 1). To take one small example, some 20th century English language literature and films represent ‘the beach’ as a symbol of freedom, pleasure, sensuality, sexuality, escape from “civilization”, and use ‘the beach’ as a springboard to discuss the place of human beings in the natural world (Annesley 2004: 551-552). 'The beach' is primarily a place of recreation in Anglophone and many European cultures, a relatively recent phenomenon (Lenček and Bosker 1998: xx; Macquarie Dictionary (MD)). However, I will begin my discussion of ‘the beach’ by looking at its physical aspects before later turning to more social aspects of this kind of place.

One of the most important defining features of ‘the beach’ is the material from which it is composed. Frequent collocations with beach in Collins Wordbanks are substance terms such as, shingle, pebble, black-sand, sand, cobble and white-sand (as in (6)) (Wordbanks Australian English subcorpus wordsketch beach, 19/8/12; Wordbanks British English subcorpora wordsketch beach, 19/8/12 ). Longman Dictionary of Contemporary English (LDOCE) and OED both state, in part, that a beach is, roughly, a strip of sand or pebbles. The
material must be mentioned as it is distinct from the standard surface of the Earth. The American writers Lena Lenček and Gideon Bosker comment:

For those of us who have grown up on the Eastern seaboard or in Southern California "sand" and "beach" are interchangeable. But the sandy beach hardly exhausts the range of physiographic forms that take shape on the boundary between land and sea. In Great Britain, for example, much of the coast is covered with "shingle" or flat stones. (Lenček & Bosker 1998: 10)

There is evidence that English-speakers who live in different natural environments have slightly varying senses of the term beach. Australian literary scholar and historian Leone Huntsman writes, "The quintessential Australian beach is a surfing beach—that is, one that faces the open ocean, and where waves build in height before crashing as breakers onto the sand." (Huntsman 2001: 8). She goes on to say that non-prototypical places which are sometimes thought of as 'beaches' "possess attributes of beachness to a greater or lesser extent, depending on how closely they approach the qualities of the ocean surf beach" (Huntsman 2001: 8). In the Australian English subcorpus of Collins Wordbanks, the only collocates indicating the materials of 'beaches' are those pertaining to 'sand': white-sand, black-sand, sandy, and sand, unlike the case for the British English subcorpora which frequently include collocations such as shingle beach, pebble beach and cobble beach (Wordbanks Australian English subcorpus wordsketch beach, 19/8/12; Wordbanks British English subcorpora wordsketch beach, 19/8/12).

'The beach' is a place where 'the land' meets 'the sea'. On one side of the sand is the sea. In more technical language, 'the beach' can be termed a liminal zone (Mathewman 2004: 1). One can sometimes call some pieces of land on edges of rivers and lakes beaches. Prototypically, however, 'the beach' fringes
the sea, rather than another body of water. In this connection the concept of 'beachness' is also useful. Huntsman mentions in her discussion of 'beachness' that "sandy stretches of riverbank are also sometimes thought of as beaches" (Huntsman 2001: 8).

In addition to its physical characteristics, 'the beach' is a very human space and, as is the case with all landscape concepts, can be defined through an anthropocentric view. Lenček and Bosker draw attention to the importance of some human presence in the concept of 'the beach', "... whether an isolated stretch of sand staked out by a solitary towel, or a populous strand colonized with carnivals and curios, the beach is at once escape valve and inspiration, symbol and playground" (Lenček and Bosker: 1998: xxi). In understanding the human perspective on 'the beach', it can be helpful to look at the representation of 'the beach' in Australian art and literature. In the 19th century 'the beach' was "a lonely place from which a solitary observer views the sea, often prompting religious and moral reflection" (Huntsman 2001: 121). Huntsman calls this early idea of the beach', "the first-stage beach". By contrast, from the 20th century onwards, Australian art celebrates 'the beach' and portrays it as occupied, full of activity, vivid and bright, an image Huntsman calls, the "second-stage" beach (Huntsman 2001: 121).

Collocational evidence for the significance of a human presence in the term of 'the beach' is indicated in the frequent use of desert and crowd as verbs of which beach is an object, and crowded as an adjective with beach, as in (7) (Wordbanks Australian English subcorpus wordsketch beach, 19/8/12; Wordbanks British English subcorpora wordsketch beach, 19/8/12). Desert is also a revealing collocate because the absence of humans is noted, and in
order for 'the beach' to be described as deserted, there must be at least one human observer.

Indeed 'the beach' is now, for the most part, a place where people have fun. On 'the beach' the pleasures are of the body: swimming, sun bathing, surfing, and playing. Numerous compounds using beach reflect these activities: beach towel, beach umbrella, beach volleyball, and beach cricket (ibid.). In order to pursue these activities, people prefer to be on 'the beach' when it is hot. Tropical, sun-kissed and sun-drenched (see (8)) are common collocates of beach, but cloudy and overcast are not (ibid.).

Many commentators have discussed the importance of 'the beach' in Australian culture (e.g. Horne 1964; Huntsman 2001). The majority of Australians live on the coast\(^2\) and for many, holidays are spent at 'the beach' (Dutton 1985: 53). As explored in this thesis, the seat of Australian identity is sometimes said to be found in 'the bush' (see Ch. 8). On the other hand, 'the beach' projects another image of Australia. Australian author and historian Geoffrey Dutton sums up this image by saying, “There is an alternative Australian tradition of pleasure and ease as against the hardships of the bush legend ...” (Dutton 1985: 48).

In [C] and [D] I will present explications of the beach in British English and Australian English.

[C] the beach (British English)

a. a place of one kind
b. this place is near the sea [m]
c. on one side of this place is the sea [m]
d. the ground [m] in this place is not like the ground [m] in places of other kinds
e. there can be sand [m] in this place
f. there can be a lot of small hard [m] things on the ground [m] in this place
g. when someone is in this place, this someone can see the sea [m]
h. often when it is hot [m] in places where many people live people want to be in this place
i. often people do things of many kinds in this place
because they want to feel something good in their bodies

[D] the beach (Australian English)

a. a place of one kind
b. this place is near the sea [m]
c. on one side of this place is the sea [m]
d. the ground [m] in this place is not like the ground [m] in places of other kinds
e. there is a lot of sand [m] in this place
f. when someone is in this place, this someone can see the sea [m]
g. often when it is hot [m] in places where many people live people want to be in this place
h. often people do things of many kinds in this place, because they want to feel something good in their bodies

Component (b), shared by both explications, places ‘the beach’ near the sea. The specific position of ‘the beach’ on one side of the sea is stated in component (c). Component (d) portrays the ground of ‘the beach’ as distinct from that of other kinds of places. The two explications then diverge because of the differences in the composition of ‘the beach’ in various parts of the world. Component (e) of the explication of the beach in Australian English [D] states that “there is a lot of sand in this place”. By contrast, the British English component (e) in [C] is phrased in terms of potential: “there can be sand in this place”. Furthermore, the British English explication of the beach contains a component (f) accounting for the many small hard things (e.g. pebbles, cobbles) which can be on the ground.

Component (f) of the British English explication [C] and component (g) of the Australian English explication [D] are the same: “when someone is in this place, this someone can see the sea”. This component brings in a human perspective. As discussed, ‘the beach’ is a place for people, and this component ties in with Huntsman’s notion of the “first-stage” beach discussed earlier. Component (g) of the British English [C] and component (h) of the Australian English [D] account for the preference to spend time on ‘the beach’ in hot temperatures. ‘The beach’ as a place of physical recreation is specified in
component (h) of the British English explication, and component (i) of the Australian version.

A further point of difference between British and Australian conceptualizations of places by the sea is the specifically British term *the seaside*.

(9) Oh, I do like to be beside *the seaside*!  
I do like to be beside the sea!  
I do like to stroll upon the Prom, Prom, Prom!  
Where the brass bands play: “Tiddely-om-pom-pom!”  
(John A. Glover-Kind, 1907)

(10) Storms closed the *seaside promenade* in Penzance after waves damaged the town’s sea wall. (Wordbanks SunNOW)

(11) In short, a typical spring day at *the English seaside* ... (Wordbanks Br News)

‘The seaside’ refers to resorts beside the sea in England and this dates back to the mid 18th century (Walton 1983: 12). ‘The seaside’ is characterized by a distinct architecture which allows people to enjoy the environment by the sea. As John K. Walton, the foremost historian of ‘the seaside’, writes, “from its earliest days the English seaside resort has made its living by offering distinctive entertainments and artificial attractions as well as the natural (but culturally mediated) features of shoreline and sea” (Walton 2000: 94). Holiday-makers can walk along promenades, esplanades and parades which run alongside the sea. Pleasure piers containing bandstands and amusement parks extend into the water. Although people bathe and spend time on beaches at ‘the seaside’, there are typical seaside pastimes which do not depend on the sensual pleasures afforded by the sun and seawater. Some children’s activities include donkey rides, Punch and Judy (puppet) shows, and sandcastle competitions.
Collocations of *seaside* used as a noun modifier taken from a Collins Wordbanks Online wordsketch of the British English subcorpora are also telling. Those which reflect ‘the seaside’ as a holiday destination include *seaside resort*, *seaside postcard*, *seaside tripper*, *seaside retreat*, *seaside holiday*, and *seaside holidaymakers*. The collocates *arcade*, *pier*, and *promenade*, as in (10), indicate the characteristic built environment. Because of the archetypal activity of the seaside donkey ride, *donkey* also appears as a collocate of *seaside*. The collocation *English seaside* (see (11)) appears frequently, as ‘the seaside’ is considered a uniquely English kind of place.

The seaside holiday town rose between the mid-18th century and the First World War (Walton 1983: 226). They were initially established as sites of medical treatment based on sea bathing, as well as social centres. However, they became primarily places of recreation in the early 1800s (Shields 1991: 79). In the early years of seaside holiday towns, they were, in the main, visited by the upper and middle classes. Later, from the mid-19th century onwards, a wider range of classes of British society had access to holidays at ‘the seaside’ (Urry 1990: 17-32).

The popularity of ‘the seaside’ declined in the latter 20th century as more Britons began to holiday at beach resorts overseas (Shields 1991: 109). These overseas beach resorts were marketed as places where tourists could enjoy more sensual pleasure of ‘the sun’ and ‘the beach’, in contrast to traditional British ‘seaside’ activities (see Andreu et al. 2001 on the image of Spain as a destination for British tourists). Nonetheless, ‘the seaside’ continues as a nostalgic concept, as evidenced by the sizable amount of contemporary children’s literature set there (Walton 2000: 1-3).
Looking at the OzNews subcorpus of Wordbanks, it appears that *the seaside* is not used in Australian English. Just 2% of all occurrences of *seaside* are of *the seaside*, and the majority of those refer to the English "seaside" song (see (9)). However, in the Times subcorpus of British English (of a similar size to OzNews, and also composed of newspaper material), 17% of all hits of *seaside* are in the frame *the seaside* (Wordbanks, 28/10/12).

Even those tokens in the Times subcorpus which are not in this frame generally pertain to the same kind of place as *the seaside*, as in *seaside town*, referring to English seaside resorts, such as Margate and Bournemouth. By contrast, tokens of *seaside town* in OzNews refer to towns such as Terrigal (Central Coast, New South Wales) and Yeppoon (Central Queensland), which are totally unlike English seaside resorts. According to Huntsman, *the seaside* is not an appropriate label to apply to Australian beach holiday spots (Huntsman 2001: 92). Australian beaches and climate are attractions in their own right, therefore the buildings and the amusements of 'the seaside' are not necessary in Australia.

*The seaside* is explicated in [E].

[E] *the seaside* (British English)

a. a place of one kind
b. this place is near the sea [m]
c. the sea [m] is on one side of this place
d. often people want to be in this place for some time because they want to be near the sea [m]
e. there are a lot of places of other kinds in this place
   because some time before people did something in this place
f. people do things of many kinds in this place because they want to feel something good

Components (b) and (c) are shared with *the beach* and situate 'the seaside' near the sea, beside the sea. Component (d) depicts 'the seaside' as a place
where people want to holiday because of its location. Component (e) speaks of 'the seaside' as a man-made environment.

Component (f) portrays 'the seaside' as a place of recreation. The wording of this component differs from the wording of a similar component in the two explications of the beach. The reason why people do things of many kinds at 'the beach' is sensual pleasure. Therefore the component for the beach reads "because they want to feel something good in their bodies". The version for the seaside is simply "because they want to feel something good". This wording reflects seaside activities which are not particularly associated with the body, e.g. puppet shows, and listening to live music played in bandstands.

6.4 The coast, the shore

The coast and the shore are illustrated in (12)-(16).

(12) If the wave crests are not parallel to the shore as they approach the coast ... (Wordbanks US Books)
(13) The Israeli navy patrols the coast off Gaza for weapons smugglers. (Wordbanks US Mags)
(14) The gentle waves lapped the shore in a rhythmic soothing whisper.
(15) A whirling storm battered the coast of southern Brazil ... (Wordbanks US News)
(16) Few fishermen ... have returned to the sea since the ... tsunami. Many lost their boats when the waves pounded the shores. (Wordbanks US Spoken)

The words shore and coast are sometimes considered synonyms (e.g. in an online dictionary of synonyms). Some psycholinguistic tests of synonyms rank coast and shore next to boy and lad, and journey and voyage in terms of the amount of similarity perceived between the pairs (Charles 2000: 514). OED tells us that a ‘shore’ is “the land bordering on the sea or a large lake or river”, and that a ‘coast’ is “the edge or margin of the land next to the sea”. Although
some may see *coast* and *shore* as denoting the same referent, the two words have different senses, as has been discussed by the founder of Frame Semantics, Charles Fillmore:

Though the details are a bit tricky, the two English words *SHORE* and *COAST* (not differently translatable in many languages) seem to differ from each other in that while the *SHORE* is the boundary between land and water from the water’s point of view, the *COAST* is the boundary between land and water from the land’s point of view. (Fillmore 1982: 121)

In this section, I will attempt to come to grips with some of the “tricky details” by presenting semantic explications of *the coast* and *the shore*. As I would see it, ‘the coast’ and ‘the shore’ are, like all landscape or seascape concepts, human-centred concepts (see 1.7). *The shore* bases its meaning on the perspective of someone in the water, and *the coast*, on the vantage of someone on land.

As suggested by the dictionary entries, a number of kinds of bodies of water can be said to have a ‘shore’ (see 4.2). There can be a ‘shore’ of a river or lake, as well as a ‘shore’ of the sea. However, ‘coast’ can only be used in relation to ‘the sea’.

If we are to take Fillmore’s idea of ‘coast’ being a boundary from “the land’s point of view” we can note the following. ‘The coast’ covers a larger area than does ‘the shore’. The term *the coast* can be used to refer to the East and West sides of the United States of America. In Australia, people talk about travelling to beachside towns, such as Bateman’s Bay or Ulladulla in Southern NSW as “going to the coast”. A ‘coast’ can even be said to have a ‘shore’ as one of a number of features, as in (12). Another piece of evidence is the concept of guarding or patrolling ‘the coast’ to protect the land from people and vessels approaching from ‘the sea’. *Coast guard* is the most frequently found
combination using *coast. Patrol* is one of the ten most frequent verbs which
*coast* is the object of, as in (13) (Wordbanks wordsketch *coast*, 24/8/12).

Now I turn to look at the idea of ‘the shore’ being a boundary from “the
water’s point of view”. I propose that ‘the shore’ is a place on the side of a water
place which is narrower than ‘the coast’. ‘The shore’ can at times be covered
with water, as in the case of tides coming in and out on the sand edging the
sea. In this connection, the verb *lap* appears on the list of frequent collocates
which *shore* is the object of, as in (14) (Wordbanks wordsketch *shore*, 24/8/12).
The physical composition of ‘the shore’ is sometimes indicated in collocations,
such as *sandy shore, pebbly shore*, or *rocky shore* (ibid.). Adjectives of this kind
are not found frequently for *coast* (Wordbanks wordsketch *coast*, 24/8/12). This
difference is in line with a ‘shore’ being more specific than a ‘coast’.
Furthermore, a ‘shore’ can be a particular habitat as seen in the common
names of some species, such as *shore crab* and *shore bird* (both in the top ten
colllocations in which *shore* is a modifier) (Wordbanks wordsketch *shore*,
24/8/12).

People use the word *shore* for the place where one enters or exits a body
of water, most often by boat. There is phraseology such as *come ashore* and
*ship-to-shore*. Some compounds of *shore* indicate a nautical perspective. *Shore
leave* is a leave of absence granted to a sailor to go back on land; a *shore party*
is a group of people going onto land from a ship; a *shore excursion* is a short
trip onto land taken by passengers on a cruise; and a *shore crew* consists of
members of the crew of a yacht who remain on land (OED).

Another aspect of the land bound nature of ‘coast’ is its use with compass
point terms, for example “West coast of Ireland”, “North coast of NSW”.
Combinations such as these indicate a relative area on a land mass. By
contrast, the compass points used with *shore* refer to the edges of a body of water, for example “the north shore of the harbour”, “the southern shore of the river”. As Fillmore observes:

A trip that took four hours ‘from shore to shore’ is a trip across a body of water; a trip that took four hours ‘from coast to coast’ is a trip across a land mass. “We will soon reach the coast” is a natural way to say something about a journey on land; “we will soon reach the shore” is a natural way to say something about a sea journey. Our perception of these nuances derives from our recognition of the different ways in which the two words schematize the world. (Fillmore 1982: 121)

I will mention some further evidence which suggests that the sense of *the shore* is more tied to ‘the sea’, but the sense of *the coast* is more related to ‘land’. The verbs *batter, pound*, and *lash* frequently collocate on Wordbanks with *coast*, mostly in the context of natural disasters, as in (15) (Wordbanks wordsketch *coast*, 24/8/12). *Batter* and *pound* also appear frequently with *shore* on Wordbanks, as in (16) (Wordbanks wordsketch *shore*, 24/8/12). However, when *batter* and *pound* are used with *shore* on Wordbanks, in relation to a natural disaster, this natural disaster is always a tsunami or tidal wave which come from ‘the sea’. By contrast, on Wordbanks, the subject of the aforementioned verbs used with *coast* can also be, in addition to tsunamis and tidal waves, hurricanes, storms, and cyclones. Natural phenomena such as hurricanes can come further inland than tsunamis and tidal waves do.

Furthermore, *ravage* and *devastate* also occur frequently with *coast*, but not with *shore* (ibid. Wordbanks wordsketch *coast*, 24/8/12). In some of the examples of the use of *ravage* and *devastate* with coast, people, for example, Vikings, are the subjects, of these verbs. Presumably, people can come farther inland than can tsunamis and tidal waves.
I will now present the meanings of *the coast* and *the shore* in semantic explications [F] and [G].

[F] *the coast* (English)

a. a place of one kind
b. many places are parts of this place
c. all these places are near the sea [m]
d. some of these places are far from some other of these places
e. people can see the sea [m] on one side of these places
f. people can live in these places

[G] *the shore* (English)

a. a place of one kind
b. this place is very near some places where there is a lot of water [m]
c. there are places where there is a lot of water [m] on one side of this place
d. people can see places where people can live on one side of this place
e. there can be water [m] in this place

To begin by looking at the explication of a *coast*, components (b), (c), and (d) portray ‘coast’ as a broad area composed of many places near the sea. Component (e) depicts the position of ‘the sea’ on one side of ‘the coast’. This component is framed in terms of what people can see. This frame reflects the anthropocentric nature of ‘the coast’ as being from the point of view of someone on land.

As has been foreshadowed earlier, it is not necessary to include the concept of ‘land’ per se in the explications of the meanings of *coast* and *shore*. I suggest that ‘land’ is the default kind of place. The use of the component “people can live in this place” accounts for the notion of ‘coast’ as being a boundary from the land’s point of view.

Next, I will turn to discuss the explication of *shore*. This explication speaks of places where there is a lot of water, rather than ‘the sea’, as is the case with *coast*. The explication of *shore* does not include the same broad positioning
found in the explication of *coast*. A ‘shore’ is not depicted as being made up of many places. While a ‘coast’ is described as being “near” the sea, a ‘shore’ is said to be “very near” places where there is a lot of water.

Components (c) and (d) place a ‘shore’ between bodies of water and the land or “places where people can live”. Component (e) depicts the position of ‘land’ on one side of ‘the shore’. This component is framed in terms of what people can see. This frame reflects the anthropocentric nature of ‘the coast’ as being from the point of view of someone in the water. Component (e) states that a ‘shore’ can have the presence of water.

### 6.5 Islands, peninsulas

In the discussion of “semantics by the sea” the topic of ‘islands’ and ‘peninsulas’ recalls again the sharp distinction between ‘land’ and ‘sea’. As ethnologist Owe Ronström writes:

> Islands, at least linguistically, are constituted by the interplay between two radically different elements – land is what they consist of; water is what surrounds and defines them. (Ronström 2009: 170)

The English word *island* is illustrated in (17)-(18).

(17) ... the dark blues and greens of the tropical waters surrounding the island ... (Wordbanks OzNews)
(18) ... Australia is separated from these islands by at least 500 miles of notoriously turbulent waters ... (Wordbanks Br Books)
(19) He knows the house on the island ... (Wordbanks Br Books)

In this section, I will discuss ‘island’ and ‘peninsula’ concepts. The geographer Stephen A. Royle in his book chapter “Island Definitions and Typologies” (2007) gives the basic definition of the English word *island* as ‘a piece of land surrounded by water’. The etymology of the English term *island* is
referred to in writings in the discipline of Island Studies (Beer 1990: 271; Edmond and Smith 2003: 9). The word *island* derives from two elements. As with similar island-type terms in other Germanic languages, *island* partly has its origins in the Proto-Indo-European *akua*, water or swamp. Another part of the etymology of *island* is *land* (originally meaning “a definite portion of the earth’s surface which is owned”) (OED; Ronström 2009: 167-169).

Ronström made a survey of the etymology of ‘island’ words from a number of European languages. He found that in Germanic, and in most Slavic and Baltic languages the etymological source of the general ‘island’ terms had a water based meaning. By contrast, the root of the general ‘island’ terms in Hungarian, Finnish, Sami, Irish and Polish had a land-based meaning (Ronström 2009: 170-171). The question of whether these diverging etymologies have an influence on the semantics of ‘island’ terms will not be pursued.

Languages of island-based countries in North Western Europe, English, Finnish, and Swedish, have many words for different kinds of ‘islands’ (Ronström 2009: 172). Royle links the development of words of these kinds to the seafaring culture of the Vikings. On journeys Vikings stopped at small islands for rest and refuge (this would naturally not account for Finnish) (Royle 2007: 33). Languages of countries with few islands appear to have fewer words for ‘islands’. For example, Slovak has the one term *ostrov* (Royle 2007: 36). (However, one can also form diminutives of ‘island’ words in some of the languages which have fewer ‘island’ terms, though they still do not have as many distinctions as languages with a lot of ‘island’ words (Ronström 2009: 173)).
English has the terms *isle, islet, holm* (uncommon), *reef, rock, ait* (uncommon), *atoll* and *key* among others. There are 221,800 islands in Sweden. Swedish, in addition to the general word ö has *holm/holme* (the dash <I>indicates a variant spelling), *skär, ör/öra/ören/örel, kobbe/kobb/kobba/kubba, båda/bade, klack, har/hara/hare,* and *grynna/grynda/grund,* to name some of the more frequent ‘island’ term. I will elaborate on two of these Swedish terms, *holm* and *skär.*

Islands come in different sizes. However, as Smith and Edmond write, “The defining idea of an island is its boundedness” (Smith and Edmond 2003: 2). The vast land of Australia is not normally considered an ‘island’. Rather, it is thought of as a continent, or an island continent. At various times there have been attempts to legally define an island based on whether it is habitable (Royle 2007: 40).

In some languages the locative preposition used for ‘islands’, particularly small islands, differs from those used for the mainland. The English preposition *on* is used with places such as small islands which can be viewed as surfaces (OED). In English one is generally *on* a small island (e.g. “*on* the island” as in (19)), but *in* a larger place (e.g. *in* Australia). Ronström gives the example of the large Swedish island of Gotland. Tourists sometimes say “*i* ‘in’ Gotland but its inhabitants say “*på* ‘on’ Gotland” to signal the special island status of Gotland. (Holmes and Hinchcliffe 2003: 387; Ronström 2009: 176).

The fact that ‘islands’ are separate and not part of places of other kinds is important to the ‘island’ concept. Royle writes of places such as Bermuda whose principal islands are now joined by bridges. With such fixed links the conception of these places as ‘islands’ has been eroded and Bermuda is often thought of as a single island (Royle 2007: 44).
I will now present the meaning of the English word *island* in [H].

[H] *an island* (English)

a. a place of one kind
b. on all sides of places of this kind, there are places where there is a lot of water [m]
c. because of this, places of this kind are not parts of places of other kinds
d. places of this kind can be big places, places of this kind can be small places
e. people can live in some places of this kind
f. someone can be on a place of this kind

Component (b) depicts 'islands' as surrounded by water on all sides. The phrasing "places where there is a lot of water" allows for the inclusion of islands in many types of water places: 'rivers', 'lakes' and 'the sea'. Component (b) covers the land-water dichotomy, which is built into the term *island*. (Here, as with other explications, "land" is taken as the default kind of place and not specifically named). However, Ronström asserts that there is an additional element to the concept of 'island'. To be classified as such an 'island' depends on the presence of other places across the water from the 'island', either the mainland or other islands (Ronström 2009: 172). Component (c) states that 'islands' are separate from other places where people can live. The varying sizes of 'islands' are captured in component (d). Component (e) states that people can live in these places. Because an 'island' is a bounded kind of place, someone can be on an 'island', as captured in component (f).

(20) The *peninsula* juts out into the Channel like a sore thumb. (Wordbanks SunNOW)
(21) The City of Redcliffe is ... on a *peninsula* bounded by water on three sides ... (Wordbanks Oz news)
(22) ... how the *peninsula* forming the north-west corner of France came to be called Brittany. (Wordbanks Br Books)

Relatively little attention has been paid to 'peninsulas' in comparison with 'islands'. 'Islands' arouse interest because they are bounded and foster
distinctive environments, cultures and histories. As the editors of *Islands in History and Representation* Rod Edmonds and Vanessa Smith write, “Boundedness makes islands graspable, able to be held in the mind’s eye and imagined as places of possibility and promise” (Edmonds and Smith 2003: 2).

‘Peninsulas’, by contrast, can be considered to be parts of other places. They lack the uniqueness of ‘islands’. ‘Peninsulas’ are bordered by water on some, but not all, sides, and are attached to larger land masses. The semantics of the English term *peninsula* is set out in explication [I].

[I] a peninsula

a. a place of one kind
b. on many sides of places of this kind, there are places where there is a lot of water [m]
c. on one side of places of this kind, there are places of other kinds where people can live [m]
d. these places are parts of big places where people can live

e. places of this kind can be big places, places of this kind can be small places
f. people can live in these places

The explication of *peninsula* can be compared with the explication of *island*. In component (b) ‘peninsulas’ are depicted as being surrounded by bodies of water on “many sides” as against “all sides” in the explication of *island*. One common collocate of *peninsula* is *jut* (as in (20)), which is, naturally, not found frequently with *island* (Wordbanks sketch difference, *island/peninsula*, 15/8/12). In components (c) and (d) the connection which ‘peninsulas’ have to other places is depicted. This property can be contrasted with the separateness of an ‘island’ which is portrayed in component (c) of [H]. Component (e) covers the varying sizes of ‘peninsulas’ and it is identical to component (d) of explication [H]. Component (f) states that people can live in places of this kind, and is identical to component (e) of [H].
I now turn to look at two of the Swedish island terms mentioned earlier, *holm* and *skär*.

(23) RUNEBERG 5: 57 (1860). Solen sken och fjärden lyste, sjöbrisen blaste muntert, långt ut stod *holmar* och *skär* i havsdiset. (*Svenska Akademiens ordbok*)

'The sun was shining and the bay shone, the sea breeze was blowing gaily, far out were standing *holmar* (indefinite plural of *holm*) and *skär* (indefinite plural of *skär*) in the sea mist.'

A ‘holm’ is “an island with some trees and other vegetation, often smaller and somewhat flatter than ‘islands’” (Ronström 2009: 173-174). A similar definition can be found in *Svenska Akademiens ordbok* (the Swedish Academy Dictionary): “small (often very) island, typ. with at least reasonably good vegetation of some sort”. *Lexin Swedish-English dictionary* gives the English definition of *holm* as ‘islet’. *Holm* or the suffix –*holm* appears in proper nouns for small islands such as, Långholm, Tallholm, and Lillholm. Because of their favourable conditions people can live on ‘holmar’ (indefinite plural of *holm*). (There is also the cognate term *holm* used in English particularly for small islands in the North of Scotland (OED)). I offer a sketch of the semantics of *holm* in explication [J].

[J] *en* (indefinite article) *holm* (Swedish)

a. a place of one kind
b. on all sides of places of this kind, there are places where there is a lot of water [m]
c. because of this, places of this kind are not parts of places of other kinds
d. places of this kind are small places
e. people can live in some places of this kind
f. someone can be on a place of this kind
g. many things grow[m] in places of this kind

Components (a), (b), and (c) are identical to those used in the explication of *island*. Component (b) states that a ‘holm’ is surrounded by water. In
component (c) the separation of a ‘holm’ from other places is captured. The size component (d) differs from that used in the explication of island. ‘Holmar’ are small places whereas ‘islands’ can vary in size. Component (e) states that people can live on ‘holmar’ and it is the same as the component used in [H]. The presence of vegetation on ‘holmar’ is spelt out in component (g).

The second Swedish ‘island’ term is skär, which Ronström describes as “A small island, with little or no vegetation, often a bare, naked rock” (Ronström 2009: 174). A similar definition appears in Svenska Akademiens ordbok (the Swedish Academy Dictionary), “Comparatively small (rocky) island (especially in the sea), cut off by water. ... For example, (hilly) island in general, made from marine rock and the like; submerged rock, made of rock”. The Lexin Swedish-English dictionary gives the English definition of skär as ‘[rocky] islet, skerry, rock’. (In English there is the cognate skerry mostly used in Scotland (OED)). A tentative meaning of skär is proposed in explication [K].

[K] en skär (Swedish)

a. a place of one kind  
b. on all sides of places of this kind, there is ‘the sea’ [m]  
c. because of this, places of this kind are not parts of places of other kinds  
d. places of this kind are small places  
e. there is rock[m] in places of this kind  
f. people don’t live in many places of this kind

Components (a), (b), and (c) are shared with those used in the explications of island and holm. The size component (d) is identical to that used in the explication of holm. The physical composition of a ‘skär’ as ‘rock’ is captured in component (e). In component (f) a ‘skär’ is portrayed as not often inhabited. In this way, the explication differs from the explications of island and holm.
6.6 Bays, zatoki

In this section, I will discuss a number of English terms and categories for places in the sea which are partially enclosed by land: bay, cove, inlet, and harbour. English has a large number of categories for recesses of the sea into the land, and for bulges of the land into the sea. As discussed earlier in the chapter, the English elaboration of this area of vocabulary can be linked with the status of England as an island country and former marine power. By contrast, Polish, as the language of a continental country with little history of exploration and trade via ‘the sea’, has fewer terms of this kind. I will discuss the Polish term zatoka, glossed in English as ‘bay’. To begin with, before I discuss the individual words, I will illustrate this lexical elaboration of English with reference to James Cook’s Endeavour voyage.

In 1770, Lieutenant James Cook (later Captain) aboard the British Royal Navy ship HMS Endeavour charted the East coast of Australia. In exploring and mapping a coastline, the Endeavour expedition needed to pay attention to the finest indentations and protrusions of the Australian shore. Cook gave dozens of proper names to features of these kinds, such as Morton Bay, Cape Tribulation, Point Upright.

The writer and artist Paul Carter in his book The Road to Botany Bay: An essay in spatial history argues that English language place names in Australia need to be understood in light of the process of discovery. One cannot assume that named places, such as Botany Bay, already existed as definite places before application of their English names during European exploration (Carter 1987: 13). The same can be said for the classification of places as ‘bays’, or ‘points’, or ‘inlets’.
I will begin with the term bay because the other English words treated in this chapter (cove, inlet, and harbour) are often defined in terms of bay. A ‘bay’ is a reasonably-sized closed area of a body of water with a wide opening. ‘Coves’ and ‘inlets’ are smaller than ‘bays’. A ‘cove’ is round or oval in shape. It has a narrow opening out to the sea. An ‘inlet’ is a small, narrow strip of water which also has a narrow opening, and is long in shape. Because they are partially enclosed by land, ‘bays’, ‘coves’, and ‘inlets’ are shielded from the wider area of ‘the sea’. The collocate sheltered is found on the wordsketches of bay, cove and inlet (Wordbanks, accessed 16/8/12). Secluded and protected are also frequent collocates of bay and cove (ibid.). Antonyms of these adjectives, exposed, unprotected, and open, are not found frequently with bay, cove, and inlet (ibid.).

Both ‘coves’ and ‘inlets’ have narrow entry points. For this reason a ‘cove’ or an ‘inlet’ could be hard to notice. Hidden cove and hidden inlet are frequent collocations, whereas the numbers of hidden bay are negligible (ibid.). Width terms such as wide and narrow are on the wordsketches of bay and inlet (ibid.). By contrast, wide cove and narrow cove are not frequent collocations (ibid.). I believe that this is because it makes little sense to talk about the width of something round like a ‘cove’.

A ‘harbour’, like the other concepts discussed in this section, is a part of the sea which is partially enclosed by ‘land’. However, a ‘harbour’ is not conceived of in terms of a particular size or shape, but of its usefulness for people. A ‘harbour’ could be composed of a ‘bay’, ‘inlet’, or ‘cove’, or a combination of these places. For example, Sydney’s Middle Harbour is described as being a ‘bay’ (Mobile Reference 2007). Because ‘harbours’ are surrounded in part by ‘land’, their water is relatively still, in comparison with the
water in other parts of 'the sea'. Therefore, they are a safe place for ships. The role of a 'harbour' as a place for ships is indicated in frequent collocations of harbour, such as safe harbour, busy harbour (referring to marine traffic), deep-water harbour (depth is important for vessels), harbour craft, and harbour town (a human settlement may have the need for a 'harbour'). These collocates are not found with bay (Wordbanks sketch difference harbour/bay, 16/8/12).

I will now set out the meanings of the English terms bay, cove, inlet, and harbour in semantic explications [L]-[O].

[L] a bay (English)

a. a place of one kind
b. places of this kind are big places
c. there is a lot of water [m] in places of this kind
d. this water [m] is part of the sea [m]
e. there are places where people can live on some sides of places of this kind
f. someone can think about a place of this kind like this:
   "when someone is in a part of the sea [m] near this place
   this someone can see some parts of this place, not all parts"

Component (b) covers the reasonable size of a 'bay'. In component (c) the large amount of water is specified. Component (d) locates a 'bay' in 'the sea'. In component (e) the water of a 'bay' is enclosed by land. Places where people can live are said to be on some sides of a 'bay'.

Component (f) accounts for the wide opening of a 'bay'. This aspect is explained via what a person can think about a place of this kind. A similar frame is used in the explications of inlet and cove. The openings of 'bays', 'inlets', and 'coves' are significant in terms of how easy it is for a vessel to enter them. This property is indicated in previously mentioned collocations such as wide bay, narrow inlet, and secluded cove. Therefore, the cognitive scenario in (f) places an observer in the sea, near a 'bay'. This observer can see some, but not all, parts of this place because of its relatively wide opening.
[M] an inlet (English)

a. a place of one kind
b. places of this kind are not big places
c. there is water [m] in these places
d. this water [m] is part of the sea [m]
e. there are places where people can live on many sides of places of this kind
f. someone can think about a place of this kind like this:
   "when someone is in a part of the sea [m] near this place
   this someone can't see many parts of this place"
g. places of this kind are long [m] places

Component (b) states the comparatively smaller size of 'inlets'. Places of this kind are said to not be big places. There is simply "water" in 'inlets', as against "a lot of water" found in 'bays'. As in previous explications, component (d) situates an 'inlet' in the sea, and component (e) encloses an 'inlet' in land. The narrow opening of an 'inlet' is suggested in component (f). The phrasing is similar to component (f) of explication [L] of bay. It differs in it says someone is not be able to see "many parts of this place" because the opening of an 'an inlet' is smaller than that of 'a bay'. Component (g), the shape component, specifies that an 'inlet' is a long place.

[N] a cove (English)

a. a place of one kind
b. places of this kind are not big places
c. there is water [m] in these places
d. this water [m] is part of the sea [m]
e. there are places where people can live on many sides of places of this kind
f. someone can think about a place of this kind like this:
   "when someone is in a part of the sea [m] near this place
   this someone can't see many parts of this place"
g. a place of this kind is like something round [m]

Explication [N] of a cove is nearly identical to the explication of an inlet. It states that 'coves' are not big places, contain water, are part of the sea, are enclosed by land, and are likely to have narrow openings. However, [N] contains the shape component (g) which liken a 'cove' to something round.
[O] a harbour (English)

a. place of one kind  
b. there is a lot of water [m] in places of this kind  
c. this water [m] is part of the sea [m]  
d. in many parts of the sea [m] often the water [m] moves a lot  
e. it is not like this in this place  
   because there are places where people can live [m] on some sides of places of this kind  
f. because of this, often people can want ships [m] to be in this place

Component (b) states the large amount of water in a ‘harbour’. In component (c) a ‘harbour’ is located in the sea. Components (d) and (e) point out the exceptionally calm quality of a ‘harbour’. ‘Harbours’ are compared with many part of the sea where the water often moves. The water in a ‘harbour’ does not move as much because it is partially enclosed by land. This point is made in component (e). The purpose of a ‘harbour’ as a place to bring ships is covered in component (f) in which the semantic molecule “ship” appears. “Ship” is not a universal semantic molecule, unlike “water”. For example, it would not be necessary in Pitjantjatjara/Yankunytjatjara, a language spoken by people who live in an arid, inland environment. However, “ship” would be necessary to explicate many English words, such as, navy, and pirate.

As mentioned in section 6.1., Głaz and Potapenko (2009) point out that Polish has only one word for indentations of the sea into the land because “the languages of the non-marine Slavic nations do not require minute differentiations of the coastline” (Głaz and Potapenko 2009: 4-5). The relevant Polish word is zatoka, glossed in English as ‘bay’ or ‘gulf’. The word zatoka does not imply a specific shape or size of an entrance. Therefore its semantic explication has fewer components than those of the English words. (There is also the diminutive zatoczka. However, the diminutive could be explicated using zatoka as a derivational base.) Zatoka is explicated in [P]
[P] zatoka (Polish)

a. a place of one kind
b. there is a lot of water [m] in places of this kind
c. this water [m] is part of the sea [m]
d. there are places where people can live on some sides of places of this kind

[P] specifies that there is a lot of water in these places and that this water is part of 'the sea' in components (b) and (c). Component (d) states that there is land on some sides of these kinds of places. No shape or size components appear in this explication, unlike those of the previously discussed English words.

6.7 Concluding remarks

In this chapter, I have uncovered the meanings of a number of seascape terms in English with, in some sections, contrastive reference to the meanings of a number of seascape terms in Swedish, Polish, British English, and Australian English. In my process of discovery, I have found that seascape concepts in different cultures are based on both geographic facts, and cultural practices. Furthermore, many cultural practices stem from the geography of the countries in which these languages are spoken. The key factor in English seascape categorization is the seafaring history of Britain, which is, naturally, influenced by the geographical situation of Britain as an island surrounded by 'the sea'.

I will recap my findings, using some examples. In terms of seascape categorization based on geographic facts, the sea is used colloquially in British English for the waters surrounding Britain, whereas the ocean is used
colloquially in American English which is spoken in a country on a continent between two ‘oceans’.

Once again, differing geographies come into the conceptualization of the recreational kinds of places, ‘the beach’ and ‘the seaside’ in Australian English and British English. The slightly varying referents of the beach in the UK and Australia give rise to slightly different components describing the physical composition of ‘the beach’. The sense of the term the seaside in British English indicates recreational activities which are present in the UK, but not in Australia. These cultural practices are influenced by British history, and the British climate, which is less pleasant than the climate of Australia.

Furthermore, cultural and geographic factors contribute to the fact that English contains two terms for the margin between land and water, the coast and the shore, whereas Chinese has the one term. Britain is an island-based country with a long history of seafaring, whereas most people live inland in China and the country lacks the same history of seafaring (Zhengdao Ye, p.c.).

Another example is the lexical elaboration of words for indentations of ‘the sea’ into land, such as ‘bays’ and ‘coves’, in English. This elaboration is suggestive of English geography and culture. The abundance of these kinds of words in English is linked with the status of England as an island country and former marine power. By contrast, the fact that there is a just one word for an indentation of ‘the sea’ into land in Polish is connected to the place of Poland as a continental country with little history of exploration and trade via ‘the sea’.

Another notable aspect of this chapter is the inclusion of a “pleasure component”, the senses of the beach and the seaside. This is a new kind of component in the explications contained in this thesis. In the case of the seaside, the component is phrased “people do things of many kinds in this
place because they want to feel something good" and, in the case of *the beach*, "people do things of many kinds in this place because they want to feel something good in their bodies", which expresses sensual pleasure.

This chapter also significantly demonstrates the anthropocentric nature of seascape concepts in the differing semantics of *the coast* and *the shore*. Although the two terms are sometimes considered synonyms, *the shore* bases its meaning on the perspective of someone in the water, and *the coast*, on the vantage of someone on land (Fillmore 1982: 121).

Overall, this chapter has demonstrated the importance of the semantic molecule ‘the sea’ and the NSM phrasing of ‘land’ as “places where people can live” in the senses of seascape terms.
Notes


3) It could be argued that component (f) of explication [C] should include a semantic molecule such as “stone” instead of using the phrasing “small hard things”. I have not proposed a component using a molecule because there are a variety of small hard things which compose ‘the beach’ in the British English conceptualization (e.g. pebbles, cobbles) – these can all be accounted for in the general phrasing “small hard things”.


CHAPTER 7

PEOPLE SAY IT’S JUST A DESERT: 
DESER T IN AUSTRALIAN ENGLISH AND
PITJANTJATJARA/YANKUNYTJATJARA ECO-ZONES

7.1 Introduction

In this chapter, I contrast words used to describe the same kind of place in the Australian landscape. One of these words, desert, as used in Australian English, comes from the language of the colonizers, and the other words, so named eco-zone terms, come from a language of some of the original indigenous inhabitants of the country, Pitjantjatjara/Yankunytjatjara. By comparing these words from the two languages, we can gain an insight into how different groups of people can think and speak about the same landscape and the same referents in different ways. Furthermore, we can gain some understanding of the values that the two groups have in regard to the same landscape. The semantics of the Australian English desert reveal a view of ‘desert’ as a “land of absences” (although this view is not necessarily a negative one) (see 7.2; Haynes 1998: 88). On the other hand, the semantics of Pitjantjatjara/Yankunytjatjara eco-zone terms, such as putji and apu/pulji, reveal that the original inhabitants of this space see these kinds of places as ecologically rich.

Bi-cultural observers testify to the differences between the two conceptualizations of this same kind of place. I will give three examples from Australians who have lived in both Anglo-Australian, and Indigenous Australian cultures. Non-Indigenous writer, Pat Lowe who has lived in both Anglo Australian and Indigenous Walmajarri (Great Sandy Desert) cultures, and
married a Walmajarri man, articulates her evolving ideas about ‘desert’ which were informed by her experience in the Walmajarri language.

At first, the desert appeared to me beautiful but undifferentiated. I saw regular, long red sandhills and swales clad in spinifex, wattle and small trees. Only as I picked up some of the vocabulary of the Walmajarri people did I begin to distinguish one area from another, and start to perceive pattern instead of randomness. (Lowe 2005: 91)

Scott McConnell, CEO of Ingkerreke Outstations Resource Services, a non-indigenous Australian, who grew up among Aboriginal people in the desert in the Northern Territory, tells of how, as a child, he did not see his home as ‘desert’:

First time I heard my home referred to as a desert, I was actually very upset. To me a desert was the Sahara, somewhere with blowing sand dunes and not a place with trees and grass like where I came from. (McConnell 2007)

In his poem, “From the place window”, the Noongar (South-Western Western Australia) poet, Jack Davis, writes of two different perspectives on the Australian landscape: an Aboriginal perception of a place which is full of life, and a non-Aboriginal view the same place as ‘desert’:

Some call it desert
But it is full of life
pulsating life
if one knows where to find it
in the land I love (Davis 1992: 73)

Firstly, in this chapter, in section 7.2, I will explore the Australian English term desert. Next, in section 7.3, I will discuss eco-zone terms in Pitjantjatjara/Yankunytjatjara. In section 7.3.1, I will look at
Pitjantjatjara/Yankunytjatjara eco-zones generally; in section 7.3.2, I will turn my attention to the Pitjantjatjara/Yankunytjatjara word *puţi*; and in section 7.3.3, I will treat the Pitjantjatjara/Yankunytjatjara word *apu/pulji*; in section 7.3.4, I will examine the Pitjantjatjara/Yankunytjatjara word *nyaru*; and in section 7.3.5, I will offer some notes on two other eco-zone words, *pila* and *tali*₂. Finally, I will offer some concluding remarks in section 7.4.

### 7.2 Desert in Australian English

Australia is the second driest continent on Earth (after Antarctica) (Haynes 1998: 2). 68% of the Australian land mass is classified as arid or semi-arid by geographers (Brown et al. 2008: 30). Dry parts of Australia are very diverse – some are sandy, some are rocky, some have permanent water, some only have water after rain, and so on. However, they are often all labeled 'desert', as literary academic Roslynn D. Haynes writes in her book, *Seeking the Centre: The Australian desert in literature, art and film*:

> In Aboriginal culture this bountiful variety of geology and biology is documented so richly and in such minute detail that even the smallest mound or declivity has, for the local people, a complex history and meaning. But variation has featured rarely in non-indigenous Australian art of the desert and even more rarely in its literature. Diversity offends against the image conveyed by the European notion of 'desert' as wilderness – vast, empty, monotonous. (Haynes 1998: 2-3)

> 'Desert' is conceptualized as a place of deprivation, a place without water, without plants, and without people, rather than being conceived of by positive attributes. Geographers, biologists, and ecologists have a more nuanced view of parts of Australia which are commonly called 'desert'. For example, *A biological survey of the Anangu Pitjantjatjara Lands South Australia 1999-2001* (Robinson et al. 2003) lists the environmental associations of various parts of...
the APY Lands, e.g. extensive sand plain with closely spaced dunes, gently
sloping limestone plain, low woodland etc. Once again, I will mention that, in
this thesis, I am investigating the folk picture of the world, rather than the
scientific picture of the world (see 1.5, also, Apresjan 1992).

According to the *Oxford English Dictionary* (OED), the English word *desert*
derives etymologically, through Old French, from the Latin *desertum* meaning
"abandoned, deserted, left waste". *Desert* originally could be applied to any
wild, uninhabited region. However, *desert* came to be "conceived as a desolate,
barren region, waterless and treeless, and with but scanty growth of herbage",
and was used to refer to places in the Middle East and Africa (OED). The "New
World" English varieties Australian English and American English use the word
*desert* for similar places in Australia and the USA.

‘Desert’ covers a large area of land. *Vast desert* (see (1)), *desert region*
(see (2)), *desert area*, and *desert country*, are considered good collocations by
native speakers. In addition, *great* combines well with *desert*, also in proper
names, such as, *Great Sandy Desert*.

(1) ... the Federal Government paid many millions of dollars to construct a
decent highway across the *vast desert* to link Western Australia with the
East. (Wordbanks Oz News)

In her book, *The Default Country: A lexical cartography of twentieth-
century Australia*, Jay Arthur observes that the relative lack of water in Australia,
in comparison with the British Isles, has caused disquiet among non-Aboriginal
Australians. Places without water are seen as deprived – ‘desert’ (see also,
section 3.2.3):
... aridity is a major focus for colonial anxiety. There is a narrative where 'wet is good' and 'dry is bad'; where bringing water, changing the nature of the hydrology, is an unqualified good. The desert is an environment that is deprived, whereas water is the gateway to Paradise: (Arthur 2003: 107)

'The desert' is without water, dry. The collocations arid desert (see (2)), and parched desert sound good to native speakers.

(2) ... it covers Australian birdsong from suburban gardens and parks to arid desert regions. (ABC Online, <http://shop.abc.net.au/products/helen-horton-abc-local-radios-guide-to-australian-birdsongs>, accessed 1/10/2012)

In addition to water, another other thing that 'desert' lacks, in comparison with other kinds of places, is vegetation. The combinations barren desert, and treeless desert are found in Australian English, as in (3) taken from a tourist guide to the South Australian opal mining town, Coober Pedy.

(3) Coober Pedy is situated upon the edge of the erosional scarp of the Stuart Ranges, on beds of sand and siltstone 30m deep and topped with a stony, treeless desert. (Coober Pedy Retail, Business and Tourism Association 2010: 5)

'Desert' is also considered to be lacking in many things, such as buildings and towns. Empty combines well with desert. In (4) the Australian 'desert' is likened to a lunar landscape, and contrasted against 'the city' which is full of distractions.

(4) That empty desert is incredible. On the one hand it felt just like being on the moon. On the other, it's amazing that, away from the city distractions, you can actually feel at home there. (Wordbanks Oz News)
Furthermore, 'desert' is largely uninhabited, and indeed inhospitable to people. One can speak of a place with few people as a metaphorical 'desert', as in (5).

(5) We were in Canberra last week and it was very much like a desert. There were so few people in the streets. (Cobuild Oz News)

Not infrequently, the Australian media features stories about tourists lost in 'desert', as in (6).

(6) **Lost in the desert:** ... This is not the first time a tourist has become lost in the desert. "In the past few years we've had three people disappear in the area in similar circumstances ..." (ABC Online, <http://www.abc.net.au/local/stories/2009/01/23/2472902.htm>, accessed 1/10/2012)

Furthermore, people unfamiliar with 'desert' can get easily lost, whereas desert Aborigines do not because of their strong way-finding and survival skills. Pat Lowe draws a contrast between the helplessness of tourists whose car had broken down in 'desert', and the competence of her Walmajarri husband, Jimmy Pike when she and he had similar car difficulties in 'desert'.

... a middle-aged Australian couple, driving a new four-wheel drive car, well-equipped and provisioned with food and water, broke down on a desert track. Unable to get their car started, they decided to wait for rescue. They waited for two weeks. ... with no sign of rescue, they wrote their wills. Somewhat belatedly, their daughter reported them missing, a rescue party went out, and they were found. This is in country that, not so long ago, was inhabited by people who knew nothing of cars, who walked confidently from waterhole to waterhole with no more equipment than they could carry in their hands and on their heads. I once broke down in the desert with Jimmy Pike and two dogs. We spent a day-and-a-half trying to get our car started again, but failed. After lunch on the second day, Jimmy announced that we would have to walk. ... Where I would have had to retrace our journey along the seismic lines, Jimmy cut across country, heading as the crow flies, straight towards our camp, thereby saving us hours of foot-slogging. Even so, the journey took all afternoon and most of
the night ... I had no fear, because I was in the competent hands of someone who knew the country intimately and was at home there. (Lowe 2005: 93-94)

Moreover, the experiences of explorers lost, or indeed dying, in harsh ‘desert’ forms part of Australia’s foundational narratives (e.g. Carter 1987, esp. pp. 69-98). Patrick White, the country’s only Noble Laureate for literature, based his 1957 novel *Voss* on the final fatal journey of the explorer, Ludwig Leichhardt, who perished in Australian ‘desert’ in 1848 (Macintyre 2009: 101).

The South-North crossing of Australian, led by Robert Bourke and William Wills, which ended in their deaths in ‘desert’, is also a seminal national story, as historian of Australia, Stuart Macintyre writes:

> The colonists made heroes of them [Burke and Wills, H.B.] in verse and art, and there have since been histories, novels, plays and several films. The pencilled diary of their final days holds pride of place in Victoria’s state library. (Macintyre 2009: 101)

In the 1950s and 1960s nuclear tests were carried out in ‘desert’ at Maralinga and Emu in the Great Victoria Desert, South Australia. These events exposed local Anangu, as well as Australian and British servicemen, to harmful levels of radiation. The land was also damaged, and Anangu were relocated, and unable to access their lands. These sites were chosen on the basis that, to white authorities, ‘desert’ was uninhabited (Davison et. al eds. 2001: 42-43, 414; also, Lester 1993: 174-183).

It is worth noting that although ‘desert’ is a place of deprivation to many non-indigenous Australians, today this state is not necessarily perceived as a negative one. The way in which non-indigenous artists have represented ‘desert’ has changed over the 19th, 20th, and 21st centuries. In the 19th century ‘desert’ was painted as empty and inhospitable, in Lowe’s words, as “a
landscape of skulls, the starvation desert of Lasseter, Burke and Wills [three Australian explorers who died in ‘desert’, H.B.]” (Lowe 2005: 92). Today, paintings often depict ‘desert’ as beautiful, but, in Lowe’s words, “more for its sweeping vistas of sameness than for its variety or its detail” (Lowe 2005: 92).

The Australian English lexicon does have other words used to refer to places which are also called ‘desert’. *Outback*, which is only partially identical in referential range to *desert*, means particularly remote parts of Australia. A large part of the sense of *outback* is based in the distance from this kind of place from major centres of population, as against environmental features which are part of the meaning of *desert* (*Australian National Dictionary* (AND); Moore 2008: 110). Central Australia has been called *the Centre* in Australian English since the late 19th century (AND). The expanded term *the Red Centre*, popularized by H.H. Finlayson’s 1935 book *The Red Centre: Man and beast in the heart of Australia*, recognizes the characteristic reddish colour of a lot of the rocks and soil of the region. This term, *the Red Centre*, therefore, identifies the region by what characteristics it has, as opposed to *desert*, the meaning of which relies on what this kind of place lacks. However, no Australian English terms recognize the variety of this region, as do the Pitjantjatjara/Yankunytjatjara eco-zone words, treated in 7.3.

There is further evidence for ‘desert’ as a place of deprivation in the figurative use of the word *desert*, for example, *concrete desert*, *spiritual desert*, and *cultural desert*. The next example (7) uses *desert* in a metaphorical sense. In (7), a newspaper journalist describes his previous perception of the Australian Gold Coast as a “cultural desert” because of its want of concerts, opera, and high art.
(7) I have been known to complain that the Coast is something of a cultural desert. (Wordbanks OzNews)

Drawing on the evidence about the meaning of the word above, Desert is explicated in [A].

[A] desert (Australian English)

a. a place of one kind
b. many parts of a place of this kind are very far from many other parts of this place
c. there is very little water [m] in places of this kind, not like in places of many other kinds
d. not many things can grow [m] in a place of this kind, not like in places of many other kinds
e. people can't see things of many kinds in places of this kind, not like in places of many other kinds
f. very few people can live in places of this kind, not like in places of many other kinds

Component (b) “many parts of this place are very far from many other parts of this place” conveys the vast area covered by ‘desert’. This component is similar to component (b) in the explication of the bush (see 8.3.2). However, while in the explication of the bush, “many parts of this place” are said to be “far from many other parts of this place”, [A] uses the qualifier very, in “very far”. It would be unusual to speak of vast bush, however, vast desert is a natural sounding collocation.

Unlike the other words for places of some kinds explicated in this thesis, including Pitjantjatjara/Yankunytjatjara eco-zone words, desert is defined by the features that it lacks rather than the positive attributes of this kind of place. The second line of components (c)-(f) draws a contrast between ‘desert’, and places of many other kinds. In these components, ‘desert’ is portrayed as deprived, in comparison with places of many other kinds.
Component (c) treats the shortage of water in ‘desert’. In the second line of the component, the small amount of water in ‘desert’ is contrasted against larger amounts of water in many other kinds of places.

Component (d) depicts the lack of plants in ‘desert’. The deficit of plants in ‘desert’ is set against the presence of vegetation in places of many other kinds. Component (e) portrays the paucity of things of many kinds in ‘desert’. Once again, the second line of (e) specifies that this property of ‘desert’ is not found in places of many other kinds.

In component (f), the uninhabited nature of ‘desert’ is represented. The component portrays the fact that very few people can live in ‘desert’, unlike in places of many other kinds.

7.3 Pitjantjatjara/Yankunytjatjara eco-zone words

7.3.1 Introduction to Pitjantjatjara/Yankunytjatjara eco-zone words

In describing the country of Pitjantjatjara/Yankunytjatjara speakers Yankunytjatjara leader and elder Yami Lester contrast a non-indigenous view of the landscape of Central Australia with an Anangu view of the same area. While many non-indigenous people see this landscape as, in his words, “just a desert”, Anangu view the country as being composed of diverse ecologically rich kinds of places:

You know, a lot of people say it’s just a desert, but it’s a certain type of area to us. The apu area, which is rock or mountain, a hill, ... you find different kinds of things like i!is (‘wild figs’) growing, and that kupa!a (‘wild plums’), round there, and these rock holes and euros, ... wallabies. Then away from the rock we call pu!i, which is thick timber land. And pu!i, which is karukaru, that’s where the kangaroos live in the watercourse way, because more grass grows there ... (Lester 2007)
In this section, I will introduce, in general, words for eco-zones in Pitjantjatjara/Yankunytjatjara. Firstly, I will provide some background on traditional Anangu culture in order to put these words and concepts into context.

Anangu are, traditionally, a nomadic, hunter-gatherer people. Even today in Anangu communities, and on Anangu homelands, hunting and gathering are popular cultural practices. These activities are not, in the main, used for subsistence, but rather for recreation, and for maintaining connection to their country. Hunting and gathering now take place using vehicles (see also, Young 2001: 36). Anangu now use guns to shoot game; metal crowbars and shovels to dig in the ground (shovels can also be used to kill small animals); and plastic storage containers for storing gathered plant material, edible grubs, and edible ants (see also, Young 2001: 40). These tools have replaced the spears; wooden hitting or throwing sticks; wooden digging sticks, and wooden bowls, which were formerly used (Hamilton 1990: 212). Important Pitjantjatjara/Yankunytjatjara concepts relating to hunting and gathering are ‘punu’ ‘trees, bushes’, ‘mai’ ‘vegetable food’, and ‘kuka’ ‘game’ which I will discuss in more detail later in this section.

In addition to their use as food, according to botanist Philip A. Clarke, plants provided Aboriginal groups, “the essential materials for making ... medicine, narcotics and stimulants, as well as the means for manufacturing their weapons, tools, shelter, watercraft [obviously, not in the case of Anangu, H.B.], ceremonial objects, clothing, ornaments and paint” (Clarke 2012: 6). Furthermore, as Clarke states, “Plants are also ecologically important for maintaining the populations of terrestrial fauna that hunter-gatherers once foraged upon for their subsistence” (Clarke 2012: 6).
In relation to food, the traditional diet of Anangu consisted of about 85% plant foods (or in Pitjantjatjara/Yankunytjatjara ‘mai’) (Keen 2004: 80). Anthropologist of Aboriginal Australia Ian Keen writes, “Over 100 species of plant were potential sources of food in the west of the Western Desert (comprising about 35% of the recorded flora), of which 20 to 40 were significant staples” (Keen 2004: 31–32). The numbers of kinds of foods shows the depth of the ecological knowledge of Anangu who lived traditionally (Lester 1993: 10). Goddard (2011: 210) writes, “An adult Yankunytjatjara would know upwards of 120 different plant species”. As discussed in sections 3.4 and 4.6, the scarcity of water in the dry environment of the Western Desert traditionally was always the dominant factor in the lifestyle of the Anangu, and the food supply was dependent on rainfall (see also, Keen 2004: 32).

Different food is available according to the time of year. There is lexical evidence for this fact in, for example, the expression mai wiyaringkupai defined as “time of year when bush foods are coming to an end (wiyaringanyi ‘to finish’), around December” (Pitjantjatjara/Yankunytjatjara to English Dictionary (PYED)). Example (8) uses the word piriya kutu ‘time of the warm spring winds, windy season, spring’, and this season is when Anangu had the richest food supply. The example gives an illustration of Anangu season vocabulary, and the relationship of season to food supply (see also, Lester 1993: 20 on hunting during ‘piriya kutu’).

(8) Ka piriya kutu mai pulka pakanî.
ka piriya kutu mai paka-ŋi
CONJ Spring plant.food grow-PRS
‘In spring lots of plant food comes up.’ (PYED: 137)
As one may expect from a hunter-gatherer people, Anangu divide the landscape into certain eco-zones or locales. These eco-zones are based on the landscape and the plants and animal which live within them (see also, Walsh 1990 on the slightly different ecological zones of Martu, another Western Desert group). This kind of division is common among Australian Aboriginal groups, including those who live in landscapes unlike those of Central Australia. The Alawa of the Gulf country of Northern Queensland distinguish various kinds of country and their typical species, for example, ‘ulbul’ ‘lagoon country’, ‘ngayiwwurr’ ‘cliff country’, and ‘urai’ ‘blacksoil’ (Layton 1999: 22, 24-25).

Eco-zone concepts are also found among other hunter-gatherer groups, such as the Baka of the Congo basin. They “classify the forest landscape into two types. Forest with a closed canopy is called manja ... and broken canopy and dense shrub and vine growth is called bi” (Yasuoka 2009: 583) (for another hunter-gatherer group example see Widlok 2008 on the #Akhoe Hai/lom language, a Khoisan language spoken by “Bushmen” in Namibia.).

The eco-zones of Anangu are well documented in literature from various disciplines. Researchers have consulted Anangu about these zones, and have drawn on their traditional ecological knowledge. Anangu have worked extensively with scientists to carry out biological surveys of Pitjantjatjara and Yankunytjatjara lands (e.g. Robinson et al. 2003). One study, a fauna survey of the Uluru National Park (now Uluru-Kata Tjuta National Park), co-authored by a biologist and the Mutitjulu Aboriginal community, reports, “Anangu identified landscapes by landform, soils, vegetation, fire state and faunal components” (Baker and Mutitjulu community 1992: 179). It goes on to give a table containing the Pitjantjatjara/Yankunytjatjara classifications alongside the scientific classifications, for example, “pu!i – monoliths".
A book on Yankunytjatjara plant use, *Punu*, by linguist Cliff Goddard, botanist Arpad Kalotas, and Yankunytjatjara speakers, reads, “The nature of the vegetation is often related to the habitats or landforms they occupy. The vegetation around the Everards is described ... in terms of the major habitats recognised by Yankunytjatjara people” (Goddard et al. 1995: 11). Anthropologist of Anangu, Robert Layton (1986) writes in relation to “distinct types of country” recognized Pitjantjatjara dialects, and their relationship with hunting and gathering, “Each must be visited from time to time to obtain vital resources – different parts of the bush different plant species and animals also have their favoured habitats” (Layton 1986: 17-18).

In the Visitor Guide to the Uluru-Kata Tjuta National Park, which is jointly managed by Anangu traditional owners and the Director of National Parks, one reads under the heading Ngura Kulintjaku ‘Understanding Country’:

Anangu have successfully hunted and gathered in this land for thousands of years. They have learnt from their grandmothers and grandfathers how and where to find particular foods. They understand the relationships between the land, plants and animals. Anangu recognise habitats in their own way. (Uluru Kata-Tjuta National Park Visitor Guide 2012: 28)

The document then goes on to list and describe some Anangu eco-zones, for example, “Karu – creek-lines and runoff plains”, Tali – sand dunes” and so on.

In some other documents put out by the National Park species of flora and fauna are given their Pitjantjatjara/Yankunytjatjara name and its habitat is specified, as in the following extract from a table: for example:

<table>
<thead>
<tr>
<th>ini tjuta Ananguku (Anangu name)</th>
<th>common name</th>
<th>Scientific name</th>
<th>Park habitats</th>
</tr>
</thead>
<tbody>
<tr>
<td>nganngi, (kurtji-kurtji)</td>
<td>water-holding frog</td>
<td>Cyclorana maini</td>
<td>karu</td>
</tr>
<tr>
<td></td>
<td>(tad-pole)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Uluru-Kata-Tjuta National Park 1996)
The following kinds of places are among Anangu eco-zones (I include English glosses in brackets): puži ('woodland, bush'), apa/pulį3 ('rocky, hilly country'), talį2 ('sandhill country'), pila ('spinifex plains'), and karu2 ('creeks and their banks'). It is important to note that these places are habitats, as has been stated in the literature previously quoted. When Anangu talk about these kinds of places, they very often mention the things which grow and live in them. A lot of the time, these eco-zone terms are used with the locative suffix -ngka, for example, pužingka ‘in the woodland, bush’, pilangka ‘on the spinifex plains’, and so on. When speaking of hunting or gathering, it is common to speak of where this activity takes place, whether it be pužingka or pulingka, or somewhere else.

In (9), a man speaks about how in ‘puži’ one keeps a look out for ‘minyura’ ‘desert mulga’. This tree is used, traditionally, to obtain resin for making weapons and tools, as well as for fixing wooden bowls.

(9) Ka ma-nyakukatira pužingka
ka ma-nyakukati-ra puži-ngka
CONJ outward-watching.while.going.along-SER bush-LOC
‘Keeping a look out as you go along – as you travel through the scrub country

nyakukatira nyakupai ilurangkula
nyakukati-ra nyaku-pai ilurangku-la
watching.while.going.along-SER see.CHAR stand.out-SER
you see the desert mulga standing out clearly there

nyangatja ngaŋanytiŋjala. Uti kutu.
nyangatja ngaŋa-nytiŋja-la. Uti kutu.
DEM stand-NMLZ PART really
‘Really plainly.’ (Goddard et al. 1995: 45–46)

The suffix -tja meaning ‘of/from/associated with, which derives adjectives from nouns, can be added to eco-zone words. These words, such as pužitiŋja describe the habitat of a particular plant or animal, for example, apa/pulį3 ‘thing,
e.g. bird, plant living in the hills" (PYED). In (10) 'mai' 'food' is described as *puṭita* 'belonging in the woodland, bush', and this common combination is translated into English as either 'bush food' or 'bush tucker'.

(10) *Palu nganana wanka para-ngarapai.*

Palu nganana wanka para-ngara-pai
PART 1.PL healthy around-stand-CHAR
'We used to be healthy moving around (the country).

*Nganampa mai tjuta nganana puṭita ngalkupai*

Nganampa mai tjuta nganana puti-tja ngalku-pai
1PL.POSS plant.food-PL 1PL.SBJ bush-ASSOC eat- CHAR
*Our food would be bush food,*

tjala, maku, malu.

\[ 1 \text{PL.POSS plant.food-PL} \quad 1 \text{PL.SBJ bush-ASSOC eat- CHAR} \]

honey ants, witchetty grubs plains.kangaroo
honeyants, witchetty grubs, kangaroo.' (PYED: 148)

Today, it is mainly senior people who possess a deep knowledge of the country, and its flora and fauna. Younger Anangu are not as familiar with eco-zone concepts. They often apply the word *puṭi* to all the country outside settlements, and do not use the other eco-zone words (Narelda Adamson, Priscilla Adamson, Sandra Ken, p.c.).

7.3.2 *Puṭi* (Pitjantjatjara/Yankunytjatjara)

The first eco-zone word I will discuss is *puṭi*. The translation of *puṭi* given by Anangu to English speakers is 'bush'. *Puṭi* is explicated in [B] in English NSM. A Pitjantjatjara/Yankunytjatjara version appears in [B']. The components are justified and discussed after the explication.

[B] *puṭi* (Pitjantjatjara/Yankunytjatjara, English NSM)

a. places of one kind
b. these places are very big places
c. people can see a lot of manta/pana ‘ground’ [m] in these places
d. there are purru ‘trees/bushes’ [m] of many kinds in these places
   - kurku/wanari ‘mulga’ [m*] is one, ilykuwara ‘witchetty bush’ [m*] is another
e. small things of many kinds grow [m] in these places
   - tjani ‘spinifex grass’ [m*] is one of these kinds
f. at some times, there is mai ‘plant food’ [m] of many kinds in these places
   - kampurar ‘desert raisin’ [m*] is one of these kinds
g. at some times, there is kuka ‘game’ [m] of some kinds in these places
   - malu ‘plains kangaroo’ [m*] is one of these kinds
h. at some times, there are things under the manta/pana ‘ground’ [m] in these places
i. at some times, there can be kapi/mina ‘water’ [m] on the manta/pana ‘ground’ [m]
j. people think about these places like this:
   “often people want to do things of many kinds in these places”

[B’] puti (Pitjantjatjatjara/Yankunytjatjara, Pitjantjatjatjara/Yankunytjatjara NSM)

a. ngura tjuta ini kutju tjara
b. ngura nyanga tjuta ngura pujka kutu
c. ngura nyanga tjutangka anangungku manta pujka nyanganyi
d. ngura nyanga tjutangka puru ini kutjupa-kutjupa tjuta ngarananyi
   - ini kutju kurku/wanari [m*], ini kutjupa ilykuwara [m*]
e. ngura nyanga tjutangka puru tjukutjuku (ini kutjupa-kutjupa) tjuta mantangka pakanji
   - ini kutju tjani [m*]
f. ngura nyanga tjutangka, kutjupa ra mai ini kutjupa-kutjupa tjuta ngarananyi
   - ini kutju kampurarpa [m*]
g. ngura nyanga tjutangka, kutjupa ra kuka ini kutjupa-kutjupa tjuta ngarananyi
   - ini kutju malu [m*]
h. ngura nyanga tjutangka, kutjupa puru kutjupa-kutjupa tjuta manta unngu ngarananyi
i. ngura nyanga tjutangka, kutjupa ra kapi ngarananyi mantangka
j. anangungku ngura nyanga tjuta alatji kulini:
   “anangu tjuta tjutara kutjupa-kutjupa tjuta ngura nyanga tjutangka palyantjikitja mukuringanyi”

I will now discuss the components of explication [B] of puti and provide background information about this kind of place. Component (b) covers the size of ‘puti’ – it must be of a substantial area.

Component (c) covers the place of ‘earth’ or ‘manta/pana’ in Pitjantjatjara/Yankunytjatjara in the concept of ‘puti’. As cited earlier in 7.2.1, “Anangu identified landscapes by ... soils ...”, among other things (Baker and Mutitjulu community 1992: 179). The material from which a kind of place is composed is prominent distinction in the semantics of
Pitjantjatjara/Yankunytjatjara landscape terms, as in the case of the “standing water place” word tjukula, based on ‘rock’ ‘apu/pulį’ and tjintjira based on ‘earth’ ‘manta/pana’ (see 4.6.1 and 4.6.3). I propose that the semantic molecule “earth” (“manta/pana”) is a semantic molecule in the sense of puti. Furthermore, the “earth” (“manta/pana”) – “rock” (“apu/pulį”) distinction can be found in difference in meanings of the eco-zone terms puti and apu/pulį. During my fieldwork in the Anangu Pitjantjatjara Yankunytjatjara Lands, when travelling through ‘puti’, various Anangu consultants sometimes pointed different kinds of earth to me, for instance “manta talingka” ‘sandhill sand’.

Component (d) treats the very important feature of ‘puti’, its vegetation ‘punu’ ‘trees, bushes’. The lexical form puti, like the Australian English bush, is polysemous (see 9.4.1). Puti also means a kind of vegetation which grows in the eco-zone ‘puti’. In PYED this meaning is defined as “bushes, scrub”, and is illustrated in (11).

(11) Tjitji tjuta, mamu pulkanya nyinanyi puti

Tjitji tjuta, mamu pulkanya nyina-nyi puti
child PL monster big be.sit-PRS bushes

nyarangka.
nyara-ngka
that.over.there-LOC
Kids, there’s a big monster over there in the bushes. (PYED: 148)

Punu is not exactly equivalent in meaning to the English tree. The core meaning of punu is large woody plant, and this sense can be glossed ‘trees, bushes’. Example (12) illustrates the use of the word punu.

(12) Tjitji tjuta punungka kalpanyi.
tjitji tjuta punu-ngka kalpa-nyi
children PL tree.bush-LOC climb-PRS
‘The children are climbing a tree.’ (PYED: 145)
The first line of component (d) states that there are *punu* ‘trees/bushes’ of many kinds in this place. Two exemplars of ‘*punu*’ were prominent among those mentioned by my consultants, senior Anangu women reputed for their knowledge of the land. I made recordings in which I asked these women to tell me what ‘puti’ was like, and about experiences they had had in ‘puti’. The second line of (d) gives these two highly salient exemplars of ‘*punu*’ found in ‘puti’: ‘kurku/wanari’ ‘mulga’ and ‘ilykuwara’ ‘witchetty bush’ (see 2.2.6 on exemplars). The first exemplar of ‘*punu*’, ‘kurku/wanari’, an acacia, is a kind of low, stunted, hardy tree with longish leaves (Goddard et al. 1995: 38)

‘Kurku’ dominate ‘puti’, and have many uses. Their wood can be used for manufacturing artefacts or for firewood. Seeds from ‘kurku/wanari’ can be processed and eaten and the tree secretes sap which can also be consumed. *Kurku* or *wanari* are general terms, and there are specific varieties such as ‘wintalyka’. According to the *Uluru-Kata Tjuta National Park Knowledge Handbook* (2012: 130), “Wanari is possibly the most important tree for Anangu”.

The following snippet (13), using the words *kurku* and *wintalyka*, shows the use of the wood from ‘kurku’ as a material for constructing a ‘wiltja’ ‘shelter’.

(13) *kurku* uwa *wintalyka* *punu* tri ... kampa wiltja.

mulga yes mulga tree.bush tree side shelter

‘kurku ‘mulga’, yes, wintalyka ‘mulga’, *punu* ‘tree, bush’, tree ... sides of a shelter’. (Field recording)

The second exemplar, ‘ilykuwara’, is a grey-green shrub with rounded leaves, it can also have a either a single trunk or a number of trunks. The plant’s leaves are long with rounded tips (Goddard 1995 et al.: 62).
Edible grubs (‘witchetty grubs’) or ‘maku’ in Pitjantjatjara/Yankunytjatjara live in the roots of ‘ilykuwara’ and are dug out for food, mostly by women, and will be discussed later in this section. Furthermore, as (d) states, “puŋu of many kinds” are in ‘puṯi’, and particularly striking ones may be pointed out to visitors such as the ‘utjanypa’ ‘ironwood’, described by Latz (1995: 97) as a graceful tree with pendulous leaves which give it a willow-like appearance.

In addition to the larger ‘puŋu’, small plants of many kinds grow in ‘puṯi’. Component (e) treats the small things of many kinds which grow in ‘puṯi’. The exemplar in (e) is ‘ṯjanpi’ ‘spinifex’, a common, dry grass which grows in clumps in ‘puṯi’ (and also in other eco-zones, particularly ‘pila’ ‘spinifex plains’). ‘TCHA.weight’ was traditionally used to make shelters; to make ‘kiṯi’, an adhesive gum; and to weave baskets, a practice which has continued (PYED: 172). In (14) an Anangu consultant expands on the use of ‘ṯjanpi’ to make ‘kiṯi’.


Components (f) and (g) cover the two main Anangu categories of food, both of which are found in ‘puṯi’ – ‘mai’ ‘plant food’ and ‘kuka’ ‘game’. Example (15) is an answer to a question I put to a consultant, asking what ‘puṯi’ is like, and her experiences in ‘puṯi’. The example names a number of kinds of ‘mai’,
and attests to the importance of ‘mai’ “of many kinds” (“mai kutjupa kutjupa tjuṯa) to the concept of ‘puṯi’. It depicts the gathering of ‘mai’.

(15) Ngayulu ankupai puṯikutu. Ngayulu nyinapai mai

ngayulu anku-pai puṯ-ki-tu ngayulu nyina-pai mai
1.S go-CHAR puṯ-ALL 1.S be.CHAR plant.food

‘I would go into puṯi. There would be mai

puŋungka – kampurarapa. puŋu mai kutjupa-kutjupa tjuṯa
puŋu-ngka kampurarapa puŋu mai kutjupa-kutjupa tree.bush-LOC desert.raisin tree.bush plant.food various

in the puŋu – desert raisin, a lot of kinds of mai in the trees –

tjuṯa – kulypurpa mai kutjupa wiriny-wirinypa, tawal-tawalpa.
tjuṯa kulypurpa mai kutjupa wiriny-wirinypa tawal-tawalpa PL gooseberry plant.food kind bush.tomato desert raisin

large wild gooseberry, bush tomato, small wild gooseberry. Yes, but of

Uwa nyara palu tjunama manama mai ngalkupai.
Uwa nyara palu tjuna-ma mana-ma mai ngalku-pai.
yes DEM of .course put-IMP get-IMP plant.food eat.CHAR

course, those ones there, keep putting them aside, keep getting them,

munu rapita, kuka rapita, tinka mamalu kuku katipai
munu rapita kuka rapita tinka mama-lu kuku kati-pai CONJ rabbit game rabbit goanna dad-ERG game bring-CHAR

we would eat the mai. And rabbit, rabbit meat. Dad would bring

malu kankuru mamangku.
malu kankuru mama-ngku.
plains.kangaroo kangaroo dad-ERG
goanna, he would bring kangaroo.’ (Field recording)

The exemplar included in (f) is ‘kampurar(pa)’ ‘desert raisin’, an important kind of ‘mai’. ‘Kampurar(pa)’ is also sometimes known as ‘bush tomato’, and PYED states that its “Fresh and dried fruit may be eaten raw. The dried fruit may be pounded and reconstituted with water into a paste to be eaten or saved for later use” (PYED: 33). The word kampurar(pa) and its association with ‘puṯi’ is illustrated in (16), part of an explanation of a canvas depicting ‘kampurar(pa)’ painted as part of a project collecting Anangu art and stories by the Healthy

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Aboriginal Life Team (HALT) of the Nganampa Health Council on the Anangu Pitjantjatjara Yankunytjatjara Lands.

(16) Ka tjana kampurarpa nyanga palunya tjananya
CONJ 3.PL kampurarpa DEM 3.S.ACC 3.PL.ACC

iriti ngalkunu. Ka kuwari kulu nganaña
iriti ngalku-nu. Ka kuwari kulu nganaña
old.days eat-PST CONJ today too 1.PL.ERG

ngalkupai. Minyma tjutjatjara kampurarpa uralpai
ngalku-pai minyma tjutjatjara kampurarpa ural-pai
eat-CHAR senior.woman PL-ERG kampurarpa gather-CHAR

putjingka munu ngura kutu katipai. Ka tjitji
putji-ngka munu ngura kutu kati-pai ka tjitji
putji-LOC CONJ place ALL bring-CHAR CONJ child

tjuta pukularinyi. Munuya pukulpa ngalkupai mai
tjuta pukulpa nyi munu-ya pukulpa ngalku-pai mai
PL feel.pleased-PRS munu-ya pukulpa ngalku-pai mai

kampurarpa, mai wirunya.
kampurarpa mai wiru-nya
campurarpa mai lovely-ACC

Our ancestors ate kampurarpa, then. And nowadays we eat them, too. Women gather desert raisin in putji and carry them home. This pleases the children. They enjoy eating kampurarpa. Wonderful food!’ (Nganampa Health Council 1991: 38)

Common kinds of ‘kuka’ ‘game’ found in ‘putji’ include, most prominently, ‘mału’ ‘plains kangaroo’ which is used as an exemplar and illustrated in (18). ‘Mału’ can only live on earthy ground, as opposed to rocky ground, because of the soft padding of their feet. All these kinds of ‘kuka’ are included in (15) in which the consultant’s father brings home ‘kuka’ for his family. Example (17) similarly depicts a father hunting ‘mału’ in ‘putji’. (Men were responsible for the hunting of larger ‘kuka’, while women were in charge of gathering ‘mai’ and hunting smaller ‘kuka’ (Gould 1969: 261-262).
"My father was always going into puṭi to hunt for plains kangaroos." (PYED: 153)

'Tinka' 'goanna', and, since their introduction from Britain, 'rapita' 'rabbits', are also hunted for food in 'puṭi'. Example (18) is a description of adult men taking uninitiated boys into 'puṭi' to teach them how to hunt for 'kuka'.

Both components (f) and (g) are qualified with the phrase "at some times" which accounts for the fact that 'mai' and 'kuka' are only abundant in some seasons. In (f), 'mai' is "of many kinds", and in (g), 'kuka' is "of some kinds".

Component (h) portrays the things which can, at times, be found under the ground in 'puṭi'. A lot of gathering of food was done by digging in the earth and extracting foodstuffs, especially in older times. The most salient of these kinds of foods are 'tjaḷa' 'honey ants' and 'maku' 'witchetty grubs', both delicacies.
These foods are still collected by contemporary Anangu women, even by younger women, although mostly for recreation, rather than subsistence (Nganampa Health Council 1991: 24; Young 2006: 43-44).

Women go on bush trips to perform the exhausting task of digging down into honey ant chambers with crowbars and shovels. Children especially love the sweet liquid which can be squeezed from the bellies of the ants. The word tjala was prominent in accounts from consultants about ‘puţi’ and ‘tjala’ are often described as wiru ‘lovely’ because of their sweet taste. Example (19) depicts Anangu going into ‘puţi’ to collect ‘tjala’.

(19) Puティングka nganana nyakupai nganana ankupai puţikutu
puţi-ngka nganana nyaku-pai nganana anku-pai puţi-kutu
puţi-LOC 1PL search-CHAR 1PL go-CHAR puţi-ALL

maiku mai wiru tjutaku. ... munu nganana piruku
mai-ku mai wiru tjuta-ku. ...munu nganana piruku
plant.food-PURP plant.food lovely PL-PURP CONJ 1PL next

‘We would search in puţi, we would go into puţi for food ... And next

mukuringkupai tjala-ku. wiru tjala ngalkupai wiru.
mukuringku-pai tjala-ku wiru tjala ngalku-pai wiru
like-CHAR honey.ant-PURP lovely honey.ant eat-CHAR lovely
we liked going for honey ants – we love eating honey ants.’ (Field recording)

Anangu also dig for ‘maku’ ‘witchetty grubs’, as mentioned earlier in the discussion of ‘ilykuwara’ ‘witchetty bush’, and illustrated in (20).

(20) Paluru tjana maku-ku yanu, maku ilykuwaraku.
paluru tjana maku-ku ya-nu maku ilykuwaraku-ku
3PL 3PL grub-PURP go-PST grub witchetty grub-PURP

‘They went for grubs, witchetty grubs.’ (PYED: 65)

Component (i) accounts for the all-important desert resource of water. In the ‘puţi’ ‘woodland, bush’ can lie ‘tjukula’ ‘rockholes’ like small dots,
unspectacular compared with those in the hills (apu/puḷi3), but which can contain water deep inside (see 4.6.1). After rain in ‘puṭi’ there can be also be ‘ti jintja’ 'claypans' (see 4.6.1).

Component (j) portrays the Anangu perception of ‘puṭi’ as a place where people obtain resources. It includes all the human activity which takes place to get ‘puṇu’, small plants, ‘mai’, ‘kuka’, ‘things under the ground’, and ‘water’. Two examples of the “things of many kinds” which people often want to do in ‘puṭi’ are: ‘uranyi’ ‘gather’ (as in urara “serial form”), in (15); and ‘katinyi’ ‘take’ (as in katipai “characteristic form”), in (15). There is also a common collocation of the verb ananyi ‘go’ and a noun with the purposive suffix –ku which describes going to get a certain resource. One example is “makuku yanu” (maku + -ku, yanu, past tense of yananyi, the Yankunytjatjara form of ananyi in (20)). Furthermore, Anangu used to ‘ngarinyi’ ‘camp’ in ‘puṭi’, and still do so today during ceremonial business and, sorry (mourning) camps, as well as on extended ‘bush trips’ (Young 2001: 41-45).

7.3.3 Apulpuji3 (Pitjantjatjara/Yankunytjatjara)

Apulpuji3 can be glossed ‘rocky, hilly country’ and consists of rocky hills and outcrops and the area around their base. Traditionally, only men climbed the steep country to hunt animals well adapted to a steep rocky environment. Women, by contrast, gathered plant food at the base of the steep slopes (Nganampa Health Council 1991: 22).

One source of plant food that grows in ‘apu/puḷi3’ is ‘ili’ ‘wild fig’, a kind of fruit bearing tree, as in (21). The fruit from ‘ili’ used as food is referred to as mai ili ‘wild fig as plant food’. According to Goddard et al. (1995: 137), ili ‘wild fig’ is spoken of as an important food, mai pulka, mai ‘plant food’, pulka ‘big,
important. They go on to write, “the red, ripe fruits [of ‘ili’, H.B.] are eaten raw; the fallen dry fruit may be ground with water to make an edible paste, or made into balls for later use” (Goddard et al.: 1995: 137).

(21) **ili puilingka ngarapai punu pułkanya, munu**
ili puli-ngka ngara-pai punu pułkanya munu
ili puli-LOC stand.be-CHAR punu big CONJ

kururingkula mai wiruringkupai.
kururingku-la mai wiruringku-pai.
ripen-SER plant.food become.nice-CHAR

‘ili is a large tree found in puli, and the fruit is nice when it’s ripe.’ (Pitjantjatjara/Yankunytjatjara Picture Dictionary (PYPD): 115)

Today, many women know the locations of ‘ili’, and sometimes drive out to check whether the trees have any fruit, at likely times of year.

Other kinds of ‘mai’ are also found in ‘apu/pulī’, as in (22) which speaks of awalyuru ‘bush currant’.

(22) **Awalyuru mai maru tjuta-tjara puilingka ngarapai.**
awalyuru mai maru tjuta-tjara puilingka
bush.currant plant.food dark PL-HAVING pułi-LOC

ngara-pai.
be.stand-CHAR

‘The bush currant has many dark fruits and grows in puli.’ (PYPD: 115)

‘Apu/pulī’ is hard to traverse, one often tatini ‘climbs’ in this kind of place, as discussed in 5.2.3. The animals ‘kanyala’ ‘hills kangaroo’ and ‘waṟu’ ‘rock wallaby’ have feet designed to grip rock, which enable them to live in steep environments, as opposed to ‘maļu’ ‘plains kangaroo’ (associated with ‘puṭi’), which have large claws for digging into soil. This distinction is explained in (23) and (24) (see also Fauna of Uluru-Kata Tjuta National Park 2007: 1-2).
(23) *Ka kanyala apungka kutju nyinapai, munu*
ka kanyala apu-ngka kutju nyina-pai munu
*CONJ hills.kangaroo apu-LOC only live-CHAR CONJ*

And the hills kangaroo only lives in the rocky hilly country, and

*apungka wala ankupai. Panangka paluru pu!u ankupai.*
apu-ngka wala ankupai pana-ngka paluru pu!u ankupai
*apu-LOC fast go-CHAR ground-LOC 3.S can’t go-CHAR*

travels fast on the rocks. He can’t travel on the flat ground.’ (Kirke 1987: 74)

(24) *Maju panangka nyinapai, ka kanyala*
ma!u pana-ngka nyina-pai ka kanyala
*plains kangaroo ground-LOC live-CHAR CONJ hills.kangaroo*

‘The plains kangaroo lives on the plains, and the hills kangaroo

*apungka nyinapai.*
apu-ngka nyina-pai
*rocky.country.LOC live-CHAR*

lives in the rocky country.’ (Kirke 1987: 74-75)

Returning to the vital desert resource of water, Anangu find water in

‘apu/pulji3’ ‘rocky, hilly country’, as well as in ‘pu!i’. As Young points out, “Rocky
hills create run-off as well as containing rock holes, so in this sense hills and
water go together for Anangu” (Young 2006: 241). ‘Apu/pulji3’ contains ‘tjuku!a’
‘rockholes’, ‘warku’ ‘rockpools’, and ‘wa!a’ ‘waterfalls’ (see 4.6.1.and 4.6.2).

As mentioned, traditionally, men would venture into ‘apu/pulji3’ on hunting
trips, but women tended to stay at the base and gather materials. Therefore,

‘apu/pulji3’ is not a place where people camp or live.

I now weave together the evidence presented above into an explication of

*apu/pulji3* in [C].

[C] *apu/pulji3* (Pitjantjatjara/Yankunytjatjara)

a. a place of one kind
b. these places are very big places
c. people can see a lot of puljir 'rocky outcrop, hill' [m] in these places

d. there are not many 'purru' 'trees/bushes' [m] in these places

e. not many small things grow [m] in these places

f. at some times, there is mai 'plant food' [m] of some kinds in these places
   - 'ijii 'wild fig' is one of these kinds

g. at some times, there is kuka 'game' [m] of some kinds in these places
   - 'kanyalâ 'hills kangaroo' is one of these kinds

h. at some times, there can be kapi/quina 'water' [m] in these places

i. people think about these places like this:
   "often people want to do things of many kinds in these places
   people don't live in these places"

Explication [C] contains the same first two components as that of putji in [B].

In component (c), as follows on from the regular polysemy of apupulji, the word apupuljir 'rocky outcrop, hill' (see 5.2.3) is included as a molecule.

'Apu/puljir 'rocky outcrops, hills' essentially compose 'apupuljir3 'rocky, hilly country'. Therefore, this molecule brings with it the semantic components contained in the explication of apupuljir2. Examples of these components are

"the katu 'top' [m] part of a place of this kind is far above the places on all sides of this place", and "when someone sees a place of this kind they can think like this: "there is a lot of rock[m] (apupulji1[m]) in this place". Furthermore, given that the meaning of apupuljir contains the molecule "apupulji1," 'rock, rocks', this molecule also comes into the meaning of apupuljir3. Therefore it brings components such as, "this thing is something witu-witu 'hard' [m]'.

Travelling through traditionally Yankunytjatjara country around the community of Ernabella (Pukatja) in a vehicle one sees that the referents for the three senses of apupulji rise out, so to speak, from one another. The red rock 'apupulji1', which one sees as a great mass, becomes a rocky outcrop or hill
'apu/pul\(l_2\)' and the rocky outcrop or hill becomes part of the eco-zone 'apu/pul\(l_3\).

Component (d) presents 'apu/pul\(l_3\)' as relatively clear of 'punu', unlike 'puti', which has many 'punu'. Likewise, component (e) portrays 'apu/pul\(l_3\)' as not having many small things growing there, in contrast to 'puti', which has many things growing there. This is not to say that no small things which grow in 'apu/pul\(l_3\)', but, rather, not many. 'Apu/pul\(l_3\)' is "sparsely vegetated by spinifex tjanpi and various Acacias or wattles" (Goddard et al. 1995: 12). A plant which grows in the lower parts of 'apu/pul\(l\)' is 'mingku!pa' 'native tobacco', the large leaves of which are gathered by the armful by Anangu women. Even today, some Anangu suck on the dried leaves mixed with ash to get a slightly narcotic effect (Young 2005: 68).

Component (f) covers the important resource of 'mai' 'plant food'. In this component 'mai' is said to be of "some kinds", rather than of "many kinds" as in the explication of puti. Because of its sparse vegetation, 'apu/pul\(l_3\)' is not as abundant with food as 'puti'. However, some foods, 'i!i' 'wild fig' in particular, can be found, especially around the base of 'apu/pul\(l\)' as discussed above. 'I!i' appears as an exemplar of 'mai'.

As in the explication of puti, the seasonal nature of the food supply is captured with the use of the phrase "at some times". 'Mai' is said to be of "some kinds" rather than "many kinds" which was used in the explication of puti, due to the fewer kinds of plant foods found in 'apu/pul\(l_3\).

Component (g) treats the 'kuka' 'game animals' which can be found in 'apu/pul\(l_3\}'. As with 'mai' in 'apu/pul\(l\)', the amount of 'kuka' is said to vary, and the phrase "at some times" is used. Kanyafa 'hills kangaroo' appears as an exemplar in this component. Example (25) illustrates the use of the words kuka
and *kanyala*, and is taken from an account about traditional Anangu hunting (see also Lester 1993: 31).

(25) *Munuya rawa ankupai exercise pulkanya*

\[ \text{munu-ya rawa anku-pai exercise pulkanya} \]

\[ \text{CONJ-3.PL always go-CHAR exercise big} \]

\[ \text{palyalpai para ngurira kukaku ankupai kutjupa kutjupa} \]

\[ \text{make.be-CHAR around seek-SER game-PURP go-CHAR kind} \]

\[ \text{kutjupa tju1a pulingka tatilpai kanyalaku munuya} \]

\[ \text{kind PL puli-LOC climb-CHAR hills.kangaroo-PURP CONJ-3PL} \]

\[ \text{wakara katipai tjitiku munuya munga winkingka ...} \]

\[ \text{waka-ra kati-pai tjitji-ku munu-ya munga winki-ngka} \]

\[ \text{spear-SER bring-CHAR child-POSS CONJ-3PL night lot-LOC} \]

'When people went hunting, they walked great distances. That’s why they were strong healthy people. The men used to climb in puli while searching for rock wallabies and hill kangaroos. When the men speared a kangaroo or a wallaby they used to bring it back to the camp and share it with their children ...' (Nganampa Health Council 1991: 78)

The association between water and ‘apu/pulį’ has been covered in the previous discussion. It is reflected in component (h) which is the same as that which appeared in explication [B] of *putį*.

In component (h), one finds the human conceptualization of ‘apu/pulį’. As in the case of the explication of *putį*, there is the line “often people want to do things of many kinds in these places”. This phrasing brings in the idea that this ‘apu/pulį’ is a kind of place where people can engage in hunting and gathering activity. People do many different kinds of things in ‘apu/pulį’. Two examples are ‘wakanį’ ‘spear’ (as in (25) which uses *wakara* “serial form” of *wakanį*), and ‘tatinį’ ‘climb’ (as in (25) which uses *talilpai* “characteristic form” of *tatinį*). The use of the combination of the verb *ananyi* ‘go’ and a noun with the purposive suffix –*ku* describes going to get a certain resource, is also used in relation to
'apu/pulj' (see 7.3.2 on 'putj'). One example is "ankupai kukaku" (ankupai, "characteristic form" of ananyi and kuka + -ku) in (25).

The final part of component (h) covers the idea that apu/pulj 'rocky, hilly country' is not a place where people live, as included in the discussion before the explication.

7.3.4 Nyaru (Pitjantjatjara/Yankunytjatjara)

Traditionally, Anangu, like other Aboriginal groups, deliberately burnt off the vegetation in parts of the country. They did this for a number of reasons, including, to create paths for travel; to flush out game; to manage the growth of plants; and to prevent the spread of bushfires (Jones 1969; Latz 1995: 19, 22). This burning off of the country is often called, in English, patch or mosaic burning (or fire-stick farming, a term coined by Jones 1969). The relevant Pitjantjatjara/Yankunytjatjara transitive verb is nyaruni, defined in PYED as "clear (country) by burning off", and illustrated in (26).

(26) Nyaratja pula ma-kutjara wanara,
nyaratja pula ma-kutja-ra wanara
DEM 2.DU outward-light-SER follow-SER
’You two burn off along that area,

ma-nyarura wanara wanti.
ma-nyaru-ra wanara wanti.
outward-burn off-SER follow-SER leave off-IMP
clear it all along to over there.’ (PYED: 111)

By clearing some parts of the country but leaving others, Anangu created a mixture of vegetation at different stages of growth. In his book, The biggest estate on Earth: How Aborigines made Australia, historian of Australia, Bill Gammage wrote, “about 70 per cent of Australia’s plant species need or tolerate fire” (Gammage 2011: 1). When an area is cleared of ‘tjanpi’ ‘spinifex',
new plants grow. This new growth can be used for plant food ‘mai’, and also encourages game ‘kuka’ to come into the area (Latz 1995: 19, 22; 2007: 134-135). Most burning took place in the cooler seasons or following heavy rains (Uluru-Kata Tjuta Board of Management & Parks Australia 2000: 76). The Fourth Uluru Kata-Tjuta National Park plan describes the traditional Anangu burning system:

Anangu deliberately intervened with fire and developed it as a technology for ecosystem manipulation .... They did this for a number of reasons, such as hunting and the encouragement of ‘bush tucker’ vegetation and green feed for animals. (Uluru-Kata Tjuta Board of Management & Parks Australia 2000: 76).

Parts of country that remain after either deliberate burning, or wild fires, are called nyaru. PYED defines nyaru as “stretch of burnt-out country, an area where regrowth is taking place”. ‘Nyaru’ is not a kind of eco-zone in itself, but rather a burnt-off, regenerating part of some kinds of ‘eco-zone’. Baker and Mutitjulu community write, “Regenerating areas of both tali [‘sandhill country’, H.B.] and pila [‘spinifex plains’, H.B.] become nyaru, which supports its own suite of plants and animals” (Baker & Mutitjulu community 1992: 179). (Here, I will note that ‘tjanpi’ also grows on ‘tali’, see 7.3.5). Young reports that on the APY Lands, “The re-growth of green plant tips on black ground is cause for comment and often created in paintings for the market (Young 2011: 266).

In Pitjantjatjara/Yankunytjatjara, in addition to the transitive verb nyaruni (see (27)) there is also the intransitive verb nyaruringanyi “to get burnt out” (PYED), as in (27) which also includes the noun nyaru.

(27) Anangungku waru tililpai ka nyaruringangi,
anangu-ngku waru tilil-pai ka nyaruringa-nga
people-ERG fire light-CHAR CONJ get.burnt.out-PST.IPFV
People used to light fires and the country would get burnt out,

and in the burnt-out areas desert raisin and bush tomato would come up.’ 

(PYED: 111)

Since the colonization of traditional Pitjantjatjara and Yankunytjatjara lands, less burning off of vegetation ‘nyaruni’ has taken place. The reason for this is, naturally, the transition of Anangu from a traditional nomadic lifestyle to a settled one in communities and on homelands. The burning of country declined because the practice was discouraged by station (‘ranch’) owners, even in the time when many Anangu still lived a traditional lifestyle (Yates and Morse 2003: 6). Traditional knowledge of hunting, gathering, and artefact-making, therefore, has persisted longer than the knowledge of traditional burning. In their Fire Management Strategy of 2003, Yates and Morse report that, “‘Traditional” burning to increase bush tucker (‘bush food’, H.B.)/medicine/tobacco resources was only conducted by a small number of Traditional Owners, and was deemed to be less frequent than burning instigated by APY Land Management” (Morse & Yates 2003: 33, cited in Paltridge and Latz 2009: 15).

Today, Anangu work with Land Management schemes burning the country, as reported on the Anangu Pitjantjatjara Yankunytjatjara Land Management (APLM) website, “Patchburning country is APLM’s biggest task. APLM and community members go out bush to country that needs burning”. The purpose of this controlled burning is to prevent the spread of bushfires, encourage diversity of vegetation, and to increase new green growth which is feed for wildlife (Yates and Morse 2003: 64-65).

The Pitjantjatjara/Yankunytjatjara Lands Fire Management Strategy contains, as an appendix, a simplified strategy document, in English, and a
translation in Pitjantjatjara/Yankunytjatjara. An extract in both languages follows (28), which describes ‘nyarunu’ follows.

(28) Panya nyaru tjuku-tjuku tjuta ngura winkiku
panya nyaru tjuku-tjuku tjuta ngura winki-ku
PRT regrowth.area small PL country all-PURP
‘There were always lots of little patches of new burnt ground,
nyaru pakalpai. Ka ngura wingkingka ukiri pulka
nyara pakal-pai. ka ngura wingki-ngka ukiri pułka
DEM grow-CHAR CONJ country whole.lot-LOC grass lots
munu punu tja!a pakal-payi itjanu pulka.
munu punu tja!a pakal-payi itjanu pulka
CONJ tree.bush thicket grow-CHAR green very
and lots of country that was growing back.’ (Morse and Yates 2003: 74, 79)

The English version of the first sentence of (28) uses the phrase “little patches of new burnt ground”. By contrast, in Pitjantjatjara/Yankunytjatjara, this phrase is rendered with one word, nyaru. In the second sentence, the English version uses the phrasal verb grow back. However, the second sentence in Pitjantjatjara/Yankunytjatjara tells us what grows back in ‘nyaru’: a lot of ‘ukiri’ ‘fresh, green grass’, and clusters of very green trees.

‘Nyaru’ is also an important source of ‘mai’ as is illustrated in (29) which describes the necessity of fire for nice ‘mai’.

(29) Paluru tjanpi tilintja wiya ngaranyangka, mai wiru
paluru tjanpi til-ntja wiya ngara-nyangka mai wiru
3.s tjanpi light-NMLZ no stand.be-CIRC plant.food lovely
pakalpai wiya.
pakal-pai wiya
grow-CHAR no
‘If there was no firing of the spinifex, the nicest bush food wouldn’t grow’. (PYED: 172)
Example (30) comes from a consultation about ‘nyaru’ which I had with a senior woman. In the account, she firstly tells of men burning the country, and the place resulting from this burning, ‘nyaru’. Next, she describes Anangu hunting for game in ‘nyaru’. Then, she mentions a number of different plant foods which grow in ‘nyaru’, and says that everything grows in ‘nyaru’. At the end of the passage, she says that a lot of ‘ukiri’ grows in ‘nyaru’.

(30) Putja kutjara, tjanpi tjuta kutjara nyaru-lpai.
putja kutja-ra tjanpi tjuta kutja-ra nyaru-lpai.
glass light-SER spinifex PL light-SER burn.off-CHAR
‘Lighting the grass, lighting the spinifex, they would burn off the country.

Nyarungka kuka ngurilpai mulapa nyarungka kuka
nyaru-ngka kuka nguri-lpai mulapa nyaru-ngka kuka
nyaru-LOC game search-CHAR really nyaru-LOC game
They would really search for game in nyaru.

Ngurilpai. Nyarungka pakalpai kampurarpa,
ngur-ilpai nyaru-ngka paka-lpai kampurarpa
search-CHAR nyaru-LOC grow-CHAR desert.raisin
Desert raisin, bush tomato,

wiriny-wirinypa, tawal-tawalpa munu kulpurpa.
wiriny-wirinypa tawal-tawalp munu kulpurpa.
bush.tomato wild.gooseberry CONJ wild.gooseberry
small wild gooseberry, and large wild gooseberry grow in nyaru.

Ukiri tjuta pakalpai nyarungka. (...)
ukiri tjuta pakal-pai nyaru-ngka.
green.grass PL grow-CHAR nyaru-LOC
A lot of green grass grows in nyaru.

Mai wakati. Wakati. Wirangka tjunkupai.
mai wakati. wakati. wira-ngka tjunku-pai.
plant.food pigweed pigweed dish-LOC put-CHAR
Inland pigweed. You put inland pigweed in a dish.

(... ) Ka wakati palu pulkaringkupai nyarungka
ka wakati palu pulkaring-kupai nyaru-ngka.
CONJ pigweed PRT increase-CHAR nyaru-LOC
And inland pigweed. It all grew up in nyaru when we gathered it.

mantjiintjatjanu. Nyaru uwankara. KAMPurarpa. MAI
mantji-nytja-tjanu nyaru uwankara kampurarpa mai
get-NMLZ-SEQ nyaru all desert.raisin plant.food
Everything grows in nyaru – desert raisin, naked woollybutt.

*wangunu. ( ... ) ukiri wiru tjuṭa pakalpai.*

A lot of lovely green grass grows (there).

Drawing on the evidence given above, I will now present an explication of nyaru in [D].

[D] *nyaru* (Pitjantjatjara/Yankunytjatjara)

a. a place of one kind

b. places of this kind are parts of some places of other kinds

c. something happened in these places not long before

d. there was waru ‘fire’ [m] in these places

e. because of this, after this, for some time, things in these places are not like they were before

f. there is *tjanpi* ‘spinifex grass’ [m] there anymore

g. because of this, a lot of ukiri ‘green grass’ [m] ‘grows’ [m] in these places

h. there is mai ‘plant food’ [m] of many kinds in these places

i. there is kuka ‘game’ [m] of some kinds in these places

j. people think about these places like this:
   “often people want to do things of many kinds in these places”

k. these places are not like this for a very long time

Component (b) tells us that ‘nyaru’ is part of places of some other kinds. As discussed previously, it is not a kind of eco-zone in itself, but rather part of ‘puṭi’ and ‘pila’. Components (c) and (d) give the relevant background about ‘nyaru’ – that recently there was fire in this kind of place. The components do not specify how this fire occurred because ‘nyaru’ result from both deliberate burning and wild fire.

Component (e) tells us that, as a result of fire, for some time these places are different from how they were before. Component (f) deals with the fact that
there is now no 'tjanpi' in these places. Component (g) lets us know that, because the 'tjanpi' is no longer in these places, a lot of 'ukiri' 'green grass' grows in these places.

Component (h) treats the 'mai' found in 'nyaru'. As in the explication of putţi [B], the 'mai' is said to be "of many kinds" because a wide variety of plant food grows in 'nyaru' (set out in (26) and (28)). Component (i) treats the 'kuka' found in 'nyaru'. As in the explications of putţi [B] and apu/pulī [C], 'kuka' is said to be "of some kinds" because there are fewer kinds of animals than there are kinds of plant food in 'nyaru'. Components (h) and (i) are not qualified with the phrase "at some times" as are the equivalent components in [B] and [C]. 'Nyaru' are not eco-zones in themselves, but rather places which last for a short period. During this period they are abound with 'mai' and 'kuka', unlike eco-zones which are fertile only at some times of year.

Component (j) portrays the Anangu perception of 'nyaru' as a place where people obtain resources. Two of the "things of many kinds" which people often want to do in 'putţi' are: 'ngurini' 'seek out' (as in ngurilpai "characteristic form" in (28)), and 'mananyi' 'gather' (as in mantjintjatjanu "nominalized, sequential form" in (28)). Component (k) treats the temporary nature of 'nyaru'.

7.3.5 Notes on two other eco-zone words: pila and tali (Pitjantjatjara/Yankunytjatjara)

Further Pitjantjatjara/Yankunytjatjara eco-zone words which have not been previously treated include pila 'spinifex plains' and tali2 'sandhill country'. Full discussions of pila and tali2 will not be pursued in this thesis. However, I will suggest a few components that could form explications of pila and tali2. I will firstly turn to look at pila.
*Pila* is illustrated in examples (31) and (32), both of which include the word *tjanpi* ‘spinifex’.

(31) *Mutinka panya pilangka ngarapai tjanpitjarangka.*

mutinka panya pilangka ngara-pai
skink PRT pila-LOC be.stand-CHAR

tjanpi-tjara-ngka
spinifex-HAVING-LOC

‘The skink lives in plain country covered with grass.’ (Eckert et al. 2007: 112)

(32) *Tjanpi panya pilangka ngarapai tjuta kititjara watingku mantjintjaku.*

tjanpi panya pila-ngka ngara-pai tjuta kiti-tjara
spinifex PRT pila-LOC be.stand-CHAR PL resin-HAVING

wati-ngku mantji-ntjaku
man-ERG get-PURP

*men gather.*’ (Eckert et al. 2007: 71)

Component (b) found in the explications of *puji* [B] and *apu/pul* [C] “these places are very big places” would be likely part of the meaning of *pila* as it is also an eco-zone. I propose a component for *pila* which accounts for the fact that they are relatively open plains. The component is phrased in terms of people visual experience in ‘pila’ – they can see many parts of these places because there is not a lot of ‘punu’ ‘trees/bushes’ in these places:

“people can see many parts of these places
because there is not a lot of ‘punu’ ‘trees/bushes’ [m] in these places”

‘Tjanpi’ ‘spinifex’, the most notable vegetation in ‘pila’ (see (30) and (31)), could be accounted for in the component: “there is a lot of ‘tjanpi’ in these places”. The component “at some times, there is ‘mai’ ‘plant food’ in these places” is also proposed (see Goddard et al. 1995: 13 on the plant food found in
I am unsure of whether this ‘mai’ would be “of some kinds” or “of many kinds”. Furthermore, I also propose the component “at some time, there is ‘kuka’ ‘game’ of some kinds in these places”.

To Anangu, ‘pila’ is a place where people obtain resources. The same component which was used in the explications of *putj*, *apu/pulji*, and *nyaru* can cover this conceptualization: “people think about these places like this: “often people want to do things of many kinds in these places””. One example of a kind of thing people want to do in ‘pila’ is ‘mantjinyi’ ‘gather’ (as in *mantjintjaku* “purposive form” of *manytjinyi* in (30)).

Secondly, I will say a few words about the Pitjantjatjara/Yankunytjatjara eco-zone word *tali* 🟢 ‘sandhill country’. *Tali* is a polysemous word form which has the senses 1) ‘sandhill’ (*tali*₁), and 2) ‘sandhill country’ (*tali*₂). *Tali*₂ is illustrated in the following examples, (32) and (33).

(32) *Liru panakura talingka nyinapai munu anangu*  
liru panakura tali-ngka nyina-pai munu anangu  
snake death.adder tali-LOC live.be-CHAR CONJ people  
‘The desert death adder lives in sandhill country and when it  
  patjara iluntankupai.  
  patja-ra iluntanku-pai  
  bite-SER kill-CHAR  
  bites people it kills them’. (Eckert et al. 2007: 113)

(33) *Wiriny-wirinypa mai wiru talingka ngara-pai*  
wiriny-wirinypa mai wiru tali-ngka ngara-pai  
bush.tomato plant.food lovely tali-LOC stand.be-CHAR  
‘The banana flavoured bush tomato makes good eating  
  tjiwuru-tjiwurungka.  
  tjiwuru-tjiwuru-ngka  
  dead.wood-LOC  
  and grows in sandhill country where there is dead wood’. (PYPD: 115)

As in the case of *pila*, component (b) found in explications [B] and [C]  
“these places are very big places” would be likely part of the meaning of *tali*₂ as
it is also an eco-zone. The meaning of \textit{tali}_2 'sandhill country' would contain, as a semantic molecule, "\textit{tali}_1 'sandhill' because 'tali}_2 'sandhill country' is composed of 'tali}_1 'sandhills'. A potential component for \textit{tali}_2 is: "people can see a lot of tali}_1 'sandhills' [m] in these places". The relationship between 'tali}_1 ' and 'tali}_2 ' is similar to the relationship between 'apu/pulj}_2 'rocky outcrop, hill' and 'apu/pulj}_2 'rocky outcrop, hill', as seen in component (c) in [C].

An explication of \textit{tali}_2 would also likely mention 'tjanpi'. Furthermore, components treating the presence of 'mai' and 'kuka' at some times in these places could also be included. I also propose the component "people think about these places like this: "often people want to do things of many kinds in these places" " which has been included in the explications of all Pitjantjatjara/Yankunytjatjara words treated in this chapter.

7.4 Concluding remarks

In this chapter, I have compared the meaning of the word \textit{desert} in Australian English, with the semantics of a selection of words in Pitjantjatjara/Yankuntjatjara. The Australian English \textit{desert} refers to a wide area of arid Australia. The Pitjantjatjara/Yankunytjatjara words, on the other hand, draw distinctions between various kinds of landscape in dry Central Australia. Therefore, the contrast between the senses of the the words in the two languages sheds light on two different worldviews – a non-indigenous Australian one, and an Anangu one.

The sense of the Australian English \textit{desert} shows that 'desert' is seen as a place of deprivation, lacking water, plants, people, and things. Large regions of Australia which are diverse in flora, fauna, topography, and weather, are classed together under the one label – \textit{desert}. This conceptualization is a result
of non-indigenous Australians’ way of life, and their relationship with the landscape. Contemporary Australia is, for the most part, an urban country and more than two thirds of its population live in the major cities. Even outside urban areas, most regional and rural Australians live in areas close to the coast, rather than in ‘desert’ (Brown et al. 2008: 30). More importantly, Australians’ food, in the main, comes from agriculture in regions with relatively high rainfall (DAFF 2012: 27). Therefore, Australians, other than desert Aborigines, have no utilitarian reason to recognize the diversity and ecological richness of places which they call _desert_ in the Australian English lexicon.

However, certain aspects of the semantics of _desert_ in Australian English may reveal that non-indigenous Australians have, to a certain extent, come to terms with the environment of the dry centre of Australia. In the explication of _desert_ in Australian English, there is no mention of “sand”’. I have not made a detailed study of the word _desert_ in British English. Nonetheless, judging from a Wordsketch of _desert_ in the British English subcorpora on Wordbanks, a plausible component for the sense of the noun in this variety could be: “there is sand [m] in places of this kind”, in addition to most, or some of the components included in the explication of the Australian English _desert_ in Australian English. The explanation for this potential difference between the varieties of English could be that the typical referents for the British English _desert_ are sandy places in the Middle East and Africa.

The semantics of the Pitjantjatjara/Yankunytjatjara eco-zone words, _puṭi_, _apu/pulji₃_, _pila_, and _tali₃_, reveal an Anangu view of their country as diverse and rich in resources. The sense of each eco-zone word contains an immense amount of compressed ecological knowledge. Semantic molecules used in the explications of these words, such as ‘puṇu’ ‘tree/bush’, ‘mai’ ‘plant food’, and
'kuka' 'game', are crucial subsistence categories in Anangu culture. These eco-zone concepts reflect the significance to Anangu of the changes in these kinds of places throughout the year, and in different years. These changes are particularly importance to nomadic hunter-gathers who live in a very dry environment. The availability of 'mai', 'kuka', edible grubs, honey ants, and water in these kinds of places is qualified in the explications of eco-zone words with the phrase "at some times". The meaning of the Pitjantjatjara/Yankunytjatjara word nyaru, a temporary part of an eco-zone, also indicates the significance to Anangu of change in the landscape.

One innovation in the explications of eco-zone words in Pitjantjatjara/Yankunytjatjara is the inclusion of exemplars. I propose that typical kinds of 'punu' 'tree/bush', 'mai' 'plant food', and 'kuka' 'game animal' are part of the semantic structure of eco-zone words. The reason for my proposition is that there is a strong cultural association between particularly important individual species and kinds of eco-zones.

Another notable aspect of the Pitjantjatjara/Yankunytjatjara words treated in this chapter is how well they match with scientific landscape classification words (see Baker et al. 1992: 179-180). That said, the two kinds of ways of conceptualizing the "desert" landscape are not identical. The scientific classifications do not come from a human-centred perspective. By contrast, the Anangu eco-zone concepts encompass the resources which people can get in these places; what people can see in these places; and how they conceive of these places as places where people do things. The element of the change across time in eco-zone concepts is also not as well developed in scientific classification. A collaborative fauna study between a zoologist and an Anangu community noted that the observation of ecological patterns over many years is
an important contribution that Anangu living on their traditional lands can make to scientific research (Baker et al. 1992: 186).

It is not by chance that eco-zone words are more endangered in Pitjantjatjar/Yankunytjatjara than some of the Pitjantjatjar/Yankunytjatjara words treated in previous chapters. Words such as karu ‘creekline, creek’, tjukula ‘rockhole’, and ‘apu/puli₂’ ‘rocky outcrop, hill’, are part of the ordinary lexicon of Pitjantjatjar/Yankunytjatjara speakers of all ages. For example, in Ernabella, Anangu go down to the ‘karu’ which runs through the middle of the community to have barbeques and children play there. There are small ‘apu/puli₂’ within Ernabella, and a lot of residents are proud of the ‘apu/puli₂’ of the Musgrave Ranges around the community. After rain, large ‘tjukula’ are swum in today.

Eco-zones, by contrast, are of concern to people who subsist by moving from camp to camp, and hunting and gathering across different kinds of landscape. Therefore, they need words with which to talk about these kinds of places. (See Enfield 2008 on the utility of landscape categories, for which he uses Lao as a case study). For this reason, younger Anangu who live in settlements do not have as much reason to be concerned with eco-zone words as they do with words like karu, tjukula, and apu/puli₂. This is similar to the case of speakers of Australian English who use the one label ‘desert’.
Notes

1) Other distinctions may also be made, for example, *ulupuru*, a subdivision of *puti* ('woodland, bush'), particularly associated with the *mału* ('plains kangaroo') (Baker and Muṯitjulu community 1992: 179).

2) *Punu* is polysemous. It can also mean "a piece of wood or a stick"; anything made of wood, especially artefacts and implements; and plants in general, including grasses, vines and fungi (PYED).

3) The form *kurku/wanari* appears because *kurku* is the usual form in Yankunytjatjara and *wanari* is the usual form in Pitjantjatjara.

CHAPTER 8

The bush in Australian English

8.1 Introductory remarks

"The term bush has assumed great importance in the Australian lexicon". (Moore 2008: 29). The bush has a number of meanings related to the landscape, to culture, and to human geography. Looking through the prism of the bush in Australian English one can gain insight into Australia's history, way of life, and psyche. More generally, the meanings of the bush can help reveal the relationships between settler colonial societies and their adopted lands.

Colonial settlers have often moved into lands with natural environments very different from those of their original country. The languages of these settlers have changed in response to their new landscapes (M. Austin 1933: 7-8 on South-Western United States; Branford 1994: 446-450 on South Africa; Gordon and Deverson 1985: 30-42 on New Zealand; Zamora 1982: 162-169 on Latin America). Terms have been recruited for new uses and loanwords have been borrowed from indigenous languages to describe the adopted land. For example, the meaning of the term creek has morphed from that of 'inlet' in British English to, roughly, 'small watercourse' in "New World" English varieties, such as American, Australian, Canadian, and New Zealand English (see 3.2.2). The use of the bush in Australian English is one way in which early British settlers attempted to come to terms with a contrary geography (Moore 2008: 28). The term the bush was taken up very early in the 19th century to describe country covered in native vegetation in its natural state.¹ Dealing with the physical environment of the continent was one of the factors in shaping a distinctive Australian ethos and culture. Furthermore, as the settlers made their
way in a new country the bush acquired meanings related to culture and human geography.

In this chapter I will ask what exactly Australians mean when they say the bush. In doing so, I will tease out three individual meanings of the term. For each of these senses, I will provide a statement of meaning which incorporates the intertwined physical and cultural aspects of the bush. Firstly, in 8.2 I will briefly discuss a general sense of the bush that could apply to Englishes spoken across a number of former British colonies. Next in 8.3.1, I will examine bush as a type of vegetation, as in “the hill was covered with bush”. Then in 8.3.2, the chapter turns to look at the bush as a kind of distinctly Australian wooded tract of country, as in “I got lost in the bush”. In 8.4, I then explore the bush as a human domain in Australia, as in “this hardy woman of the bush”. The final meaning covered in 8.5 is the bush referring to the places in Australia that are outside the major cities, as in “Sydney or the bush”. Section 8.6 contains concluding remarks.

‘The bush’ in Australia has been explored in literature from many points of view. There are works addressing themes such as ‘the bush’ in art (Rowley 1997), fire in ‘the bush’ (Collins 2006), ‘the bush’ in children’s novels (Penn 2007), as well as physical guides to ‘the bush’ (Kynaston 1977). Also many literary scholars have commented on how ‘the bush’ has been represented as an alien hostile environment in Australian literature (Pierce 1999; Steele 2010). My aim is to understand the relationship between the lexical semantics of the term the bush and its wider cultural context.

More broadly, this chapter will demonstrate how landscape can provide insight into varieties of English and the cultures of their speakers. “New World” languages bear the imprint of settlers’ attempts to relate to their adopted
country (Arthur 2003: 2-3). Furthermore, in my examination of the bush, I will also show that the portrait of one word can help shed light on languages and their users.

8.2 The bush across Englishes

The term the bush is also used in other settler Englishes, such as New Zealand English and, notably, South African English. It was through South African English that the term bush came into Australian English (Australian National Dictionary (AND)). (The South African English term comes from the South African Dutch, bosch 'wood, forest' (A Dictionary of South African English)). The physical referent of the bush is, naturally, different in each country. In New Zealand ‘the bush’ is greener and denser than ‘the bush’ of Australia. The vegetation is, in the main, conifers, beech and ferns, rather than gum trees as one finds in the Australia (Te Ara Encyclopedia of New Zealand).


‘The bush’ or ‘bushveld’ of South Africa, by contrast, often consists of rolling grassland dotted with acacias and clumps of thornbush (Bainbridge 2009: 124). Furthermore, in South Africa ‘the bush’ or ‘bushveld’ can be opposed to ‘the veld’ (‘open undeveloped countryside’) which is itself a distinctive national landscape concept (A Dictionary of South African English).

As will be detailed further, the presence of living creatures is important to the Australian concept of ‘the bush’. The same is the case for the South African
model. Throughout colonial history, settlers in South Africa have hunted native animals for a number of reasons. They have cleared the land for agriculture and towns, harvested ivory and skins, and shot animals for sport (Beinart and Hughes 2007: 58-68). Today, South Africa’s wildlife is a tourist attraction, and going to a game park or reserve is often referred to as “going to the bush” (de Bruyn 2009).

As in Australia, ‘the New Zealand bush’ has been cleared to make way for agriculture and human settlement (Fischer 2012: 140-141). In contemporary times, in New Zealand, ‘the bush’ is often prized and protected (Dunlap 1997: 84). The indigenous silver fern is a New Zealand national emblem, as are native birds, in particular, the kiwi (Dunlap 1999: 98-99). The term the bush can also be used by a speaker of one settler-English to describe the land of a foreign country. For example, some Australian World War Two soldiers described their surroundings in Papua New Guinea as ‘the bush’ (V. Austin ed. 1988).

I propose that the meaning of the bush in different varieties of settler English has a common core, which I will label the bush. In settler Englishes, the term the bush refers to a vast area filled with indigenous vegetation and living creatures. A semantic explication of the bush captures the intersection of meanings but it is outside the scope of the present chapter focusing on the bush in Australian English.

Individual explications for the bush in South African English and New Zealand English could also be formulated. One possible component for the bush in New Zealand English is a component conveying the density of ‘the New Zealand bush’. It could be phrased in terms of someone not being able to see very far through ‘the bush’ because of the thick vegetation, as follows:
because many things grow [m] in this place,
when someone is in one part of this place
this someone can’t see many things in other parts of this place

Also a component mentioning the bird life of ‘the New Zealand bush’ could be included, such as:

birds [m] of many kinds live in this place

These components are not part of the explications of *the bush* in Australian English. The explications presented in this chapter are for three senses of *the bush* in Australian English. Full semantic explications for *the bush* in other Englishes will not be included. They fall outside the focus of the present chapter on Australian English.

The term *the bush* is also used in Aboriginal English. Its meaning is partially influenced by the semantics of words in Aboriginal languages (see chapter 8). The discussion of this use too goes beyond the scope of this chapter.

8.3 *The bush* of the Australian landscape

8.3.1 *Bush* as vegetation

Moving to Australian English, firstly, I will examine the concept of ‘bush’ or ‘the bush’—a mass of native vegetation. The referent of the word *bush* under consideration in this section is the vegetation grows in ‘the bush1’ (one of the concepts of ‘the bush’ which will be treated in 8.3.2). AND provides definitions of *bush* (noting that it appears frequently with *the*) which recognize the distinction between the vegetation and the wider area in which it grows. These definitions are: “Natural vegetation of any kind; a tract of land covered in such vegetation”, and “Country which remains in its natural state; country which has
not been settled or which has resisted settlement." The meanings diverge in that in one sense the bush as vegetation is "something", and the other sense of the bush as an area is a "place". The NSM primes used in the semantic explications of the two terms, something and place, reflect this difference.

A word on the role of the definite article in the senses of the terms studied. The meaning of bush as vegetation can appear with or without the. However, for the three selected Australian English meanings of the bush as piece of the landscape, the bush as a social and human space, and the bush as a populated area, the term bush takes the definite article. The is used because these places are conceived of as taken-for-granted and unique, as in the beach, the sun (Kaplan 1989: 167). This situation can be described as an instance of framed uniqueness, i.e. the referents are assumed to be unique within a given setting (Radden and Dirven 2007: 104-105).

Returning to the semantics of the bush, the relationship between 'the bush' as vegetation and 'the bush' as an area is seen in (1). The following guideline is found on the websites of some local government areas in Australia. It is a play-on-words telling people not to clear dead vegetation ('the bush') from a broader area ('the bush').

(1) **Leave the bush in the bush**
It is illegal to remove dead trees, logs and branches from bushland reserves without written permission from the Shire. (http://www.mornpen.vic.gov.au/Page/Page.asp?Page_Id=394andh=1)

In (2) we find the term bush as botanical cladding used without the.

(2) ... the curves of hills, each a darker blue, until the closer ones were almost black with thick bush softening every contour of the land like mould. In the foreground each individual hill had only a remnant cap of bush ... (Grenville 1999: 167-168)
There is a variety of vegetation which composes ‘bush’ including trees, bushes, undergrowth, and grasses. The Australian Macquarie University Bushwalking club website introduces overseas students to the concept of ‘bush’ in (3).


During early British settlement, bush was often described as “monotonous” (Moore 2008: 30-31). In keeping with the view of monotony, ‘bush’ is thought of as a mass, as one thing, although it is composed of different kinds of vegetation. Environmental science writer Ian Read discusses this perception:

The vegetated landscape, or the Australian bush, on first appearance presents a bewildering display of living matter, a higgledy-piggledy mass of trunks, leaves, branches, shrubs and grasses seemingly without form. ... Because of all this confusion the ‘bush’ is often thought of as boring. (Read 1994: 11)

Evidence of this conceptualization is the status of bush as a mass noun (see (2)). ‘The bush’ is also often thought of as a conglomeration because the vegetation grows thickly. Both dense and impenetrable appear on the list of the ten most frequent adjective collocates in the Australian subcorpus of Collins Wordbanks, as in (4). There are no antonyms, such as sparse and thin, included in the list.

(4) ... steep hills covered in dense bush ... 

The vegetation which makes up ‘bush’ grows in relatively dry soils (Taylor
Australia's landscape is often described in terms of how it differs from European lands. Australia is called 'dry' and 'brown' in comparison to 'green' England, although this description is not necessarily negative (Arthur 2003: 25-26). Writings of early colonists contain descriptions of the foliage of Australian trees as “brownish-olive” and “sombre” (Moore 2008: 30-31).

'Bush' is indigenous to Australia. *Native* and *Australian* are on the list of the ten most frequent adjective modifier collocates of *bush* in the Australian subcorpus, as in (5).^7

(5) ... the river is fringed by *native Australian bush* and rolling farmland ....

Furthermore, on arriving in a strange land, British colonists compared the native flora and fauna with that of the country they had left behind. As the lexicographer of Australian English Bruce Moore (2008: 24-25) writes, “In order to distinguish the Australian plant or animal from the European plant or animal with which it was compared, the Australian word was often preceded by a term that indicates a difference”. One of these terms is *bush*. For example, Australian native plant species include the *bush tomato* and the *bush rose* (Arthur 2003: 81).

'Bush' is wild rather than cultivated vegetation. Botanical gardens in Australia may contain native plants but cannot be 'bush', no matter how faithful to nature. *Virgin* is on the list of frequent adjective modifier collocates of *bush* in the Australian subcorpus, as in (6).

(6) ... dozens of walking paths through virgin *bush* ...

Traditionally, Indigenous people burned off vegetation in order to prevent
wild fires, create pathways, and encourage new growth, among other things (Pyne 1991: 85-135; see also 8.3.4). Since the establishment of the British colonies in Australia, plant growth has been cleared from the land to make way for agriculture and human settlement (Arthur 2003: 98-103). This practice continues, albeit controversially, in some places today, as in (7).

(7) ... a decision ... to allow a resource company to **clear bush** on the Maret Islands. (ABC Online, <http://www.abc.net.au/news/stories/2007/04/26/1906976.htm>, accessed 24/6/11)

Sometimes vegetation is re-planted in the place of cleared ‘bush’. This practice is called **bush regeneration** (as in (8)), rather than, for example, ?bush plantation. It is thus named because the plants replace growth which, it is said, should grow on the site naturally.

(8) ... environmental funding which is now being invested in local community projects ... They include water quality management ... **bush regeneration** ...

For **bush** as shown in the examples above, I would propose the following semantic explication:

[A] **bush** (Australian English)

a. something  
b. things of many kinds are parts of this something  
c. these things grow [m] in some places  
   some of these things are big, some of these things are small  
   some of these things are trees [m]  
d. when someone sees these things somewhere, they can think like this:  
   all these things are like one very big thing  
e. at many times when people see these things somewhere they can think like this:  
   there is not much water [m] in this place  
f. people know that it is like this:  
   these things grow [m] in one country [m], this country [m] is Australia [m]  
   some of these things don’t grow [m] in many other countries [m]  
   these things are not in places where they are for some time
Components (a) and (b) establish that ‘bush’ is perceived of as one thing despite being made up of individual pieces of vegetation. Component (c) depicts the variety of plants which compose ‘bush’, and their diverse sizes. Bushes, undergrowth, mosses and so on are all covered in this formulation. The most typical type of growth is the tree of various species. The notion of the vegetation as a mass appears in component (d) in which it is likened to one very big thing. The dry nature of ‘bush’ is captured in component (e). Australia, as the home of ‘bush’, appears in the second line component (f). In the third line of component (f) the growth is portrayed as indigenous to Australia. Furthermore, the fourth line of (f) captures bush as botanical cladding in its natural state.

8.3.2 The bush as a biological zone

I will next discuss ‘the bush’ in the sense of an area of the Australian landscape (the bush) in which the vegetation ‘bush’ grows. ‘The bush’ is conceived of as a distinctly Australian kind of place. For example, ‘the bush’ is presented as uniquely Australian to people from overseas backgrounds in the Australian government study booklet, Australian citizenship: Our Common Bond.

In addition to vegetation, another aspect of ‘the bush’ is its native animal, insect and bird life, as in, for example, the popular Australian children’s song, Kookaburra Song (Australian Kingfisher) in (9).

(9) Kookaburra sits on the old gum tree
Merry merry king of the bush is he (Marion Sinclair 1932)
As mentioned in the discussion of ‘bush’ as botanical cladding, some names of native Australian animals are compounds which use the term *bush*, such as *bush rat* and *bush mouse*.

‘The bush’ is not a place where people usually live. People can experience solitude in ‘the bush’. Moreover, ‘the bush’ is somewhere people can become lost. From early colonial times, the theme of the child lost in ‘the bush’ has formed part of the Australian psyche, and has surfaced in art and literature (Pierce 1999). This trope reflects the settlers’ anxiety concerning their new landscape as an alien and dangerous space (Torney 2004). One piece of lexical evidence for this connection is the (slightly outmoded) expression *to be bushed*, meaning to be lost. Another threat from ‘the bush’ is the ‘bushfire’. Experiences of dealing with ‘bushfires’, such as fighting fires or helping fire victims, have helped shape Australian culture (Collins 2006; Pyne 1991: 153-421)

The relationship between Australians and ‘the bush’ has changed since colonists began applying the term to the landscape. ‘The bush’ is now regarded favourably by many people because of its unique environment and its isolation from settlement. Furthermore, ‘the bush’ is a place to be explored and enjoyed, and many Australians spend leisure time in ‘the bush’. As historian of ‘bushwalking’ Melissa Harper (2007: xi) writes, “bushwalking has become the most popular way that urban non-indigenous Australians have come to know the bush”. A large number of non-indigenous Australians feel a deep attachment to ‘the bush’. They can come from many walks of life, from farmers to city-dwellers (Trigger and Mulcock 2005). The environmental movement and the creation of National Parks and Nature Reserves also reflect the Australian reverence for ‘the bush’ (Harper 2007: 242-271; Kynaston 1977: 101). ‘The bush’ was once a place in which vegetation was cleared to make way for British
settlers. Now value is placed on protecting ‘the bush’ from human influence.

That said, in times past many Australians have also admired ‘the bush’. For example, the pastime of ‘tourist walking’ (early ‘bushwalking’) emerged in the late 1800s (Harper 2007: 22-57). Throughout the 19th century Australian literature increasingly celebrated ‘the bush’, for example, in the poems of famous poet A.B. ‘Banjo’ Paterson (Ackland 1993: xiii-xvi). Indeed paradoxically, some commentators thought that the beauty of ‘the bush’ arose from the hostility of the environment. In 1867 the novelist and poet Marcus Clarke, commenting on the Australian landscape, wrote of “the subtle charm of this fantastic land of monstrosities” and “the beauty of loneliness” (Clarke 1993: 46). Furthermore, Australian artists, from the late 19th century onwards, painted ‘the bush’ as an Arcadian place of beauty. This depiction is found prominently in the work of the Heidelberg School (Burn 1980: 85-86).

*The bush*, can be explicated as in [B].

[B] *the bush* (Australian English)

a. a place of one kind
b. many parts of this place are far from many other parts of this place
c. there is a lot of bush[d] in this place
d. living things of many kinds live in this place
e. people know that these things live in one country [m], this country [m] is Australia [m]
f. many people think about this place like this:
   not many people live in this place
   often when someone is in this place for some time,
   this someone doesn’t see many people during this time

Component (a) “a place of one kind” appears as a first component, a header so to speak, in all the explications of *the bush* as a place in this chapter, as in other chapters. Component (b) “many parts of this place are far from many other parts of this place” specifies that ‘the bush’ covers a relatively wide area – it cannot refer to a mere thicket. The vegetation, ‘bush’, appears in component
(c). This component carries with it all the features of meaning of bush included in explication [A], such as the location in Australia, the fact that the vegetation grows naturally etc. Component (d) treats the living creatures of ‘the bush’, and component (e) specifies that they are indigenous. Component (f) depicts ‘the bush’ as isolated from human settlement.

8.4 The bush as a human domain

I will now depart from ‘the bush’ as a biological zone to discuss the meaning of the bush as a social, human space. This sense of the bush will be called the bush. The bush does not primarily relate to the land. It concerns people living on the land outside the cities near ‘the bush’. These people are said to have a unique lifestyle and way of thinking which was built up through physical circumstances. It needs to be mentioned that this concept of ‘the bush’ is essentially an archetype and relates more to a past situation. However, the concept of ‘the bush’ is important to an understanding of Australia’s history and its images are still recognized today, as will be discussed later.

The meaning of the bush is commonly used in compounds (AND). Salient frequent compounds from Collins Wordbanks include bush balladeer, bush ballad, bush telegraph, bush poetry and bush carpenter. I will use compounds as well as a small sample of the bush from the corpus, as a starting point to explore this meaning of the bush.

Evidence indicates that ‘the bush’ is regarded as a place with a different way of life to that of the cities. The people of ‘the bush’ are seen to have a more physical lifestyle and engage in specific activities on the land, such as farming, and fending off natural disasters. This view is found in (10) which characterizes a childhood ‘bush life’. 
We had a small cattle property... I was chipping out a lot of weed on the farm. ... I had ponies... And we went to a lot of race meetings... Ferguson enjoyed the bush life from age 10 to 17.

In the 1992 country standard performed by popular country singer Lee Kernaghan "Boys from the Bush", the image of 'the bush' is celebrated. The "boys" are depicted as leaving their bush activities to come into civilization, as in

(11) (Smith 2005: 126).

(11) Been shearing sheep, we been mustering stock
    We been culling out roos, we been spraying the crops
    We've been droving cattle up an old stock route
    Now its Saturday night, we pile in the ute
    We're the boys from the bush and we're back in town ...   
    (Garth Porter and Lee Kernaghan)

The expression "boys from the bush" conjures up images of hardy, rough but essentially amiable characters.

The notion of a 'bush character' and the figure of the 'bushman' grew up out of the experience of British descendants of the 19th century. They settled and subdued the Australian land while enduring its harsh conditions. The 'bushman' figure was mythologized from the 19th century onwards, and was written about in Russel Ward's influential and controversial 1958 book, The Australian Legend. In this work Ward argued that the 'bushman' was the typical, although not average, Australian, as in the following much quoted passage.11

... a practical man, rough and ready in his manners, and quick to decry affectation ... He is a great improviser ... willing to 'have a go' at anything, but ... content with a task done in a way which is 'near enough'. Though capable of great exertion in an emergency, he normally feels no impulse to work hard ... He swears hard and consistently, gambles heavily and often, and drinks deeply on occasion ... (Ward 1974[1958]: 1-2)

This ideal of a distinct bush character is born out in the examples from the sample, as in (12).
Vida Furber has the quiet determination and the same indomitable spirit of survival as many of Australia's early pioneering women. This hardy woman of the bush runs Hidden Valley Station ...

The theme of 'bush women' is significant because of the masculine, tough nature of survival in 'the bush' (Schaffer 1988). Historian John Hirst writes of the celebrated later 19th century-early 20th century Australian 'bush poet' and writer Henry Lawson:

Lawson made his most powerful contribution to the pioneer legend with his description of bush women. ... There is a sense in which all his bush women are heroines because, as he insists time and again, the bush is no place for women. (Hirst 1982: 22)

Lawson also portrays 'the bush' as a meeting point of Aborigines and colonial settlers in his 1892 short story The Drover's Wife. When the heavily pregnant character of the title is left alone in her remote house she is helped by an Aboriginal woman. In this section Lawson uses Aboriginal English grammar and words in dialogue (Lawson 1948: 91). The colonial settlers of 'the bush' can be contrasted not only with city-dwellers, but also with Aborigines, as is illustrated in the 1938 short story Marlene by the Australian author and political activist Katharine Susannah Prichard. The story depicts the tensions between colonial settlers and fringe-dwelling Aborigines of mixed-descent who are barred from fully participating in the life of the properties and townships of 'the bush' (Prichard 1967).

The hard drinking stereotype of the 'bushman' also finds expression in about a representation of a shearer in the 1970s film Sunday Too Far Away.
... our finest film about \textit{the bush}, a brutal, affectionate ode to the shearer, a story of dysfunctional love, male competition and alcoholic excess.

The ‘bush character’ is also often characterized as egalitarian and opposed to class distinctions in line with prominent Australian values (Carroll 1982: 143-153). Example (14) is a snippet of a review of the film \textit{Dad and Dave}.

(14) ... affectionate retelling of the \textbf{Aussie bush legends} created by Steele Rudd. It’s the \textit{bush battler} against the Establishment figure ...

These early 20th century humorous “Dad and Dave” “Aussie bush legends” portray a family living on a small landholding in the late 1800s battling nature’s hardships. They also feature a contrast between the struggling family and their wealthier neighbours.

The term \textit{bush} can be used as a qualifier to mean rustic, rough, crude or simple. There are compounds concerning occupations such as \textit{bush lawyer} and \textit{bush carpenter}. A \textit{bush carpenter} is a man who does rough minor carpentry work but lacks formal qualifications. Example (15) is an affectionate example of \textit{bush carpenter}.

(15) ... the knockabout \textbf{bush carpenter} who loved a punt on the horses and brewing his own beer ...

The compounds \textit{bush balladeer}, \textit{bush ballad} and \textit{bush poetry}, as seen in (16), also help illuminate the meaning of \textit{the bush}.

(16) It wouldn’t be Australia Day without some \textit{bush poetry} so, of course, there is plenty of that.

Bush poetry is a historical artform based in oral performance. In the main, these poems are about the experience of 19th century Australians living on the land,
in 'the bush'. The works, for the most part, present a romantic picture. They laud the characteristics of bush dwellers, and praise their strenuous physical labours. Often the poems are humourous and use Australian vernacular. Topics covered in the poems include bush rangers 'highway men', droving cattle, mateship, and the challenges of living in a foreign, often dry, natural environment. To some extent, this material still forms part of the national consciousness. The most famous and well-loved of these bush ballads, "Waltzing Matilda" by A.B. 'Banjo' Paterson written in 1895, is commonly understood to be Australia's unofficial national anthem (National Library of Australia) (see also, 4.5).

One could also have a similar discussion about bush art and wider Australian literature of the late 19th century-early 20th century which treated bush life (Rowley 1997). Representations of 'the bush' and its characters live on in film, notably in the character of Mick Dundee (played by Paul Hogan) in Crocodile Dundee (1986) (Curthoys 2000: 20-21).

There is a question as to how much of this bush character is, or indeed should be, a part of Australian national identity today. Australia, like many countries in a postcolonial era, debates its national identity (Dixson 1999: 18). The present chapter cannot provide a detailed treatment of this topic but will offer a brief discussion. In 1974 Russel Ward wrote that "Most writers seem to have felt strongly that the 'Australian spirit' is somehow intimately connected with the bush ..." (Ward 1974[1958]: 1). In more contemporary times the bush myth has been critiqued because it is said to leave out women, Indigenous people, and non-British migrants (Nile ed. 2000). Nonetheless, the concept of 'the bush' remains, to some extent, a presence in how many people in Australia think about Australian identity today. Even critics of 'the bush' at times recognize the resonance it still has in present-day Australia as in the following
Television images of drought affected farmers and emaciated livestock, it might be argued, mobilise national sympathy in a way that the circumstances of Aborigines do not, ... while ‘battling’ bush people as an identity group are considered to be more deserving of national assistance than, say, supporting mothers. (Nile 2000: 4)

In relation to the phrase “‘battling’ bush people” one can note that the term battler is one of the most positive terms in Australian English, and “usually refers to a person who works hard to make a decent living in difficult circumstances” (Moore 2011). The original ‘battler’ was the swagman of ‘the bush’, and although the term can be applied to working class urban Australians, battler still has a strong association with ‘the bush’ (Moore 2011). Referents of the term battler would typically be Australians of Anglo-Celtic descent. The description of “working hard to make a decent living in difficult circumstances” naturally easily applies to non-English-speaking migrants, yet not the label battler. Therefore the lauding of ‘the battler’ has been debated (e.g. LeCouteur, Rapley and Augoustinos 2001). The sociolinguist Michael Clyne (2002) observes how the positive concept of the ‘battler’ can be pitted against negative terms for asylum seekers, such as economic migrants and queue jumpers, in public discourse.

The philosopher and commentator Tim Soutphommasane questions the relevance of ‘the bush’ in Australian culture in an urban multiethnic Australia:

... to continue speaking about a bush myth seems to indulge old stereotypes, especially given that most Australians live in urban areas, and have done since the turn of the 20th century. Outside country towns, you would be hard-pressed to find someone walking under the wide brim of an Akubra (felt hat worn in ‘the bush’, H.B.) or cloaked in a Driza-bone
However, the legacy of the ‘bush character’ is found in more subtle ways in the understandings of many Australians. Sociologists Bruce Tranter and Jed Donoghue (2010) have studied the regard for the 19th century outlaw, ‘bushranger’ Ned Kelly among young people as a reflection of an Australian anti-authoritarian spirit. They concluded that “colonial bush myths remain salient for many citizens of a multicultural society” (Tranter and Donoghue 2010: 187).

A further illustration of the legacy of the ‘bush character’ is the mid-2000s sketch “Harden Up Australia” performed by comedian Heath Franklin in the character of ‘Chopper’, based on criminal-turned-author Mark ‘Chopper’ Read. In the sketch the tough, ocker (‘uncultivated, rough, using a broad Australian accent’) ‘Chopper’ tells a series of ‘soft’ urban Australians, such as Anthony who owns an expensive 4-wheel drive but cannot change a tyre and the lactose intolerant Peter who takes soymilk in his coffee, to “harden the fuck up”. That is until he meets the bush hat-wearing Bevan who “has a pig dog, ... sleeps with his bowie knife and once ... cut off his own arm for a dare” of whom he approves saying, “fucking spot on Bevan”.12

The piece sends up both the ‘effete’ city dwellers and the ‘hard men’ Bevan and Chopper. Most of the Australians who laugh at this skit would not wear bush hats, or sleep with knives, or even live in ‘the bush’. However, they can recognize the tough and unpretentious attitude expressed in the piece (whether they hold it or not) (see Goddard 2006; Wierzbicka 1997 chpt 5, 2002 on Australian cultural scripts such as ‘toughness’ and ‘informality’). It is not a question of shared values but one of shared understandings.

After the above discussion of the bush as a human domain, I propose a meaning in explication [C].
[C]  *the bush₂* (Australian English)

a. a place of one kind
b. this place is near the bush₁ [d]
c. many places are part of this place
d. at many times when someone is in one of these places
   if this someone wants to be in another part of this place,
   this someone can’t be in this other place after a short time
e. not many people live in this place
f. many people think about this place like this:
   people in this place are not like people in other places
   people in this place do things of many kinds not like people in places where many people live
   people in these places live not like people live in places where many people live
g. many people think about this place like this:
   at many times, bad things happen in this place not because someone did something
   when these bad things happen, people in this place can’t not do something
   because of this, often at times like these people know what they can do

In component (b) the explication situates ‘the bush₁’ near the vegetated area of ‘the bush.’ Components (c) and (d), the components describe *the bush* as being composed of many places (e.g. hamlets, country towns, stations (ranches)) spread over a large geographic area. Component (c) states that there are many places. The spread-out aspect of ‘the bush’ is captured in (d), which represents the area as taking some time to travel around. Component (e) portrays the low population.

The next component (f) states the attitude towards ‘the bush’. It specifies that people in ‘the bush’ are perceived as different from others. The component states that people in ‘the bush’ do things differently from people who live in cities because things are not like they are in cities. They are stereotypically thought to work the land, shear sheep and engage in other activities as depicted in bush poetry, art and popular culture. ‘The bush’ is portrayed as a harsh, potentially dangerous place in which bad things can happen. These negative events are not caused by humans, rather they are things such as having trouble farming in a dry climate, bushfires and being bitten by a snake. These
circumstances call on bush people to be resourceful and tackle their problems. Many of the connotations of the bush can be accounted for with this component, such as the toughness and resourcefulness of bush people, and the concept of 'the bush battler'. The component also suggests some of the conditions in which people display mateship by helping each other in a crisis.

8.5 The bush vs. the city

I will now move to look at 'the bush' as a kind of place where people live. The bush can mean parts of Australia outside the major cities. This sense will be labeled the bush. In this meaning, the bush is a category of place where people live. The bush is set up in direct opposition to the city, and is seen as one of two kinds of places in Australia people can reside (Davison 1982: 109-110). In sentences the bush can be contrasted with phrases such as urban areas and the city, as in (17). There is an expression, Sydney or the Bush, which has existed since the 19th century. It also has an outmoded figurative meaning of, roughly, "all or nothing". According to AND this sense grew out of "the context of a man who gambled on making a fortune and living a life of ease in the city, with the penalty for failure being the need to seek a more difficult livelihood in the outback".

(17) By the 1950s, Australia's population was spread almost evenly between the city and the bush.

The proportion of Australians who live in 'the bush' has declined markedly since the end of the Second World War (Hugo 2005: 66-67). Now under a third of Australians live outside the major cities and this percentage is diminishing.

Residents of 'the bush' do not only include people who live on farms or stations ('ranches'), and in small towns. Larger regional centres can also be
counted as being part of 'the bush'. For example, Armidale, a university town and agricultural service centre of 25 000 people in Northern New South Wales, is described as “Oxford goes bush” in a travel magazine.¹⁴

The meaning of the bush, is more political than the social and cultural sense, the bush. Residents of 'the bush' have formed a political interest group in Australia (Maddox 2005: 279-281). Some have claimed that historically 'the bush' has had a disproportionate influence on Australian politics. This impact was possibly the result of an attachment to 'the bush' (as in its the bush, and the bush, meanings) in Australian culture (Stafford Smith 2004: 16). Other contributing factors in the influence of 'the bush' include a measure of disproportionate representation of bush voters in the electoral system and the power of the rural-based National Party (formerly, Country Party), as in (18) (Woodward 2006: 245).

(18) They [the National Party] were always going to get upset with any party that challenged what they see as their God-given right to represent the bush ...

Ten tokens of a sample of sixty incidences of the bush, are about sub-standard telecommunications provision in 'the bush', reflecting wide news coverage of the topic, as in (19).

(19) ... people suffering from poor-quality telephone services in the bush ...

The adequacy, or lack thereof, of services of all types (transport, health, banking etc.) in 'the bush' is a major issue in Australia (Woodward 2006: 246-7). There are, not surprisingly, more and better services in cities, and this disparity is commented on in (20).
(20) The Government recognises the urgent need to address a growing sense of alienation in many parts of regional Australia and to bridge the increasing gulf between metropolitan areas and the bush.

There is a perception that a narrower variety of people live in 'the bush' than in Australian cities. For example, the vast majority of immigrants settle in metropolitan areas of Australia (Forrest and Dunn 2010: 81). Furthermore, attitudes towards immigrants may be more negative in 'the bush'. Some cultural researchers report on the interpretation that "there has been a backlash against multiculturalism in 'the bush'" (Ang et al 2002: 21). People of some occupations are also in shorter supply in 'the bush'. To take one case, young scientists and information technology professionals often move to larger centres because of a lack of suitable positions in 'the bush' (Gabriel 2002: 211-12).

'The bush,' consists of places where people live and work, and is not covered completely with vegetation. Throughout the semantic history of the term the bush in Australian English, some people have drawn attention to this apparent contradiction, as in (21).

(21) ... if you were Australian, you were supposed to feel at home in the country. The bush, rather. They seemed to call it that, even when it was just plain old paddocks ['fenced pastures', see chapter 9, H.B.]. (Grenville 1999: 191)

There is, however, a geographic relationship between the two kinds of places. 'The bush,' (where people live) is located near the landscape 'the bush,' even though vegetation can be cleared to make way for human activity. Bush dwellers face the threat of fires in 'the bush,' ('bushfires'). People who move from 'the city' to 'the bush' for a change of lifestyle are labeled treechangers.

AND lists examples of bush from as early as 1825 under its meaning of
‘The country as opposed to the town; rural as opposed to urban life; those who dwell in the country collectively’, as in (22).

(22) ‘Bush’ is the term commonly used for, country per se: ‘he resides in the Bush’ implies that the person does not reside in, or very near, a town. (1833 AND).

Unlike the bush, the terms country or countryside, taken from the British Isles, are not particular to Australia.\(^{15}\) The bush is used to talk about people spread across a vast continent, far from population centres, and living in a natural environment unique to the Australia. It has often been commented that distance has been a significant influence on Australia’s psyche and history. As the historian Geoffrey Blainey (2001 [1966]: ix) writes, “The distance of one part of the Australian coast from one another, or the distance from the dry interior to the coast, was a problem as obstinate as Australia’s isolation from Europe”. The Australian English lexicon makes even finer distinctions, as is seen in the use of the term outback for particularly remote parts of Australia. These distinctions are not necessarily easily grasped by non-Australians. A discussion of the nuances in meaning between the bush and the outback goes beyond the scope of this chapter.

I will present the meaning of the bush, in explication [D].

[D] the bush\(^3\) (Australian English)

a. a place of one kind
b. this place is near the bush, [d]
c. many places are parts of this place
d. at many times when someone is in one of these places
   if this someone wants to be in another part of this place,
   this someone can’t be in this other place after a short time
e. not many people live in this place
f. this place is far from places where many people live
g. many people think about this place like this:
   in a place where many people live there can be people of many kinds
   there are things of many kinds
there are places of many kinds, it is not like this in this place because of this, people in this place can't do things of some kinds like people can do in places where many people live

As in the explication of the bush, the location of 'the bush,' near 'the bush,' is stated in component (b). Components (c) and (d) are also identical to those used in explication [C]. The two components cover the variety of places which make up 'the bush,' and the vast area they cover. (e) and (f) pit the sparsely peopled 'the bush' against highly populated places (i.e. cities). The distance between the two places is treated in component (f). To end, component (g) contains people's attitude to 'the bush' (not without basis in fact). Firstly, the component sets up the cities as being able to be filled with people of many kinds (e.g. immigrants, scientists etc.), things of many kinds (e.g. dialysis machines, gourmet coffee etc.), and places of many kinds (e.g. specialist medical clinics, theatres). It then states that 'the bush' is lacking in comparison. The component next portrays people in 'the bush' as not able to do many things like people in population centres can (e.g. face-to-face banking, going to orchestral concerts).

8.6 Concluding discussion

In this chapter I have presented the bush as a cultural keyword in Australian English, in agreement with the literature (e.g. Arthur 2003; Carroll ed. 1982; Dunlap 1999; Moore 2008; Torney 2004; Ward 1974[1958]). As Moore observes "[T]he word bush has been the most fecund of all words in Australian English, in terms of the number of compounds it has generated" and a number of these have been mentioned in earlier sections (Moore 2008: 30). The significance of a term is connected to how productive it is in the creation of compounds, phrases, idioms, and new terms (Firth 1935). Furthermore 'the
bush' has been identified as a semantic field of Australian English containing a wealth of vocabulary, such as *squatter*, *swag*, *cattle station*, and *drover* to name a few (Ramson 2001: 193).

In contrast to previous historical and cultural investigations, my analysis has had a linguistic focus, and I have delineated the semantics of the term *the bush*. The semantics can help inform an understanding of the discourse of Australian identity. A number of themes can be found in the relationship between *the bush* and Australian settler culture through its history. In the following discussion I will match the specific Australian cultural concerns with the semantic components of the various senses.

At first colonists struggled to come to terms with their new environment. They saw 'the bush' as monotonous because it did not resemble the landscape of the British Isles. This view ties in with the conceptualization of the vegetation in 'the bush' as a mass. It is also reflected in the particularly dry nature of 'the bush'. As is included in the explications, 'bush' flora and fauna are native to Australia, and therefore they were novel and curious to settlers (Moore 2008: 30-31). However, since the initial ambivalence, non-Indigenous Australians have, to a certain degree, reconciled themselves to the continent's geography. 'The bush' as a biological zone became an Australian emblem, and is a major recreational area for outdoor pursuits.

One strand in the relationship is a view of 'the bush' as a natural paradise which should not be touched. This idea accords with the semantics of *the bush* as a place where people do not live, where one does not see many people, and which people did not create. To this way of thinking, the fact that the plants and living creatures are indigenous is also valued.

Another current in Australian culture is 'the bush' as a place which people
can shape, and which, in turn, shapes them. This outlook can be seen in the meaning of the cultural bush ‘the bush,’ and ‘the bush’ as a kind of place where people live, ‘the bush’. There is the image of people in ‘the bush’ battling in a harsh environment. Because ‘bush life’ was particular to Australia, the figure of the bushman could be taken up as a national myth, though its time may now have passed. In contemporary times services to ‘the bush’ have become an important political issue. This concern reflects the contrast between ‘the city’ and ‘the bush’ found in the explication of the bush which refers to the places in Australia that are outside the major cities (the bush).

Other British settler countries can tell similar stories about the connections between non-Indigenous people and a new land. Environmental historian Thomas R. Dunlap (1999: 46) writes of English diaspora societies that initially, “They destroyed and re-created, appreciated the beauties of the land, and sought to bring it closer to their own ideal”. Later, in the same countries, distinctive geographies became symbols of new nations, as the ecological history specialist Stephen Pyne writes of the landscape terms wilderness, bush and veld:

The character of the land was important to settler societies. Their nationhood stories told of encountering, transplanting, and remaking the discovered lands into something similar to the Europe they had left and, in the end, something better. ... Their national identities derived in particular from the existence of vacated ‘new’ landscapes. Its wilderness made America distinctive from Europe; its ineffable bush rendered Australians something more than Europeans in exile; its veld assured African colonists that they could never be subsumed under a strict European order. (Pyne 1997: 33)

However, the relations between settlers and their physical surroundings have different emphases in each nation. For example, the United States has lauded the heroism of its early pioneers in a landscape made threatening by
fierce animals and warfare with indigenous groups. Australian culture, by contrast, has valued the honest toil of bush workers in hard physical circumstances (Dunlap 1999: 103). In South Africa, the hunting of game assumed importance in the national psyche (Beinart and Hughes 2007: 58-68).

One finding of this chapter is that cultural keywords can be based on country concepts. *Australia* and *country* are used as semantic molecules in the meaning of the concept of ‘bush’. Other concepts which are consciously associated with particular countries may also be based on country concepts. Potential candidates from varieties of English include ‘veld’, distinctly linked to *South Africa*; ‘kangaroo’, clearly connected to *Australia*; and ‘thanksgiving’, based in specific countries, *the United States* and *Canada*. Further examples from other languages include ‘homeland’ and ‘fatherland’ concepts such as the German ‘Vaterland’ and the Polish ‘ojczyzna’, which are grounded in the idea of “one country” (Wierzbicka 1997: 156-197).

To recapitulate, in this chapter I have demonstrated that the NSM approach can be used to analyze national landscape concepts. National landscape concepts can be taken up for broader purposes to characterize a distinct way of living and thinking. Lexical meaning contributes to an understanding of culture, in this case, the relationships between British settler nations and their natural environment. Settler Englishes are artefacts of history and culture, and one term can provide a springboard for wider explorations of the languages and their speakers.
Notes

(1) Initially the word *woods* was also employed for this sense. However, once the inadequacy of this English term to refer to the very different Australian landscape was recognized *woods* was replaced by *bush* (Ramson 2002: 111). The last citation of this use of *woods* comes from 1827 and the first citation of the use of *bush* comes from 1804 (Moore 2008: 28).

(2) There are, naturally, further meanings of *bush* and *the bush* which go beyond the bounds of this study. For example, Australians who live outside the major cities are as a collective called *the bush*, as in “the bush will switch parties this election”. The term *bush* can be used in phrases with some verbs of motion, as in *to take to the bush*, *go bush*, for example, “the convicts took to the bush”. *The bush* is also sometimes used to refer to a place in which Australian Aboriginal people live in a traditional manner as in “Maudie [an Aboriginal domestic servant] ... had resigned and gone bush” (Gunn 1908 *Australian National Dictionary*). (Australian National Dictionary).

(3) Neither New Zealand English nor South African English are homogeneous (Starks and Thompson 2009; Coetzee-Van Rooy and Van Rooy 2005). I am looking at the term within mainstream standard New Zealand English and the historically ascendant British White South African English.

(4) There is too the English term *bush* in the sense of “a medium sized thing growing out of the ground, shrub”. Moore (2008: 29) suggests that this meaning and that of the South African Dutch *bosch* (‘wood’, ‘forest’) conflated.

(5) The other ten most frequent adjective modifiers are *marmalade, prickly, coral, virgin, native, Tasmanian, nearby* and *Australian*. This wordsketch includes the term *bush* in all its senses, for example, as an individual plant, as in *mulberry bush*.

(6) Unless otherwise indicated, all examples used in this chapter are from the OzNews Australian English subcorpus of Wordbanks.

(7) See note (5) for information on other frequent collocates.

(8) A.B. ‘Banjo’ Paterson famously argued about the merits of ‘the bush’ with another renowned Australian writer, Henry Lawson in the so-named ‘bush-controversy’ of 1892. Lawson portrayed ‘the bush’ as a harsh place whereas Paterson took a more romantic view (Semmler 1966: 81-86).

(9) A reviewer of Bromhead 2011b asks how human beings are excluded in the wording “living things” in explication [B]. In my approach to the study of landscape terms and folk biological terms I am not aiming to reflect the scientific reality of the Earth. I am trying to capture “the naive picture of the world” or folk concepts (Apresjan 1992: 32-33). I would argue that in everyday colloquial English ‘people’ are not referred to as “living things” or “animals”, although clearly they would be in semi-scientific language (see also Goddard 2011: 199-200).
The sample of *the bush* is taken from a 250-word random sample of *bush* the OzNews subcorpus of Collins Wordbanks. From this data I extracted instances according with the meaning of *the bush*.

Ward’s book *The Australian Legend* has been criticized on a number of fronts. For example, some commentators observed that cities have also influenced Australia’s history. Others took issue with the idea of Australia as a nation of collectivists (McQueen 1970). More recently, the ideas contained therein have been accused of being exclusionary (Nile ed. 2000). Ward defended himself against criticisms by reiterating that his work was “an attempt to trace and explain the development of [the] national mystique” rather than a history or accurate representation (Ward 1978: 171).


In examining this sense, in part, I looked at sixty tokens of *the bush*. These examples were taken from a 250-word random sample of *bush* in the OzNews subcorpus of Collins Wordbanks.


The term *country* meaning the area outside cities is more usual in Australia than in the United Kingdom. *Countryside* is more common in UK English.
CHAPTER 9
CONCLUSIONS AND FUTURE DIRECTIONS

9.1 Introduction

In this chapter I will present some conclusions, and I will explore some future directions for research. My main conclusions will be presented in section 9.2. Next, in section 9.3, I will address the question of the role of culture in the landscape, and link this role to "cultural scripts", one future direction for research. Then, section 9.4 will contain suggestions for another future research path, the exploration of words for agricultural places because they indicate human intent in the landscape. To end, in section 9.5, I will make some final remarks.

9.2 Conclusions

Many scholars recognize that languages and cultures may differ in the application of botanical words, and that plant taxonomy is not universal (e.g. Berlin 1992). As has been shown in this thesis, the categorization of landscape can be language and culture specific. The labelling of kinds of places in the natural environment in settler societies, as has been explored in this study using the example of Australia, can serve as a demonstration of issues in the study of ethnogeographical categorization as a whole. To illustrate the attribution of terms for the natural world in a settler country I will take a passage from the Nobel Prize winner for literature, J.M. Coetzee’s collection Dusklands. Coetzee writes of his ancestor Jacobus Coetzee’s trips in 1760 into the interior of South Africa where he encounters plants unfamiliar to his European eyes. To quote, "[Jacobus] Coetzee rode like a god through a world only partly named,"
differentiating and bringing it into existence" (Coetzee 1983: 116). The passage in the novel identifies three kinds of the naming of these South African plants.

The first kind\(^1\) is the botanist's application of European scientific categories to these plants. J.M. Coetzee comments, "The criteria for a new discovery employed by the gentlemen from Europe were surely parochial. They required that every specimen fill a hole in their European taxonomies" (Coetzee 1983 116).

The second kind is the indigenous Bushmen's categorization of plants. Coetzee writes of the Bushmen's discovery of plants, "when Bushmen first saw the grass which we call *Aristia brevifolia* and spoke among themselves and found that it was unknown and called it *Twaa*. was there not perhaps an unspoken botanical order among them in which *Twaa* now found a place?"

The third kind involves the frontiersman, a layman, coming to terms with indigenous plants by likening them to familiar European plants. Coetzee characterizes the "inward moment of discovery" of the frontiersman when he comes across a native grass, "I do not know this, my people do not know it, but at the same time I know what it is like, it is like *rooigras*, it is a kind of *rooigras*, I will call it *boesmangras*".

What Coetzee writes about the application of names to plants in South Africa is also relevant to the categorization of kinds of places in the Australian (and other) landscapes. However, cross-cultural and cross-linguistic differences in landscape words and categories have been little examined. (The work of ethonophysiographers, ethnoecologists, and the MPI school are notable exceptions, as discussed in 1.6, e.g. Burenhult ed. 2008; Johnson and Hunn eds. 2010; Mark et al. 2011).
In this thesis, I have gone on a journey of discovery into the interior of three kinds of ethnogeographical categorization. Firstly, I have ventured into the first kind of categorization by uncovering the semantics of a selection of words Europeans apply to their native lands. Furthermore, the second kind of categorization has been explored in the examination of the semantics of a selection of words a group of Indigenous Australians, Pitjantjatjara/Yankunytjatjara speakers, use for kinds of places in their own country. In addition, I have surveyed the third kind of classification by shedding light on the meanings of some of the words Australian English speakers use to describe their landscape, one unlike that of Britain.

Notably, this thesis has proposed that the meanings of landscape concepts, like those of other concepts based in the concrete world, are anchored in a human-centred perspective. Landscape concepts are based on human vision and human experience in space. To illustrate, the "steepness" aspect of elevated place words is stated in terms of what people can think when they see an elevated kind of place. The thought is about how someone would have to move in this place (see Ch. 5).

Returning now to the three kind of categorization, I will elaborate on the first kind of categorization, that of European languages. This thesis has found that the senses of some English geographic words are identical to some of those used in some other "Standard Average European" languages (e.g. lake in English, lac in French, see Ch. 4). However, it has also been found that the meanings of some English landscape words are not the same as their "translation equivalents’ in other European languages, such as French and Spanish. One way I have demonstrated this fact is by looking at the differences between English and French words for kinds of long flowing-water and...
standing-water places (see 3.3; 4.3). These semantic differences in words from European languages are not arbitrary but make sense in terms of cultural history and geographic differences. For example, distinctions have been drawn between the categorization of a selection of elevated places in English and Spanish. These differences are due to the distinct geographies of Britain and Spain, and to particular cultural emphases.

In regard to the second kind of categorization, I will mention the words from the Australian Aboriginal language Pitjantjatjara/Yankunytjatjara that have been treated. This thesis has drawn out the differences between an indigenous conceptualization of the Australian environment with conception of the same landscape in European languages. For example, the indigenous language in this thesis, Pitjantjatjara/Yankunytjatjara draws many distinctions with regard to kinds of places in the arid environment of Anangu country (e.g. puti, apu/pulji, see 7.3). English speakers, by contrast, have just one word for a dry kind of place, desert (see 7.2).

Turning now to the third kind of categorization, I will talk here about the case of Australia (which has been explored in this thesis). When British colonists found themselves in a new land they came to terms with its geography both by using words suited to a British landscape, such as hill and stream, as well as, by recruiting existing English words for new meanings, such as creek and the bush. In the body of this work, I have explored the Australian English terms creek, billabong, the beach, desert, and the bush that are now are applied to the places in the Australian landscape (see 3.2.3, 4.5, 6.3, 7.3, 8.3.2). These Australian English words have been compared and contrasted with some words in so named, Anglo English, as well as with some words in the Aboriginal language Pitjantjatjara/Yankunytjatjara.
In exploring these three kinds of categorization, I have found that many of the same features are picked out as important in the semantics of these words. To illustrate, the presence of water is part of the meanings of both the English river and the Australian English creek. However, Australian English speakers have adapted the sense of the word creek to take into account a varying level of water, an aspect not found in the semantics of the English river (see 3.2.1, 3.2.3).

As well as differences, there are clear categories of kinds of places in the landscape which cross languages and cultures. In this thesis, some kinds of long flowing-water places (Ch. 3); a selection of kinds of standing-water places (Ch. 4); a number of kinds of elevated places, long places formed by many elevated places, and cliff places (Ch. 5); and some kinds of places based on ‘the sea’ (Ch. 6) have been explored. There are also categories of large areas of land, such as ‘desert’, ‘the bush’, and Pitjantjatjara/Yankunytjatjara ecozones (Ch. 7; Ch. 8).

Throughout this thesis, I have employed the NSM approach to semantics by explicating the sense of each word treated, for the most part, in simple and universal words, and therefore free from terminological and conceptual ethnocentrism. Using this method has allowed me to elucidate both the distinctions I draw in terms of categorization across languages, and the similarities I point out in categorization across languages. In this way, my work on landscape categorization is novel in comparison to other approaches which rely on English language glosses.

Here, I reiterate the way in which I have used NSM to show differences and similarities in conceptual and linguistic categorization, by taking the
example of long flowing-water places. This category is, roughly speaking, long places (stated in NSM as “places of this kind are long [m] places” and “places of this kind have two sides”), filled with water (stated in NSM as “there is water [m] in places of this kind”) which moves (stated in NSM as “the water in places of this kind is moving”).

However, this category shows up in various languages in differing ways. NSM helped me state clearly a feature of the French long flowing-water place word, *fleuve*. Unlike English, French has two categories for large flowing water places, one of which concerns places whose water, most often, flows into the sea. This aspect of the semantics of *fleuve* in NSM has been stated by way of the component: “when someone is somewhere on one side of a place of this kind, often this someone can think like this: “a long time after this, this water [m] will be in the sea [m] ‘la mer’ [m]”. By contrast, this semantic component is not used in the explications of the other long flowing-water place words treated in chapter 3.

In my semantic exploration, I have uncovered shared elements in the conceptualizations of landscape categories. Size, shape and material make-up are important in the meanings of geographic concepts. However, the relative priority given to these common factors evidently varies across languages. English employs some size distinctions in its landscape terms (cf. *mountain* vs. *hill*, *river* vs. *stream*), whereas in Pitjantjatjara/Yankunytjatjara neither elevated place terms nor long flowing-water place terms come in different sizes, so to speak. On the other hand, as in a number of other languages (e.g. Seri, cf. O’Meara and Bohnemeyer, 2008), material composition is a leitmotif of landscape categorisation in Pitjantjatjara/Yankunytjatjara; notably, the substances “water” (“kapi/mina”), “earth” (“manta/pana”), “rock” ("apu/puli_1")

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(see 3.4; 4.6; 5.2.3). For example, we have seen the distinction made between kinds of standing-water places located in “ground” versus those located in “rock” (see e.g. Lowe and Pike, 1990, pp. 11–19 on Walmatjarri; Myers, 1991, pp. 26–27 on Pintupi).

In the course of my semantic investigations, I have also discovered some important semantic molecules, intermediate units of meaning, to be present in the senses of some landscape terms, for example, “the sea” in English seascape words, and “punu” ‘tree, bush’ in Pitjantjatjara/Yankunytjatjara eco-zone words (see Ch. 6; Ch. 7). Some of these molecules, such as the aforementioned “punu” ‘tree, bush’ in Pitjantjatjara/Yankunytjatjara, are language specific. Exemplars have also been used in the explications of Pitjantjatjara eco-zone words (e.g. “kampuran(pa)” ‘desert raisin’ is an exemplar of the ‘mai’ ‘plant food’ found in ‘puṭi’).

9.3 Culture in the landscape

The fact that there are both common elements and culture-specific factors in landscape categorization suggests that landscape categorization is based in both intellectual and utilitarian concerns (Enfield 2008; Malt 1995). Understanding the cultural factors in the meanings of individual lexical items makes it possible to see the relationships between lexical semantics and categorization, on the one hand, and wider cultural models of land use, on the other (see, e.g., Strauss and Quinn 1997; Maff fi ed. 2001). Here, I will discuss some ways I have shown that culture and human affordance play a role in the semantics of landscape terms.

For example, this thesis has shown how the senses of individual water-place words in Pitjantjatjara/Yankunytjatjara, such as karu and tjukula, are...
connected to the traditional water-gathering practices of Anangu, a desert people (see 3.4, 4.6). Another example taken from the exploration of the semantics of water place words concerns the difference in the meaning of pond in English and étang in French. The distinct meanings of these words, along with the senses of the related terms basin (English) and bassin (French), arose, in part, from the different gardening histories of England and France.

Moreover, there are cultural and utilitarian elements of the meanings of some eco-zone words in Pitjantjatjara/Yankunytjatjara, such as puti and apu/pulji. The explications of these words mention habitat-specific materials and food sources which people hunt and gather. The fact that these zones are resources for Anangu is part of the meanings of the terms (see 7.3). The semantics of desert in Australian English reflect the Australian view of arid areas as places of deprivation. This perception is due to the fact that Australians mostly live near the coast and rely on agriculture for their food (see 7.2).

Lexical elaboration too is indicative of cultural concerns. To illustrate, there are many words in English, a language of a country with a long history of seafaring, for kinds of places which are 'indentations' of the sea into the land, e.g. bay, cove. By contrast, Polish, the language of a continental country with little history of seafaring, has only one word for 'indentations' of the sea into the land, zatoka (see 6.6).

One direction of future research drawing on the material in this thesis could be the examination the how different cultures use various kinds of places. For example, one could write “cultural scripts” for land use. A cultural script, ‘sister’ to NSM semantic explications, is a statement “framed largely or entirely within the non-ethnocentric metalanguage of semantic primes – of some
particular attitude, evaluation, or assumption which is hypothesised to be widely known and shared among people of a given speech community” (Goddard 2006: 5). The cultural scripts approach has been used to explore areas such as social interaction, speech routines, and cultural values (see chapters in Goddard ed. 2006; papers in Goddard and Wierzbicka eds. 2004). Cultural scripts in the area of landscape is a new proposal.

One possible cultural script could focus on attitudes to ‘the beach’ in Australia. This cultural script would include reference to people swimming as in the following draft component:

often when people are in places of this kind,
    they want their bodies to be in the sea [m] near this place
often when their bodies are in the sea [m], they want to move some parts of their bodies

The cultural script could also include a mention of sunbathing:

often people want their bodies to be in the sun [m] for some time in a place of this kind

Another potential cultural script could concern how people regard the eco-zone ‘puṭi’ in Pitjantjatjara/Yankunytjatjara. This cultural script could make mention of people hunting and gathering in this kind of place (“people often do something in a place of this kind for some time, because they think like this: “there is often ‘kuka’ [m] in places of this kind, people want to eat [m] this ‘kuka’ ‘game’ [m]”, and “people often do something in a place of this kind for some time, because they think like this: “there is often ‘mai’ [m] in places of this kind, people want to eat [m] this ‘mai’ ‘plant food’ [m]”.

9.4 Human intent in the landscape – one future direction

A further direction of research is the explication of words for kinds of places used for agriculture. Places of this kind are unlike most others explored
in this thesis. Agricultural kinds of places have been made by humans: essentially, they are there because people want them to be. Therefore, in explications of these kinds of place, one recurring phrase could be “because people want this”.

By contrast, the vast majority of other kinds of places which have been treated thus far are picked out by people to be lexicalized (e.g. mountain, river), but they were not ‘constructed’ or ‘designed’ by people. The human interest comes into the explications of these words via what people can see in these places, what people can think or know about these places, whether people live in these places, and what people can do (or want to do) in these places.

This path of research will be explored by looking briefly at the senses of the agricultural words meadow in British English and the word paddock in Australian English. A ‘meadow’ is a kind of green, grassy place made by people, and used for hay or for grazing of animals. A ‘paddock’ is a big kind of place, with some grass used for grazing animals, and surrounded by fences. The semantics of these words provides an illustration of human intent in the landscape.

‘Meadows’ and ‘paddocks’ are kinds place created by people. The human objective to change the landscape and create ‘meadows’ and ‘paddocks’ could be portrayed in the semantic component, using the phrasing “because people want this”:

there are places of this kind in some places because people want this

The fact that farm animals are often put out to graze in ‘meadows’ and ‘paddocks’ could be stated in the following two components:

often there are big animals [m] of some kinds in these places because people want this people want this because these animals [m] can eat [m] the grass[m] in these places
People can mow ‘meadows’ to get grass to make into hay. One could depict this activity in components such as:

- sometimes when the grass [m] in these places is very long [m],
- people do some things with some things to this grass [m],
  because they want to do some other things with this grass [m] somewhere

Fences are erected around ‘paddocks’ to keep in farm animals. This situation could be accounted for by the following components:

- there is something of one kind on all the sides of a place of this kind
  because people do some things
- the top [m] of this thing is far above the ground [m] in these places
  because this thing is there, big animals [m] in these places cannot be on the other side of this thing
  if people don't want it

9.5 Final remarks

This thesis has shown, in agreement with previous studies, that although there are shared elements in the categorization of landscape, languages and cultures vary in terms of their geographic categories, and landscape words. To quote from an ethnophysiography study:

... people from different language groups/cultures have different ways of conceptualizing landscape, as evidenced by different terminology and ways of talking about and naming landscape features. (Mark et al. 2007: 16)

However, this thesis is novel in that it “pins down” these cross-cultural and cross-linguistic similarities and differences by using the universal concepts and language of the Natural Semantic Metalanguage. In this way, these similarities and differences can be clearly communicated both across and within languages. To end, I will quote from Benjamin Lee Whorf – the Whorf less known – on the existence of “a common stock of concepts” (he calls them “conceptions”), and the necessity of these concepts to communicate ideas:
The very existence of such a common stock of conceptions, possibly possessing a yet unstudied arrangement of its own does not yet seem to be greatly appreciated; yet to me it seems to be a necessary concomitant of the communicability of ideas by language; it holds the principle of this communicability, and is in a sense the universal language to which the various specific languages give an entrance. (Whorf 1956: 36)

Since Whorf wrote these words, these “common conceptions” and their “arrangements” have been studied extensively through NSM. As I have shown in this thesis, NSM primes can give us a common measure for comparing “local variations” in thinking about the landscape. They allow us to unlock indigenous views embedded in different languages and help us to “translate” ethnogeographies without distorting their meaning.
1) The order of the three kinds of naming is taken as they appear in Coetzee's work: first, second and third. Neither I nor Coetzee attribute any hierarchy to the three kinds of naming.

2) There are the exceptions of 'the seaside' (see 6.3), 'the bush$_2$' 'the bush as a human domain' (see 8.4), and 'the bush$_3$', referring to the places in Australia that are outside the major cities (see 8.5).
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