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COGNITIVE LINGUISTIC STUDIES IN CULTURAL CONTEXTS

9

Landscape and Culture – Cross-linguistic Perspectives

Helen Bromhead



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Landscape and Culture – Cross-linguistic Perspectives

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Volume 9

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by Helen Bromhead

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List of abbreviations

1	First person
2	Second person
3	Third person
ALL	Allative
ACC	Accusative
ASSOC	Associative
ART	Article
CHAR	Characteristic
CIRC	Circumstantial
CONJ	Conjunction
DEF	Definite
DEM	Demonstrative
DIR	Directional
DU	Dual
ERG	Ergative
FUT	Future
HAVING	Having
IPFV	Imperfective
IMP	Imperative
INS	Instrumental
LD	Locational-directional preposition
LOC	Locative
[m]	Semantic molecule
[m*]	Exemplar
m ₁	First meaning of a word (lexical unit)
m ₂	Second meaning of a word (lexical unit)
NEG	Negative
NMLZ	Nominalizer
NUM	Numeral particle
NSM	Natural Semantic Metalanguage
PAT	Patient
PERF	Perfective
PL	Plural
POSS	Possessive

PREP	Preposition
PRS	Present
PRT	Particle
PST	Past
PURP	Purposive
SEQ	Sequential
SER	Serial
SG	Singular
TELIC	Telic
v2	Second verb in a compound
Wordbanks Br Books	British Books subcorpus of Wordbanks
Wordbanks Br Ephem	British Ephemera subcorpus of Wordbanks
Wordbanks Br Reg News	British Regional Newspapers subcorpus of Wordbanks
Wordbanks Can News	Canadian Newspapers subcorpus of Wordbanks
Wordbanks NZ News	New Zealand Newspapers subcorpus of Wordbanks
Wordbanks Oz News	Australian Newspapers subcorpus of Wordbanks
Wordbanks SunNOW	<i>The Sun</i> and <i>News of the World</i> subcorpus of Wordbanks
Wordbanks Times	<i>The Times</i> subcorpus of Wordbanks
Wordbanks US Books	US Books subcorpus of Wordbanks
Wordbanks US News	US Newspapers subcorpus of Wordbanks
Wordbanks US Spoken	US Spoken subcorpus of Wordbanks

Landscape and culture

An overview

1.1 Introduction: mountains as brute facts?

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 institutional facts, which are based on human perception and organization, such as money, or citizenship, or a bathtub (Searle, 1995, pp. 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, p. 7).

Like a Swiss army knife, a mountain has objective physical features such as volume. But do all people talk about mountains? We can try to resolve this by looking at the concept of a ‘mountain’ from a cross-linguistic point of view. We know that 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, 2008; Mark & Turk, 2003a).

For example, Mt Woodroffe (Ngarutjaranya) in South Australia is called a *mountain* by English speakers, while Pitjantjatjara speaking Anangu of the region call it a *puli*. By contrast, the Australian landmark Uluru (Ayres Rock) is also called a *puli* by Pitjantjatjara speakers, whereas English speakers call it a *rock* or a *monolith*, but not a *mountain*.

Differences in landscape categorization exist even 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 linguistic studies show 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, to date, less research has been undertaken to look at the way words for parts of the physical world are determined by the cultures of speakers.

Individual landscape terms, that is, words like *mountain* and *river*, in various languages often have different meanings. In this book, I ask what the differences are between landscape categories in various languages and what are their common features. To what extent do culture and utility play a part in landscape 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 Natural Semantic Metalanguage (NSM) approach.

English, often Australian English, and the Australian Aboriginal language Pitjantjatjara/Yankunytjatjara are the main languages in focus. Also included are selected examples from French, Spanish, and Polish. I will return to these languages in Section 1.10.

1.2 Language and culture in the landscape

This study follows 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, 1949, p. 162)

This idea is often termed the principle of linguistic relativity (see Foley, 1997, pp. 192–214; Whorf, 1956, p. 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*.” (Humboldt, 1999 [1836–1840], p. 60). This school of thought is often most closely associated in linguistics with Franz Boas, Edward Sapir, and Benjamin Lee Whorf, all of whom had a profound impact on both linguistics and anthropology in the first half of the 20th 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; Kövecses, 1986; 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 thirty 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 & Levinson, 1996; Levinson & Wilkins, 2006; Malt & Wolff, 2010; Sharifian, 2011).

The Natural Semantic Metalanguage (NSM) approach to linguistic analysis which I will take in this book is one with a strongly cultural focus. Researchers working in this framework have furthered the study of the link between ‘ways of speaking’ and ‘ways of thinking’ in various languages.

Areas of vocabulary which have been analysed using the approach include emotion words (e.g., Harkins & Wierzbicka, 2001); cultural value terms (e.g., Gladkova, 2008; Levisen, 2012), temporal expressions (e.g., Priestley, 2012), colour terms (e.g., Wierzbicka, 2008); artefact words (e.g., Wierzbicka, 1985); natural kind words (e.g., Wierzbicka, 1996); speech act verbs (e.g., Wierzbicka, 1987); interjections (e.g., Ameka, 1992), discourse particles (e.g., Wong, 2014), among others. There is also work on syntax (e.g., Wierzbicka, 1988, 2006a; Asano-Cavanagh, 2009), ethnopragmatics (e.g., Goddard, 2006a; Ameka, 2009), historical semantics (e.g., Bromhead, 2009), semantic relations (e.g., Ye, 2017), and cultural key words (e.g., Levisen & Waters, 2017; Wierzbicka, 1997).

The present book is the first extended study of the lexical semantics of landscape in cultural context anchored in a human-centred perspective, using fine-grained reductive paraphrases written in the Natural Semantic Metalanguage. It builds upon my previous work (Bromhead, 2011a, 2011b, 2017), and a pioneering piece by Anna Wierzbicka (1989).

1.3 Landscape categories

The study of landscape categories is comparable to the better known and well researched fields of ethnobiological classification (e.g., Berlin, 1992; Hunn, 1982; Medin & Atran, 1999); body part classification (e.g., Majid, Enfield, & van Staden,

2006; Wierzbicka, 2007); colour labelling (e.g., Berlin & Kay, 1969; Wierzbicka, 2008); and kinship systems (e.g., Schneider, 1984; Wallace & 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, and what are the cultural motivations behind variations in categorization.

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 & 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 because they strike them as distinct and noteworthy (Berlin, 1992; 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 physical support, shelter, water, and tools (Gibson, 1979, p. 127). For example, N. J. Enfield discusses the affordance of Lao water feature concepts as places for gathering various kinds of materials, and, also, the communicative function of the words for these places for Lao speakers (2008; 2015, pp. 73–83, 94–96).

1.4 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, Harrison, Spalding, & Lysenko, 2005).

The present study differs in that it is not seeking to capture a scientific reality of the Earth. My work in this book is, rather, the description of 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: 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, pp. 32–35)

1.5 Previous landscape work

In this section, I treat a selection of the previous work on the relationship between landscape and language. Landscape categorization is a topic of interdisciplinary interest; it has been studied in both cultural and linguistic anthropology (e.g., Basso, 1996; Hirsch & O’Hanlon, 1995), and there is some history of linguistic interest in the field (e.g., Boas, 1964). 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.¹ (Whorf, 1956, p. 253)

Since 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

1. Unlike Whorf, I see words such as *hill* and *swamp* as “places” as opposed to “things”. I will expand on this topic in 1.9.

in geographic work (e.g., Mark, 1993; Mark & Turk, 2003a, 2003b; Mark, Turk, & Stea, 2007). Three notable volumes in the study of language and landscape include the 2008 Special Issue of *Language Sciences* (Burenhult, 2008) “Language and landscape: geographical ontology in cross-linguistic perspective” composed of papers mostly by linguists from the Language and Cognition group at the Max Planck Institute (MPI), Nijmegen; *Landscape in Language: Transdisciplinary perspectives* (Mark, Turk, Burenhult, & Stea, 2011) with contributions from anthropologists, geographers, information scientists, linguists, and philosophers; and *Landscape Ethnoecology: Concepts of Biotic and Physical Space* (Johnson & Hunn, 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 intersecting strands in the research on language and landscape found in this literature. Firstly, I will look at the ethnophysiography school; secondly, I will discuss the linguistic approach coming out of the MPI Language and Cognition Group; thirdly, I will cover a more anthropological approach, including the ethnoecological approach; and finally, I will say a few words about the distinctive features of my NSM approach in comparison to the other approaches.

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 & Turk, 2003a, 2003b; Turk & Stea, 2014). In the introduction to the aforementioned volume (Mark et al., 2011), Mark et al. write, “ethnophysiography is the investigation (for any particular language) of categories of landscape features, especially those denoted by common words (usually nouns or noun phrases)” (Mark et al., 2011, p. 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, p. 7). Much ethnophysiography research has centred on the Australian Aboriginal language, Yindjibarndi, spoken in the Pilbara region of Western Australia (Mark & Turk, 2003a; Mark et al., 2007, 2010, 2011). There is also an additional ethnophysiography study done with the Navajo (Diné) people in the south-western United States.

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, p. 7). In one case, for example, they discover a significant difference: 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 & Turk, 2003a, p. 7; see also Section 2.4).

Secondly, they ask how the description of a specific landscape is affected by the terms available within a specific landscape category system (Mark et al., 2011, p. 8). To illustrate, they cite the difference between English and Yindjibarndi in classification of water places – the former language originates in a relatively wet climate, the latter is spoken in a dry climate (Mark & Turk, 2003a, p. 12).

Thirdly, they ask how influential the culture and lifestyle of a people are on their conceptions of landscape (Mark et al., 2011, p. 8). They give as example the case of Australian Aboriginals 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, p. 12).

Finally, one novel aspect of ethnophysiology is the methodological question of whether non-English language landscape categorization can be used to produce appropriate, culturally specific geographic information systems (GIS) (Mark et al., 2011, p. 8). These researchers conceive of an ontology which provides a “framework within which meanings of folk terms for landscape elements can be defined” (Mark & Turk, 2003b, p. 4). Ethnophysicographers write that this ontology is “an objective, realist account of the true nature of landscape” (Mark & Turk, 2003b, p. 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 & Turk, 2003b, p. 4). They propose that folk landscape concepts from various languages could be represented in GIS using these primitive concepts.

Linguists, mostly from the Language and Cognition Group, produced studies for the 2008 Special Issue of *Language Sciences* (Burenhult, 2008; see above). 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 Burenhult (2008) differs from the ethnophysiology 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 & Levinson, 2008, p. 144). For example, Seri categorizes kinds of places in the landscape according to the substances from which they are formed (e.g., sea-water, 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 ‘stand’ in the form *hast cop*, to mean, roughly, ‘mountain’; and the same term *hast* ‘stone’, together with the definite

article derived from the posture verb ‘lie’, has the sense, roughly, of ‘mountain range’ (O’Meara & Bohnermeyer, 2008, p. 322; for elaboration, see Section 3.1).

A question raised in Burenhult (2008) is what “causes a language to categorize and label the geographical environment in a certain way” (Burenhult & Levinson, 2008, p. 142). Enfield (2008; 2015, Chapter 4) suggests that kinds of places in the landscape are labelled because they need to be spoken about. He gives as example the Lao word *nò̀ng*₃ ‘swamp, marsh’, which is a place people go to collect a type of reed to be used for weaving. Labelling it means that people can say not only where someone physically is but also their purpose in going there.

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 technologies of the Australian Aboriginal Anangu (Pitjantjatjara/Yankunytjatjara speakers). Such models are often referred to as traditional ecological knowledge in anthropology. 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, p. 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 this study.

Johnson and Hunn’s edited collection (2010) treats the field of ethnoecology. 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, p. 204). Part of this investigation concerns *what* is named, kinds of places, called “folk ecotypes”. These researchers are interested in subsistence, meanings, and spiritual practices of cultures with regard to the landscape. For example, Johnson (2010) identifies kinds of places where Kaska (a Canadian First Nations group) women can obtain plants for food and medicine, such as *tùtsel* ‘swamp’ or ‘slough’. Gilmore et al. (2010) 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 ethnophysiology approach.

Following on from the work from three strands mentioned above, there has appeared other language-focussed research exploring landscape (e.g., Aung Si, 2016; Huber, 2014; Mihás, 2015).

While the three approaches briefly outlined above – ethnophysiology, the linguistic research of 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 present study is based in the fine-grained description of selected landscape terms from a number of languages. The reductive paraphrase approach I will take to the study of language and landscape allows me to state, in a precise way, the semantics of individual lexical items and at the same time to avoid technical bias. On the foundation of a collection of these 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.

1.6 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 (Baudouin de Courtenay, 1929; Fillmore, 1982, p. 121; Wierzbicka, 1989; Enfield, 2015). (See also Lakoff's emphasis on embodiment in language and cognition, generally (1987)).

In a literal sense, there are human interests in the landscape. Concepts for kinds of landscape places identify places that people can see, places in which people can be and do things in, and, in some cases, places that people can make because they want to do some things in them.

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 concepts. 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 (Wierzbicka, 1985, pp. 35–36).

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 (Wierzbicka, 1985, pp. 167–168).

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 and movement.

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, p. 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, ‘puti’, is conceived of as a place in which people can do things of many kinds, e.g. camp, harvest food and other materials, 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, p. 121; Mark et al., 2007, p. 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 as a place where the water of ‘sea’ can be, rather than a place where people can live (see 4.4). 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, p. 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.

1.7 The case of Australia

One particular focus of this study are landscape categories and words used in Australia. This country can provide an instructive case study for the diversity of landscape 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, p. 10).

Kinds of places which many people label with English terms like *creek* or *hill* have older labels in Indigenous languages. The way places are spoken about in Indigenous languages reveal conceptions of land different from the Australian English one (e.g., Nash, 1998; Walsh, 1997; Wilkins, 1993), as has been explored in the study of place names in Australian languages (e.g., Hercus et al., 2002; Koch & Hercus, 2010).

Throughout this book, I will treat in particular the landscape terms and associated cultural concepts of Pitjantjatjara and Yankunytjatjara speakers of Central Australia (see especially Section 1.10, and later chapters).

Non-Aboriginal people have become interested in Indigenous notions of country (see, e.g., Myers, 2002, pp. 101–102). Acknowledging the traditional owners of land and having welcome to country ceremonies at the openings of events is now a very common practice in Australia (Merlan, 2014). The Australian government works with Indigenous groups in formalized caring for country programs (see, e.g., Walsh & Mitchell, 2002).

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, pp. 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 Australian, New Zealand, American, and Canadian 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 & Morphy, 2002; Goodall, 2002).

The topic of the role of landscape terms in Australia is also of interest in the country given that the question of the encounter with landscape is a frequent theme in settler Australian identity discourse (e.g., Bonyhady & Griffiths, 2002; Carroll, 1982a; Carter, 2010 [1987]; Robin, 2007; Rothwell, 2007, 2010; Watson, 2014, 2016). 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, "[i]n every era, Australian identity has been defined by environmental oddities ..." (Robin, 2007, p. 6). Notable in such work on landscape and identity is writer and lexicographer Jay Arthur's 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, pp. 25–26).

1.8 The natural semantic metalanguage

In this section, I discuss the approach I take in this book, NSM semantics. I expand on NSM and explain how I am applying it in the area of landscape words and categories.

NSM is a mini-language of semantic explanation, based upon natural languages. To break down meaning, the approach uses a vocabulary of 65 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 & Wierzbicka, 2002a; Goddard, 2008; Wierzbicka, 2014). The inventory of primes and the syntax are hypothesized as universal (based on empirical studies). Exponents of the semantic primes, the forms primitive meanings are realized as, have been put forward 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 (Ye, 2001; Levisen, 2012; Peeters, 2006; Gladkova, 2007, 2010; Yoon, 2006; Goddard & Wierzbicka, 1994, 2002a).

Table 1.1 gives the set of semantic primes in their English language exponents. 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 1.1 A table of universal semantic primes * – English version

I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY	substantives
KINDS, PARTS	relational substantives
THIS, THE SAME, OTHER~ELSE	determiners
ONE, TWO, SOME, ALL, MUCH~MANY, LITTLE~FEW	quantifiers
GOOD, BAD	evaluators
BIG, SMALL	descriptors
KNOW, THINK, WANT, DON'T WANT, FEEL, SEE, HEAR	mental predicates
SAY, WORDS, TRUE	speech
DO, HAPPEN, MOVE, TOUCH	actions, events, movement, contact
BE (SOMEWHERE), THERE IS, BE (SOMEONE~SOMETHING)	location, existence, specification
(IS) MINE	possession
LIVE, DIE	life and death
WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT	time
WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE	space
NOT, MAYBE, CAN, BECAUSE, IF	logical concepts
VERY, MORE	intensifier, augmentor
LIKE~WAY	similarity

(from Goddard & Wierzbicka, 2014, p. 12)

*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.

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, pp. 77–78, see also Melčuk, 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’). A bound morpheme can also express one of the primitive meanings. For example, Mandarin Chinese uses the bound morpheme *-BIAN* for the prime *SIDE*. Some exponents of primes are also phrasemes, multi-word units. To illustrate, the English *A LONG TIME* is equivalent to a single item, *LÆNGE*, in Danish. The primes can have different morphosyntactic properties in different languages and can belong to various word classes. For example, the prime *TRUE* takes the form of an adjective in English, a verb in Danish (*DET PASSER*), and a noun in Russian (*PRAVDA*) (Levisen, 2012; Gladkova, 2007).

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 & Wierzbicka, 2002b, pp. 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 French the exponent of the prime *FEEL, SENTIR* also has the meaning of ‘smell’.

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 book. THINK can be used in three 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.

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.

A notable theoretical concept of NSM which will play a major role in this book is the semantic molecule (notated with an [m]). As Goddard (2010a, p. 123) writes, “[t]hese are non-primitive meanings (hence ultimately decomposable into semantic primes) that can function as units in the semantic structure of yet more complex words” (see also Wierzbicka, 1985, p. 45). 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 & Wierzbicka, 2009, p. 64). The notion has similarities with that of intermediate-level concepts in the Moscow School of Semantics (Apresjan, 1992, 2000).

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, p. 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 vegetation, such as ‘tree’, and ‘grow’. 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, “[t]he 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, p. 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, for example ‘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, many languages in the world did not have a word for ‘money’. (The word for ‘money’ in present-day Pitjantjatjara/Yankunytjatjara is the English borrowing *mani*). Despite not being found in all language, ‘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*.

The explications of some Pitjantjatjara/Yankunytjatjara landscape terms require some semantic molecules which are not available in English. Ecological zone words like *puti* and *puti*₃ require molecules for the resources that are obtained in these places. 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 5).

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 2). 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.

- (2) Argentina is a **long country** smack dab in the middle of South America, which is a **long continent**.²

2. <http://travelswithblitz.blogspot.com.au/2009/11/argentina.html>, accessed 29 March 2017.

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 ‘long₁’ 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 [m] touch this thing everywhere on all sides,
this someone can think about it in the same way (Wierzbicka, 2007, p. 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:
“two parts of this place are not like any other parts,
because one of these two parts is very far from the other”
 - b. when someone is at one of these two parts of this place,
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 2, 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 & Wierzbicka, 2014). For example, in Chapter 7, 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 5, I will include exemplars in the explications of eco-zone words. The use of exemplars in semantic explications is a relatively recent innovation in the NSM research program. It is now hypothesized, for example, that functional collective superordinates in English, such as *furniture* and *vegetables*, need to be explicated with reference to salient exemplars of these categories (Goddard, 2017a).

To illustrate, the explication of *furniture* 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] mentioned previously. 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*), ‘kampurarpa’ ‘desert raisin’ (used in the explication of *puti*), and the like, would only be needed for the explications of a few words.

Therefore, they are clearly very different in status from 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 5 are particularly salient examples of the trees, plants, plant foods, and game found in these kinds of places.

Each 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]:

[C] *oh!*

- a. I now know something
- b. I didn’t know it before
- c. I feel something because of this

(Goddard, 2011, p. 188)

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, “[d]oing NSM analysis is a demanding process and there is no mechanical procedure for it” (Goddard, 2010b, p. 464). He continues, “[p]ublished 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. Next, I talk about some of the issues involved in the writing of the explications of landscape terms included in this book and how explications are formed.

The semantic analysis of landscape terms presented in this study is based on conceptual analysis. As mentioned in Section 1.6, 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., Wierzbicka, 1985). NSM provides a way to construct plausible and testable hypotheses about meanings, in the form of the reductive paraphrase explications.

Various pieces of linguistic evidence can be used 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, pp. 27–28). As J. R. Firth, who coined the term *collocation*, writes: “[y]ou shall know a word by the company it keeps” (Firth, 1957, p. 11; see also Apresjan, 2000, pp. 50–54). To take an example from another semantic field, 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, pp. 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 2.2). 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 3.2).

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* (Wierzbicka, 1985, pp. 197–204). One example of the use of phraseological evidence in this book is the social category of the ‘bushman’ which is examined in my treatment of the Australian cultural keyword *the bush* (see Chapter 7). 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, “The word *bush* has been the most fecund of all words in Australian English, in terms of the number of compounds it has generated” (2008, p. 30).

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, p. 193).

In many cases, when looking at the collocations of English terms I use results from the wordsketch 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, pp. 479–480; see also McCarthy, Kilgariff, Jakubiček, & Reddy, 2015). From looking at wordsketches, 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 wordsketch. For example, the fact that *tall mountain* is a frequent collocation in the wordsketch of *mountain* whereas *short mountain* is not, tells us something about the size and height of a *mountain* (see 3.2). (In some cases, when looking at a particular variety of English, I will look at a wordsketch composed of only tokens from that variety of English).

Wordsketches have their limitations (see Fellbaum, 2014). For example, they are composed of a lexical item of a particular word class, but corpora do not take polysemy into account. To illustrate, a wordsketch of the noun *field* brings up collocations for a few senses of *field* besides the landscape meaning treated in this book (see discussion in Section 6.3).

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 which subcorpus they come from and I draw on all the varieties of English represented: US English, British English, etc. (see also Abbreviations).

However, the semantic analysis contained in the present book should be seen as corpus assisted, as opposed to corpus driven. Introspection and consultation with speakers often provide valuable, particularly when revealing corpus evidence is not available (see Fillmore, 1992 on this issue). The approach to linguistics taken is humanistic in nature. Humanistic in the sense of being grounded in an anthropocentric perspective (see 1.6) and also in the sense of drawing on the humanities, in a broad sense. Words are put in a cultural context with reference to literature, history, geography, environmental studies, anthropology, cultural studies, Australian studies, and Australian Aboriginal studies.

1.9 Interpretation of landscape terms in this book

I will now say more about the semantic explications presented in this book. 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”. “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 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, p. 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, p. 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 (Cablit, 2008, p. 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 (Cablit, 2008, p. 219).

The two main languages featured in this study, English and Pitjantjatjara/Yankunytjatjara, treat landscape terms such as *river*, *mountain*, *puli* 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, p. 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 Sections 2.2, 2.4).

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 Section 2.2). 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” based on human vision and

thought, rather than “big” in any objective sense. The same practice is followed in all the size components in the explications contained in this book.

As discussed in Section 1.6, 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 place 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 sees 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 *puli*₂ ‘hill, outcrop’ the person’s assessment is that this feature is composed of the material *puli*₁ (‘rock’) (which appears as a semantic molecule).

1.10 Languages treated in this book

Familiar English language words are treated in this book because, given that cross-linguistic comparison is used in the study of landscape categories, it makes sense to include researchers’ home, or academic home, language (in the case of the present author, English), and not just use English as a lens through which to look at other languages. In addition, I treat familiar words from some well-described, national European languages, French and Spanish, to show that even so called Standard Average European languages differ in regard to the categorization of landscape. In order to get the full picture when, as Burenhult and Levinson (2008, p. 14) put it, “capturing landscape ontology cross-culturally”, landscape terms in Standard Average European languages are in as much need of being explained as concepts in indigenous or minority languages.

A critic of language-and-culture work lays the charge that researchers concentrate on the cultures of indigenous languages with few speakers but not widely spoken national languages, in particular English, and that, as a consequence, English is seen as culture-neutral (see McWhorter, 2014, Chapter 5). While this accusation is certainly not accurate in regard to work on linguistic relativity as a whole (e.g., see papers in Gumperz & Levinson, 1996; Wierzbicka, 1992), in the domain of landscape there is, at present, little material on European languages and settler colonial varieties in comparison with non-European indigenous languages (e.g., Burenhult, 2008; Mark et al., 2011). (Mark 1993 on standing water places in English, French and Spanish is a notable and valuable exception; see also Bromhead 2011a, 2011b, 2017). I put forward the present book to go some way towards opening a novel perspective on the study of landscape categorization and its attendant vocabulary.

I will now look at the main languages from which words are examined in this book.

For the most part, in Chapters 2, 3, and 4, 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; the term (borrowed from Spanish) *arroyo* ‘dry riverbed’ is only used in some varieties of American English. 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 and Australian English prototypes of a ‘river’ may differ in size. 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. In a dictionary devoted to Australian English *Macquarie Dictionary*, *river* is explained, in part, as “a defined watercourse of a considerable size and length”, even though the Australian referents of the word *river* do not always match up to European rivers in terms of the size of the watercourse (MD). In Chapters 2, 3 and 4, on long flowing-water places, elevated places and seascape places, respectively, my project is, in the main, to find the common core of meaning of a number English language landscape terms across Anglo varieties.

I will now look more closely at Australian English which has been called, variously, a settlers’ English (Arthur, 2003, pp. 1–10), a colonists’ or colonial variety (Kiesling, 2006, p. 75), and a Southern Hemisphere English (Trudgill, 2004, p. 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 includes Aboriginal English (Eades, 2014; Harkins, 1994; Malcolm, 2001; Sharifian, 2006), and the Englishes of recently arrived migrants from non-English-speaking countries (Clyne, 2003, pp. 152–157; Leitner, 2004b). What I refer to in this book 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, p. 1; see also Collins, 2014). 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.

Pitjantjatjara and Yankunytjatjara are two mutually intelligible neighbouring varieties of the much wider Western Desert Language family. These varieties are spoken as a mother tongue in parts of Central Australia. In the present study, Pitjantjatjara and Yankunytjatjara are grouped together as Pitjantjatjara/Yankunytjatjara, a practice also observed in dictionaries and learners’ guides (e.g., PYED, 1996; PYPD, 2007). According to the Australian Bureau of Statistics Census 2006, there are approximately 2700 Pitjantjatjara/Yankunytjatjara speakers. Western Desert Languages are typical Pama-Nyungan languages (Dixon, 1980). Pitjantjatjara/Yankunytjatjara is suffixing and agglutinative, with a well-developed case system and a flexible but basically subject-object-verb word order. In terms of Australian languages, the two varieties are well-described. A grammar of the Yankunytjatjara variety has been written (Goddard, 1985). Other materials include learners’ guides and children’s stories (e.g., Brumby, Ken, Wilson, & Zellmer, 2008; Eckert & Hudson, 1988; Goddard, 1993; Kirke, 1987; Tiger, 2008).

Pitjantjatjara/Yankunytjatjara is spoken across a vast, arid area of Central Australia, in the north-west of South Australia, and in the south-west of the Northern Territory. The landscape of these regions is extremely dry and rainfall is variable, though at times rain comes in a deluge (Layton, 1986, pp. 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 (*puli*) (Layton, 1986; see also Chapter 5).

For the most part, Pitjantjatjara/Yankunytjatjara speakers now live in small remote communities of a couple of hundred people. (There are also communities of speakers of the varieties living in towns, such as Coober Pedy and Ceduna in South Australia, as well as larger centres, such as Alice Springs and Adelaide, see, e.g., Austin, 2000; Lennon, 2000; Harris, 2006; Naessan, 2010; PYPD, 2007).

Traditionally, *Anangu* were a nomadic people who travelled across large, often dry, areas. Their subsistence technology was based on detailed geographic knowledge which enabled them to move in accordance with the availability of resources and manage the land (Lester, 1993; Keen, 2004, pp. 109–111).

In *Anangu* cosmology, the landscape is created and shaped by the movements of Ancestral Beings in the creative realm known as Tjukurpa or Dreaming. This worldview is similar to that of other Australian Aboriginal groups (Keen, 2004, p. 211). Keen 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” (p. 218).

Furthermore, places are associated with specific Dreamings (creation stories) and spiritual concerns. For example, the travels of Wati Ngintaka, the Perentie Lizard Man, and his associated *inma* ‘ceremony’, appear in James and Tregenza (2014, pp. 27–77). Wati Ngintaka has a strong relationship with Mt Woodroffe (Ngarutjaranya), a place mentioned in Section 1.1, among other sites (James & Tregenza, 2014; Lester, 1993). Dreamings also help form a system of placenames (see, e.g., Hercus, 2010 on placenames of another South Australian Aboriginal language, Arabana).

In Anangu culture, a conceptualization of the landscape is reflected in spoken language, but also in visual language in sand stories, rock art, art on canvas, gesture and sign (e.g., Cumpston, 2010; Eickelkamp, 2011; Tregenza, 2010; see also Ellis et al., 2015 on Ngaanyatjarra; Green, 2014, and Wilkins, 2016 [1997] on Arandic languages). As Evans (1992, p. 487) points out, the visual symbols of Australian Aboriginal cultures are a form of writing system.

Landforms have spiritual beginnings and strong spiritual associations, yet there are some more prosaic semantic components in Pitjantjatjara/Yankunytjatjara landscape terms. Layton writes in a chapter entitled “Relating to the Country in the Western Desert”, “[w]hen 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, p. 212). Pitjantjatjara/Yankunytjatjara eco-zone words, such as *puti* and *pila*, appear as an ‘object’ of subsistence as they are kinds of places where one can find plant food and game (see Chapter 5).

In this book, I do not posit any explicitly spiritual components for the lexical meanings of Pitjantjatjara/Yankunytjatjara landscape nouns selected for discussion here, especially since all country has its genesis in the Tjukurpa. But note that this may be appropriate in the case of some landscape nouns – see discussion of *tjukula* ‘rockhole’ (James, 2006; Bromhead, 2017; see also Turk, 2013, and reflection in Section 6.7, this volume). Any reductive paraphrase of the meanings of individual placenames and sacred sites, such as the previously mentioned Ngarutjaranya, would also contain components along these lines.

1.11 Fieldwork

I undertook fieldwork among Pitjantjatjara 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 published learner materials (Eckert & Hudson, 1988; Kirke, 1987; PYED, 1996). I then improved my language

knowledge somewhat in the field (although I am by no means a competent speaker of the language). Anangu in Ernabella are skilled at dealing with first language Australian English speakers like me and were very patient with me.

The four formal language consultants I recorded were senior women, respected for their knowledge (see Appendix). Three younger women helped me with the transcription of the majority of the recordings. I translated these transcriptions, which were checked over by Cliff Goddard (Goddard, 1985). The transcriptions were checked with consultants when I returned for a follow-up fieldtrip in July 2010. In addition, during my field trips, I spoke to some younger women and Anangu rangers more informally.

While on the APY Lands, I went with language speakers on bush trips. These are expeditions into the surrounding country in a vehicle for the purposes of obtaining food, for land management, and maintaining connection to country. Bush trips were good opportunities to talk with speakers as we were in relevant environments.

In discussions with Pitjantjatjara 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 use to do in a *karu*?”. But the best information came from stories, often from childhood, about experiences in the landscape. This should not have surprised me because, (as David Nash pointed out to me (personal communication, Canberra 2008)), in Australian Aboriginal culture, unlike my own natural Anglo generalizing approach, landscape is often understood and spoken about in particulars (see also Goodall, 2002, pp. 38–39).³

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

1.12 Outline of this book

The remaining chapters (2 to 7) will contain my analysis of various kinds of landscape terms.

3. As some of the senior women consultants spoke to me, they accompanied their verbal accounts by drawing on the ground, *milpatjunanyi* (see more discussion and references in Section 1.10; also Section 2.4). Additionally, they used a meaningful vocal style, e.g. pitch changes on serial verbs that I found hard to convey in free translation (see Ellis, Kral, Simpson, & Green, 2015). I noticed these communicative elements, but, for the most part, lacked the ability to analyse them, and focused on spoken language.

In Chapter 2, I will explore some words for flowing water places in English, Australian English, French, and Pitjantjatjara/Yankunytjatjara.

Chapter 3 will cover some words for elevated places in English, Spanish, and Pitjantjatjara/Yankunytjatjara.

In Chapter 4, I analyse a selection of English words for seascape places with some contrastive reference to Swedish and Polish.

In Chapter 5, I explore the word *desert* in Australian English, and contrast its semantics with some eco-zone words in Pitjantjatjara/Yankunytjatjara.

In Chapter 6, I turn my attention to the ways in which social cognition intersects with the landscape, and discuss words for places people create, such as 'paddocks' and 'tjukitji' ('soakages').

Chapter 7 is an extended study of the Australian English cultural key phrase, *the bush*.

Chapter 8 offers some conclusions.

Flowing-water places

River, Fleuve, Karu

2.1 The river takes on the characteristics of the culture of which it is a part

The need for water, specifically fresh water, is one thing common to all human beings. Places where there is water provide more than water to drink. They also give us a resource that can be used to prepare food and medicine, to wash, to fish and to travel. Places where there is water form barriers, too, (see, e.g., Coker, 1954, pp. xi–xviii; Gibson, 1979, p. 38). 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, pp. 132, 140–141; see also 1.8). However, languages lexicalize concepts for water places differently. These concepts reflect particular geographies, and the speakers’ way of life and worldview.

One of the most important water places, which has banks where people can live, is the long flowing-water place, referred to in English by means of words such as *river*. According to zoologist and ecologist, Robert E. Coker, “[t]he significance of rivers to human life cannot be overestimated” (1954, p. 122). In this chapter, I discuss a number of words for kinds of long flowing-water places, such as the English *river*. As Burenhult and Levinson (2008, p. 141) write in the introduction to the special issue of the journal *Language Sciences* titled ‘Language and landscape: Geographical ontology in cross-linguistic perspective’, “[t]erms glossed as ‘river’ differ considerably as to what they denote”. They make their point with reference to the languages treated in the issue, such as Tzeltal, Yéli Dnye, and Lao. However, even 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 (and using the word *river* for long flowing-water places across Europe), states that “[t]he river, in geography and as an image, takes on the characteristics of the culture of which it is a part” (Herendeen, 1986, p. 5; see also Middleton, 2012, p. xv). Consider the comparison of the English and French river concepts. French, partially for reason of geography, makes a lexical distinction between large watercourses that flow into the ocean,

'fleuves', and those that do not, 'rivières' – a distinction that is not made in English. Differences of this kind lead one to a discussion of the meanings of such lexical items. As Herendeen (1986, p. 3) writes, "[r]ivers seem to force us to ask certain basic questions, such as: What is a river?"

In 2.2, I treat the English *river* and *stream*, and the Australian English *creek* along with its associated term *billabong*. In 2.3, I turn to a discussion of the French *fleuve* and *rivière*. In 2.4, I look at the Pitjantjatjara/Yankunytjatjara *karu*. In 2.5, I offer some concluding remarks.

2.2 Flowing-water places in English

The word *river* is the most general word for a long flowing-water place in English.⁴ 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 & Mark, 2001, p. 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., CCELD, 1991; 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'.

- (4) ... walking by the **riverside** with honeyed breezes blowing over the Shannon and the fuchsias bowing down to you one by one.
(Wordbanks Br Books)

4. *River* can be used metaphorically (e.g. *river of humanity*), but I estimate that 98% of the 29,231 tokens in the Wordbanks corpus have the relevant "water place" meaning. This estimate was made on the basis of a 250-word random sample of *river* that contained 245 tokens in the relevant sense.

(5) He stood at the **river's edge** and peered down into the water.

(Wordbanks Br Books)

Both *bank* and *edge* feature as frequent collocates in a Wordbanks wordsketch of *river*; they are the first two items to appear on the list of lexical items denoting features “possessed” by *rivers*.⁵

‘Rivers’ are also big places. A word frequently included in definitions of *river* is *large* (e.g., AHD; OED). The adjective *great* can collocate with *river*, referring to the related attributes of size and importance, as in (6).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 impassable. People cannot easily get from one side of a ‘river’ to another because of the width and volume of water. ‘Rivers’ form natural borders (see, e.g., Coker, 1954, pp. xi–xviii; Middleton, 2012, pp. 53–55). They often split cities into distinct parts: the Hudson River, for example, separates some boroughs of New York City. They can partition ethnic and linguistic groups: in the U.K., the River Tamar separates the traditionally Cornish-speaking county of Cornwall from the English-speaking county of Devon. 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

5. The remaining 7 items refer to movement (*flow, course*), structure (*mouth, surface, side*) and social aspects (*history* and *character*). The social aspects may in fact be overrepresented (see Chapter 1 on the potential lack of accuracy of wordsketches): all the tokens of *river's character* are in fact one and the same example, and there is repetition of examples in the list of tokens of *river's history* as well. Unless otherwise stated, all wordsketches referred to in this chapter were generated on 4 September 2017.

6. A search of the corpus was undertaken for the lemma *river* in the context of *great* within a window of five items on either side. From a result of 356 tokens, I counted 196 relevant examples (e.g. *great river, greatest river*) excluding non-relevant examples, such as *great views along the river*. My calculations suggest that *great river* (or similar) comprises 0.68% of the tokens of the lemma *river* in Wordbanks.

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, p. 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). In Wordbanks, *cross* is the most significant verb of which *river* is the object. Two other relevant verbs, *ford* (as in (8)) and *swim* (as in (9)), are among the ten most significant verbs of which *river* is the object.⁷

- (7) ... they were **crossing** the great **river** on a creaking, paddle-driven ferry.
(Wordbanks Br Books)
- (8) Another veteran dicer used random walking for years, often climbing the sides of buildings, scaling mountains, **for**ding rivers ...
(Wordbanks US Books)
- (9) ... I’d **swim** the **river** naked, with my clothes in a plastic bag.
(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*, *bend*, *wind*, and *flow* (see (11)). *Flow* is the most significant verb of which *river* is a subject in Wordbanks.⁸

- (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, I capture the meaning of *river* in explication [A].

- [A] *a river* (English)
- a place of one kind
 - there is a lot of water [m] in places of this kind
 - these places are long [m] places

7. Of the remaining seven of the ten most significant verbs of which *river* is the object according to the wordsketch of the lemma *river*, three (*rage*, *wind*, *meander*) refer to the movement of ‘rivers’; three (*pollute*, *divert*, *dam*) indicate human intervention in ‘rivers’; and one (*overlook*) refers to the location of ‘rivers’.

8. The other five of the ten most significant verbs of which *river* is the subject (as per the wordsketch referred to in previous notes) are: *raft*, *burst*, *overflow*, *flood*, and *cross*.

- 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 discussed in Section 1.9.

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' (something which was discussed in Section 1.8, in the discussion of 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 flowing-water places treated in this chapter. Component (e), "places of this kind are big places", captures the size of a 'river' (see 1.9 on size components).

The relative impassability of 'rivers' 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 (a person's potential to *cross* a 'river') 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. The language surrounding *rivers* does not support the primacy of hearing or seeing across a 'river', but it does support the primacy of crossing a 'river'. As mentioned 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 23 examples of *river* with *look across*, and 6 examples of *river* with *look over* (in the relevant sense, rather than "a house looking over a river"). Secondly, it would seem that moving across a 'river' is of greater importance and utility to humans than looking across a 'river' or hearing across a 'river' (see Gibson, 1979, p. 38). In addition, a component stating that it is hard to 'hear' someone across a 'river' (e.g., someone who *calls out* to the other side) would not work in the case of 'rivers' across which someone could not be heard at all. Finally, component (f) is not simply capturing

the width of ‘rivers’, but also the fact that they are difficult to traverse because of the water.

Components (g) and (h) describe the movement of a ‘river’. In component (h), the ‘river’ is thought of as travelling from a distant source to a destination far away. Terms associated with ‘rivers’, such as *upstream*, *downstream*, *mouth* and *source*, attest to this understanding. In addition, 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. I submit, notwithstanding, the component “these places are big places” in the semantic explication of *river* composed to encompass both the British dialect of English and the Australian dialect of English. In the absence of larger ‘rivers’, Australian English speakers find their rivers big. As touched on in Section 1.10, 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, p. 37)

In the more arid regions of Australia, places that 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 et al. (2007, p. 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”.

The next term I will discuss is *stream*, whose explication can be compared with the explication of *river*.⁹ A ‘stream’ differs from a ‘river’ in that a ‘stream’ is smaller and has less water, and this water moves unstopably. Some examples of *stream* appear in (12) to (14); a semantic explication is provided in [B].

(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)

9. There are 12,104 Wordbanks tokens of *stream* (as a noun), of which I estimate (based on a sample search) only 37.2% represent the “water place” sense.

[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 its counterpart 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". The intuitively plausible differences in the sizes of 'streams' and 'rivers' are backed up by collocational tendencies of the two terms. In Collins Wordbanks, *great river* (or similar) appears seven times more frequently than *great stream*, a combination that is not nearly as well attested in corpora than the same adjective combined with *river*.¹⁰

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

The combination of components (f) to (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 (g), which portrays the insistent 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 *alpine streams* and *mountain streams*, as in (14). This association with 'mountains' is the result of geography. As a children's encyclopedia tells us,

10. Based on a count of tokens with the adjective *great* within a window of five items on either side, the corpus contains only 4 mentions of *great stream* (or similar), as opposed to 196 of *great river* (see note 6). My calculations suggest that *great stream* (or similar) accounts for 0.09% of the tokens of *stream* as a water place, as opposed to *great river*, which accounts for 0.68% of the tokens of *river*.

“[r]ivers begin in the hills as small streams” (McKie, 2003). The fact that ‘streams’ flow down mountainous terrain explains their insistently running water.

Component (h) of [B], which portrays the direction the water in a ‘stream’ flows, is worded slightly differently to 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’.

I now turn to a discussion of the Australian English *creek*. 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. In Wordbanks, approximately 25 per cent of the hits of *creek* come from the Australian English Oz News subcorpus, yet this subcorpus comprises only around 6 per cent of all the material in the whole Wordbanks corpus.

Creek is a term from British English that 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 that 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 exploration of landscape and 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, “[e]ven 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.” (2010 [1987], p. 60)

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

- (16) 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)
- (17) The property also includes ... fruit trees and a **permanent creek**.
(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) 1977 The **creek** come down a **banker**, I tied the car to a tree but it was submerged in the raging waters. (AND)
- (21) 1799 The **creek** runs winding between two steep hills, and ends in a chain of ponds ... (AND)

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 (16)), 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 (17)). However, *permanent* does not combine with *river*, suggesting that a *permanent river* would be a tautology (Arthur, 2003, pp. 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*. The varying amount of water in a ‘creek’ is attested, too, by the fact that significant verb collocates of which *creek* is a subject on Wordbanks include *overflow* (see (19)), *spill* and *dry*.¹¹ 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, p. 22).¹²

Bearing in mind the discussion given above, I propose explication [C] for the word *creek*.

11. According to the Wordbanks Australian material wordsketch of the lemma *creek* generated on 29 August 2017, of the other ten most significant verb collocates of which *creek* is a subject, five (*nestle*, *traverse*, *dive*, *burble* and *carve*) relate to the location and movement of ‘creeks’; two (*harbour* and *host*) to what ‘creeks’ contain.

12. *Banker*, in this sense, appear to have been used more commonly in the past and in regional varieties. It does not appear in the Australian material of Wordbanks, although there are a few relatively recent citations of the word in AND, 2016.

[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' (in the explications of *river* and *stream*, only one component for water appears; it does not specify that the amount varies at different times). Component (b) says that often there is some presence of water in a 'creek'; the phrase "parts of places of this kind" can account for the times when a 'creek' has patches of water interspersed with dry areas (Arthur, 2003, p. 22). Component (c) adds the information that sometimes there can be a substantial amount of water, with water being in all parts of the place.

The water in a 'creek' is not always moving. There are descriptions of *creeks* that indicate this quality, such as *chain of pools* and *chain of ponds* in Australian English (Arthur, 2003, p. 22; Carter, 2010 [1987], pp. 59–60). AND refers to one sense of *chain* in Australian English "used in compounds to designate a series of depressions in the bed of an intermittently flowing watercourse that continue to hold water after the connection stream has dried up", and includes *chain of billabongs* (*lagoons, lakes, ponds, pools, swamps, waterholes*). The earliest example of this use in the dictionary comes from 1799 and is reproduced in (21); there are also examples from the 20th century. However, these compounds do not seem to be as salient in present-day English. AND gives *chain of lagoons* and *chain of lakes* as obsolete; there are no examples of any of these *chain of* combinations in the Australian material of Wordbanks. AND also includes the obsolete intransitive use of the verb *to chain*, defined as: "Of pools: to form a chain".

Component (c) describes the size of a *creek* as being "not big", as in the case of *stream*. The cognitive scenario in (h), too, is the same as for *stream*. In component (g), on the other hand, the water is referred to as *often* moving, whereas, in the explications of *river* and *stream*, it is described as *always* moving. Furthermore, like explication [B] of *stream*, [C] does not feature a component relating to the

width of a ‘creek’ and its passability. Like ‘streams’, many ‘creeks’ are narrow and can be crossed fairly easily, particularly when there is not much water in them.

Billabong is another Australian English word whose referent is related to ‘creeks’. 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. In discussing both words in Australian English, the historian Heather Goodall writes, “[t]he puzzlement of the English when they encountered the way water behaved on the northern floodplain has been inscribed in the language they created to describe the unfamiliar” (2002, p. 37). However, unlike *creek*, *billabong* originated in an Australian language, and in Australian English is only used for places in Australia.¹³

Billabong comes from the Wiradjuri language of Central New South Wales. It is formed via the morphemes, *bila* ‘river’, *-bang* (“suffix probably indicating a continuation in time or space, or functioning as an intensifier”). The combination signifies a watercourse that runs only after rain (AND; see also Moore, 2010, p. 13; Ludowyk, 2004). The word was first thought by colonial settlers to be a place name and it was probably incorrectly ascribed to two rivers in the region. The first citation of *billabong* in AND, not used as a place name, is dated 1853.

Now in general Australian English, 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 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’ (Bayly & Williams, 1973, p. 58). The gloss of *billabong* as ‘oxbow lake’ is often given in contexts where the author is writing for an international audience (in addition to an Australian one, which would understand the term) (e.g., Robertson, 2006, p. 217).

Arthur gives the following account of the formation of a ‘billabong’:

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, p. 145)

13. There are other words from Indigenous languages that have been incorporated into regional varieties of Australian English, such as *warrambool*, a borrowing from Gamilaraay, Yu-waalaraay and Yuwaalayaay that is used in regional English of New South Wales and that has a meaning similar to that of *billabong* (Goodall, 2002, pp. 37–39; Nash, 2011).

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 the 19th century and with folklore. The Australian bush ballad (folk song) and unofficial national anthem, *Waltzing Matilda*, tells the tale of events that happen “by a billabong” (see song in (22) and the incredulous 1990s headline in (23); see also 7.4). 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 (Robertson, 2006, pp. 73–74).

‘Billabongs’ are also closely associated with ‘bunyips’, a kind of monster that lives in freshwater places in Australia but can move onto land, originally from South Eastern Australian Aboriginal belief (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 & Holden, 2001, p. 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, for example, *The Bunyip of Berkeley’s Creek* (Wagner, 1973; Holden & Holden, 2001, p. 16).

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

Illustrative examples of *billabong* in Australian English follow in (22) to (26).

- (22) 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)
- (23) A swagman in 1995 camping by a **billabong**? (Wordbanks Oz News)
- (24) As the river dried up, other species drought-proofed by nature over millions of years went into survival mode. Lungfish buried themselves deep in the sludge of **dehydrated billabongs**. (Wordbanks Oz News)
- (25) 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 ...
(Tate, 2012, p. 47)

- (26) ... the drought that was devastating farms and stations throughout the Eastern seaboard of Australia was his greatest concern. The land was parched; **billabongs** and other water holes had dried up long ago ... (Gold, 2015)

Drawing on the previous discussion, I suggest explication [D] for the word *billabong*.

[D] *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 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] place,
not like places of other kinds where there is water [m]
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 corresponding components in the explication of *creek*, components (b) and (c) portray the varying amount of water in a 'billabong' (see also the Pitjantjatjara/Yankunytjatjara *karu* in 2.4 and the Australian English *dam* in 6.5). 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 (24) to (26). Example (24) speaks of "dehydrated billabongs"; in (25) a 'billabong' has flooded severely; and in (26) 'billabongs' have dried up in a time of drought. In the explications of water place words from wetter climes, only one component for water appears and it does not specify that the amount varies at different times (see *river* and *stream* earlier in the section, French words for flowing-water places in 2.3, and English and French words for standing-water places in Bromhead, 2017, pp. 186–195).

Components (d) and (e) are the size components. A 'billabong' is not a big place where there is standing water, like a 'lake', but it is not always as small as a 'pond' either (Bromhead, 2017, pp. 186–190). Therefore 'billabongs' are said to be

“not big places” in component (e), as are the French standing-water places ‘étangs’, roughly, ‘ponds’ (Bromhead, 2017, pp. 192–195).

Component (d) covers another element of the size of a ‘billabong’. It takes the point of view of a human observer on one side of a place of one kind, and presents this observer’s thought that places on some other sides of a place of this kind are not far from where the observer is located. As I have noted previously (Bromhead, 2017, pp. 187–188), Wierzbicka stated in her preliminary notes on topographic concepts 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)”; she made a similar comment about the size of ‘mountains’ and ‘hills’ (Wierzbicka, 1989, pp. 54–55). In my analysis, semantic components that relate to a person experiencing a place consisting of an expanse of water, such as a ‘billabong’, are different from those presenting the impressions of an observer of a high place, such as a ‘mountain’ or a ‘hill’ (see 3.2). A person can judge the size of a high place from a distance, but most of the time an expanse of water can only be judged when a person is beside it.

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 that are considered to be distinctly associated with one particular country (see also Chapter 7 on *the bush*). Furthermore, ‘country’ and ‘Australia’ as semantic molecules are needed to explicate other Australia-specific words, such as *kangaroo*.

It’s also worth mentioning that the word *billabong* is now polysemous in Australian English. There is another kind of referent for *billabong* used to describe water places in the northern part of the Northern Territory (Top End), which could, roughly speaking, also be called by the word *lagoon* (Cowie, Short, & Osterkamp Madsen, 2000, p. 5). In fact, it may well be the case that the word *billabong* is currently used more with reference to this kind of place. Reading the 38 tokens of the lemma *billabong* in the Australian material of Wordbanks, I found 23 examples of the Top End ‘billabong’, 13 examples of the kind of ‘billabong’ explicated in [D], and 2 examples where I was unable to determine the kind of referent. Australians speak of Top End ‘billabongs’ more because, since the 1980s, this part of Australia, in particular, Kakadu National Park (declared a National Park in 1979), has become increasingly popular with tourists drawn to experience its natural beauty and wildlife, and the Aboriginal culture of the area (Environment Australia, 1999; Tremblay 2007). Tourism and crocodile attacks now feature more in Australian discourse than settlers of the back blocks and swagmen.

2.3 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 some other languages, including English. Places that 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 ‘lac’). 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, p. 38). This point is Saussure’s proposal that not only are the forms of words used for concepts arbitrary, but that, in addition, the concepts a language chooses to signify with a word are arbitrary.

On the matter of how to articulate the difference between *fleuve* and *rivière*, some writers have taken a pessimistic view. Louis de Jaucourt, the 18th century French scholar and encyclopedist, argued that it is “pas possible de fixer la distinction de ces deux mots, *fleuve* and *rivière*” ‘not possible to establish the distinction between these two words, *fleuve* and *rivière*’. The quote, reported in GRLF (1986) is taken from the entry on *fleuve* in the famous 18th century *Encyclopédie ou dictionnaire raisonné des sciences, des arts et des métiers*. However, a semantic analysis of the two words, beyond lexicographic description, has been proposed. An introductory lexical semantics text, *Introduction à la sémantique lexicale* (Schwarze, 2001) provides semantic analyses of both *fleuve* and *rivière* using a standardized language of representation. The book presents the following semantic formulae (Schwarze, 2001, p. 31; 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’ = v la mer ‘the sea’

rivière

rivière

classe ‘class’ = cours d’eau ‘watercourse’

dimensions ‘dimensions’ = faibles ou moyennes ‘small or medium’

lieu d’aboutissement ‘outlet’ = une masse d’eau plus importante ‘a larger body of water’

In this system, nouns are represented according to their relevant attributes and values are given 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 'rivières' 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 *v* for the value of 'outlet' in *fleuve* indicates that *typically* 'fleuves' flow into 'the sea', but not always. (I will return to this point later). The formula for 'fleuve' also includes the attribute of 'formation', and the value of this attribute is the meeting of 'rivières'.

These formulae can be helpful in terms of getting an idea of the meanings of the words but can be criticized on a number of counts. Here, I set out my own semantic analysis of *fleuve* and *rivière*. I will contrast my analysis with that previously presented.

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 776 kilometres before it flows into the English Channel (Encyclopédie Larousse). By contrast, the Andelle, a 'rivière', which is a tributary of the Seine, runs for 54 kilometres before it feeds into the Seine (*ibid.*). 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' (DAF, 1992+; 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* 'the long fleuve', *le fleuve serpente* 'the fleuve snakes', *longer le fleuve* 'go along the fleuve', and *au long du fleuve* 'along the fleuve', as in (27).

- (27) ... des châteaux qui s'égrènent tout **au long du fleuve** ...
'... castles that are scattered all along the fleuve ...'

(Aujoulat, 2006, p. 163)

Furthermore, a 'fleuve' is characterized as being generally big, and bigger than a 'rivière'. Definitions of 'fleuve' include "grand cours d'eau" 'large watercourse', and "cours d'eau important" 'large watercourse' (DAF, 1932–35; TLFi). 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 *majestueux* 'majestic' (as in (28)) (DAF, 1992+; TLFi).

- (28) Il se tenait debout, admirant le **fleuve majestueux** qu'il adorait.
 'He stood admiring the majestic fleuve he loved.' (Pierrejean, 2007, p. 16)

Phraseology also shows 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 (29)), *rivages du fleuve*, and *bords du fleuve*, all roughly meaning 'banks of the fleuve' (DAF, 1992+; TLFi).

- (29) La dissymétrie entre les **deux rives du fleuve** ...
 'The asymmetry between the two banks of the fleuve ...'
 (Bethemont, 1972, p. 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' (DAF, 1932–35; TLFi). The movement of water in a 'fleuve' is fast and powerful, more so than that in a 'rivière' (TLFi). As the *Encyclopédie Larousse* 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 (DAF, 1992+; 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, DAF (1992+) 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 (GRLF, 1986; NPR, 1993). DRD (1873) cites cases of important watercourses that would be classified as 'fleuves', such as the Rhine, which do not feed into the sea. The Rhine, for instance, 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, p. 30). These observations will be borne in mind in the explications of the words *fleuve* and *rivière*.

An explication of *fleuve* appears in [E].

- [E] *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 [E] 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 impassability of a 'fleuve'. In this 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 (E). 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* that do not continue as far as ‘the sea’.

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

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 (30)), and *la rivière charrie* ‘the rivière carries’ (DAF, 1992+; TLFi).

- (30) ... il avait préféré suivre le sentier qui **longe la rivière**.
 ‘... he preferred to follow the path which went along the rivière.’
 (Sonnay, 1993, p. 90)

Dictionaries tell us that a ‘rivière’ is smaller in dimension than 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* (LFED). 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 does *fleuve*, *rivière* combines with *de l’autre côte* ‘on the other side’, as well as with *berge* and *bord*, roughly ‘bank’, as in (31) (DAF, 1992+; TLFi).

- (31) ... 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, p. 103)

Similarly to that in ‘fleuves’ and the other concepts covered, the movement of water in ‘rivières’ is suggested by collocates such as *cours* ‘course’, *rouler* ‘roll’, and *courant* ‘current’ (see (32)) (DAF, 1992+; TLFi).

- (32) En été, dans les rivières dont le courant ralentit ...
 ‘In summer, in the rivières whose current slows ...’ (Chaumeton, 2008, p. 201)

Drawing on the evidence presented above, I explicate *rivière* in [F].

- [F] *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 [E] of *fleuve* and [F] of *rivière* elucidate the senses of the words in a way in which the semantic formulae reproduced earlier cannot. Explications [E] and [F] set out in simple terms the semantic features that the two words share. The formulae, by contrast, use the term *cours d’eau* to represent all these features. The phrase *cours d’eau* is more technical than either the words *fleuve* or *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, personal communication).

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”, much like 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” of a ‘rivière’, has the same wording as the one used for all the words treated in the chapter. Component (e) conveying the width and relative impassability 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’ (cf. explication [E]).

Component (g) states that the water in a place of this kind is always moving, as is the case for the other words from languages that 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 [F] already convey the sense of the word. An explication should convey the conceptual minimum, rather than every possible property of the denotata.

2.4 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”.¹⁴ An example of the word *karu* appears in (33).

- (33) *Ka karungka uru pulka ukalingangi.*
 Ka karu-ngka uru pulka ukalinga-ngi.
 CONJ karu-LOC surface.water a.lot come.DOWN-PST.IPFV
 ‘There was a lot of water flowing in the karu.’ (PYED, p. 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 (Young, 2006, pp. 249–250; James, 2006). Even in dry times, ‘karu’ hold water beneath the ground. Because of this, strings of river red gum trees (‘apara’ in Pitjantjatjara/Yankunytjatjara, or more generally ‘punu’ ‘tree/bush’) grow along ‘karu’, drawing moisture from underground (UKTNP Flora, 2009, p. 1).¹⁵

14. *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 book because it was the usual form used by Anangu of Ernabella (Pukatja), who identify as Pitjantjatjara speakers (as opposed to Yankunytjatjara speakers), during my time there.

15. A number of vocabulary items differ in the two varieties, Pitjantjatjara and Yankunytjatjara. The most relevant in this discussion are *kapi* (also *mina*) ‘water’ and *manta* (also *pana*) ‘earth’. In discussion, I will use *kapi* and *manta*. However, both Pitjantjatjara and Yankunytjatjara vocabulary appears in the examples.

A senior Anangu woman described ‘karu’ to me by drawing one in the sand using conventionalized iconography (see, e.g., Green, 2014, especially Chapter 4, on Arandic symbols).¹⁶ First, she drew two rows of trees using circular elements, and while drawing described each of them to me as “punu tjuta” ‘trees/bushes.’ Next, she drew flowing water between the trees and described it to me by saying “kapi” ‘water.’

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 makes less sense in languages spoken in dry areas (which is where many Australian languages are spoken), a fact that has been notably discussed by Mark et al. with reference to the 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, p. 7)

The same situation is found in Central Australian Arandic languages such as Arrernte, Anmatyerr, and Kaytetye (ECAED, 1994; KED, 2012; Harold Koch, personal communication). 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 *!ab* can be used as a term for rivers and river beds (Widlok, 2008, pp. 368–369). A further example from another arid part of the world is the Arabic word *wādī*. One sense of *wādī* is defined in an Arabic-English dictionary as “river-bed, river”, and, as in Australia, in the Arabic speaking world ‘wādī’ are important to people because of their ground water (Edmunds, 2002, p. 23; Salmone, 1972).

An explication of *karu* appears in [G]. Pitjantjatjara/Yankunytjatjara semantic molecules are used in the explication.

[G] *karu* (Pitjantjatjara/Yankunytjatjara)

- a. a place of one kind
- b. sometimes there is water [m] (kapi [m]) in places of this kind

16. My account of this drawing is based on field notes and memory, rather than photos or video. I am unsure as to whether this drawing could be called a sand story because it did not take place within a larger narrative like those I saw during my time in Ernabella (see 1.10). Rather, I think it is more likely the drawing is a description given to an outsider.

- c. these places are long [m] (wara [m]) places
 d. these places have two sides [m]
 e. punu ‘trees/bushes’ [m] of one kind grow [m] on these sides [m]
 f. the ground [m] (manta₁ [m]) in a place of this kind
 is below the ground [m] (manta₁ [m]) on both sides of a place of this kind
 g. it is not like the earth [m] (manta₂ [m]) in other places,
 it is soft [m] (tjula [m])
 h. when there is water [m] (kapi [m]) in places of this kind,
 sometimes this water [m] is moving
 i. people know that it is like this:
 “there is often water [m]
 in some places below the ground [m] in places of this kind”

Component (b) speaks of the water that can be in a ‘karu’. In examples of *karu*, the words *kapi* (*mina*) ‘water’ and *uru* ‘surface water’ are used, as in (33), (34), (38) and (39). The explication states that water is only present sometimes because, for some of the time, a typical ‘karu’ is dry.

- (34) *Uru pulka karungka ngarinyangka, tjitji tjukutjuku tjuta tjartjarta kutju tjarpapai munuya ngati wantipai ilunytjaku tawara.*
 Uru pulka karu-ngka ngari-nyangka, tjitji tjukutjuku tjuta
 surface.water a.lot karu-LOC lie-CIRC child small PL
 tjartjar-ta kutju tjarpa-pai munu-ya ngati wanti-pai
 shallows-LOC only swim-CHAR CONJ-3PL deep refrain-CHAR
 ilunytja-ku tawara.
 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.’ (PYED, p. 174)

Components (c) and (d) are shape components shared with other words in this chapter. 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 (*wanani*) the ‘karu’ in a line, as in (35). Additionally, one can speak of *karu kantilpa* ‘edge of the karu’ and *karu kampa* ‘side of the karu’, as in (36).

- (35) *Apara tjuta ngarala wanani karungka.*
 Apara tjuta ngara-la wana-ni karu-ngka.
 river.red.gum PL stand-SER follow-PRS karu-LOC
 ‘River red gums line the karu.’ (PYED, p. 215)

- (36) *Karu kampa kutjupakutula yara.*
 Karu kampa kutjupa-kutu-la ya-ra.
 karu side other-ALL-1PL go-IMP
 ‘Let’s go to the other side of the karu.’ (PYED, p. 32)

Component (e) covers the ‘*punu*’ ‘trees/bushes’ that grow on the sides of ‘*karu*’ (the Pitjantjatjara/Yankunytjatjara semantic molecule ‘*punu*’ will be treated in Chapter 5). These ‘*punu*’ ‘trees/bushes’ are ‘*apara*’ so they are said to be “of one kind”.

Component (f) portrays a ‘*karu*’ as a depression made from earth. The ground (*manta*₁) in a ‘*karu*’ is described as being below the ground on both of its sides.¹⁷ In this way, ‘*karu*’ contrast with the English and French language water place concepts discussed earlier, 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.

The earth (*manta*₂) of ‘*karu*’ has a specific name, *paki*, and was often described to me by Anangu as ‘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, p. 108). Children love to play in the soft sand or ‘*paki*’ ‘creek sand’ of ‘*karu*’, as in (37).

- (37) *Tjitji tjuṯa pakingka inkanyi.*
 Tjitji tjuṯa paki-ngka inka-nyī.
 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 (38), 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 includes the qualifications “sometimes” and “when there is water in places of this kind”. Young (2006, p. 249) writes of this situation saying, “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” (see also Ellis, 2016, pp. 9, 89, on flowing creeks). Example (38) depicts the flow of water in a ‘*karu*’ after two days of (heavy) rain.

- (38) *Saturday-ngka minangku tjaatarira puyiningi. Munu Sunday-ngka puyira mungaringu ka uru pulka mulapa mungangka ukalingu.*
 Saturday-ngka mina-ngku tjaatari-ra puyini-ngi. Munu Sunday-ngka
 Saturday-LOC water-ERG start-SER rain-PST.IPFV CONJ Sunday-LOC

17. The word *manta* (*pana*) is polysemous. The subscript ₁ is used to distinguish *manta*₁ ‘ground’ from *manta*₂ ‘earth’.

pyi-ra mungari-ngu ka uru pulka mulapa
 rain-SER get.dark-PST CONJ surface.water a.lot really
 munga-ngka ukali-ngu.
 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, p. 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, p. 18; Lester, 1990, Chapter 2; see also 6.6), as in (39) and (40). Example (39) describes Anangu obtaining water in the earth (using the word for creek sand *paki*) after surface water has dried up. The story teller speaks 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* ‘water’, *manta* ‘ground’, -ngka, locative suffix) (see also 6.6).

- (39) *Nyakupai ngurilpaila mina wiyaringkunyaangka mina pitjala pitjala pitjala ka karungka wiryaringkunyaangka. Wirkara nyangnyi karu pulka nyaratja tjinguru mina ngarinyi. Palu pitjala nyakupai. Kurupangka wakara ilalpai nyakulpai ngarinyi munu tjawalpai. tjukitji mina tjukitji. Tjawara utilpai ka mina pulka pakalpai.*

Nyaku-pai nguril-pai-la mina wiyaringku-nyangka mina
 see-CHAR look.for-CHAR-1PL water finish-CIRC water
 pitja-la pitja-la pitja-la ka karu-ngka wiryaringku-nyangka
 come-SER come-SER come-SER CONJ karu-LOC finish-CIRC
 wirka-ra nyanga-nyi karu pulka nyaratja tjinguru mina ngari-nyi
 arrive-SER see-PRS karu big DEM maybe water lie-PRS
 palu pitja-la nyaku-pai kurupa-ngka waka-ra ilal-pai
 CONJ come-SER see-CHAR crowbar-INS stick.into-SER pull.out-CHAR
 nyakul-pai ngari-nyi munu tjawal-pai tjukitji mina tjukitji tjawa-ra
 see-CHAR lie-PRS CONJ dig-CHAR tjukitji water tjukitji dig-SER
 util-pai ka mina pulka pakal-pai
 uncover-CHAR CONJ water big come.up- 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, IW.NG.N.030609, see Appendix 1)

- (40) *Munuya karungka warngalykura tjikilpai.*
 munu-ya karu-ngka warngalyku-ra tjikil-pai
 CONJ-3PL karu-LOC get.water.from.soakage-SER drink-CHAR
 'So they dug in the karu for soakage water.' (PYED, p. 225)

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 (Western Desert) Pintupi:

... 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, pp. 26–27)

Pitjantjatjara/Yankunytjatjara speakers, too, have traditionally used a number of other water resources, such as 'tjukula' 'rockholes', 'tjintjira' 'claypans', 'warku' 'rock-pools', and 'tjukitji' 'soakages', mentioned above (see Haseldine, 2016, pp. 215–216; James & Tregenza, 2014, p. 45, on 'tjukula'). The first three of these concepts are explored in Bromhead (2017), and 'tjukitji' is discussed in Section 6.6. One prominent feature of Pitjantjatjara/Yankunytjatjara water place concepts is the material make-up of a type of place. These materials are 'earth' ('manta/pana') and 'rock' ('apu/puli'). For example, in addition to 'water' 'kapi/mina', 'karu' and 'tjintjira' are composed of 'ground', and 'tjukula' consists of 'rock' (Bromhead, 2017, pp. 198, 201, 203). Similar distinctions are made in other Aboriginal languages spoken in dry regions (see, e.g., Lowe & Pike, 1990, pp. 11–19, on Walmajarri; Myers, 1991, pp. 26–27, on Pintupi; see O'Meara & Bohmeyer, 2008, on material make-up more generally).

2.5 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 these on the basis of different criteria. There is a rough conceptual and linguistic category that crosses the languages and

cultures represented in this chapter and that can be stated in simple language. This category is, roughly speaking, long places (stated as “places of this kind are long places” and “places of this kind have two sides”), filled with water (stated as “there is water in places of this kind”) that moves (stated as “the water in places of this kind is moving”). This category can be opposed to, say, hollows in the ground that can have water in them, such as ‘lakes’, ‘lacs’ (French), and ‘tjukuḷa’ (Pitjantjatjara/Yankunytjatjara) (Bromhead, 2017).

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 NSM. In Section 2.3., I also contrasted my analysis with another analysis of *fleuve* and *rivière*, which used a standardized language of representation (Schwarze, 2001). 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 between the senses of individual landscape terms, both within and across languages.

The languages examined in this chapter, English, 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 that 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’), and ‘earth’ (‘manta₂’) 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 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. Non-indigenous 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 and other resources, 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 collection practices of Anangu (see, e.g., Strauss & Quinn, 1997; Maffi, 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 identifies long flowing-water places with one word, *karu*, no matter what size they are. Secondly, French has two categories 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 that British English does not, i.e., 'creek'. The adoption of this concept in Australian English is a result 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.

CHAPTER 3

Elevated places

Mountain, Hill, Puli

3.1 Do mountains exist?

In this chapter, I examine some terms for kinds of elevated places, such as *mountain* in English and *puli* 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 ‘puli₂’, which appear lexicalized in our languages (Smith & Mark, 2003, pp. 419–420).

As briefly discussed in the introductory chapter, some have suggested that the concept of a ‘mountain’ is universal (see 1.3; Smith & 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 for elicitation by field linguists (Swadesh, 1972, p. 283). The words on the list were chosen on the grounds that they are high frequency items which one might expect to find in all languages (Trask, 1996, pp. 23, 363). 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, categories for kinds of elevated places, and their attendant vocabulary items, do vary across languages and cultures as touched on in Chapter 1 with reference to English, Spanish, and Pitjantjatjara/Yankunytjatjara (see 1.1).

Previous cross-linguistic studies, too, come to this conclusion. In papers in Burenhult (2008), for instance, one finds a lot of diversity in terms for elevated places (Burenhult & Levinson, 2008, pp. 140–141). For example, some languages do not make the same size distinction that English makes with its terms, *mountain* and *hill*. To illustrate, the Mayan language Tzeltal has the one term for an

individual elevated place, *witz* (Brown, 2008, p. 162; see also Levinson, 2008, p. 261; O'Connor & Kroefges, 2008, p. 298; Senft, 2008, p. 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 analysable as "stone DEF.ART.SG stand" (O'Meara & Bohnemeyer, 2008, p. 322). Languages also vary in their number of terms for elevated places. On the one hand, Lao has the term *phuu*₂, meaning 'mountainous terrain', but not a dedicated term for an individual elevated place which might be called 'mountain' in English (Enfield, 2008, p. 235; 2015, pp. 83–84). On the other hand, as I will detail further in this chapter, Spanish is rich in terms for elevated places (see 3.4).

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 Burenhult, 2008; also Mark & Turk, 2003a). However, obscure terms such as *eminence* and *convex topographic feature* are often used in description. These technical terms are more complex than the words that are 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 & Turk, 2003b).

Despite some previous work, even the precise semantic details of everyday English terms such as *mountain* and *hill* are not well set out in the literature, as often these English words are used to describe terms for elevated places in other languages. Furthermore, brief componential analyses of *mountain* and *hill*, such as those included in Cruse (1986, p. 195), also cannot include important 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 them.

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 & Gaenszle, 1999, p. 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, p. 105). The following illustration comes from a creation myth of the Camling language in which the first beings, Salapa and Simnima, are brother and sister. Example (1) describes how Salapa leaves his sister and goes up to Wabuma, a place in the high mountains, so as to avoid 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 warj-khata, tyukh-i*
 W. -highLOC climb-go there-lowLOC
m-nicho chit-yi-dyo ...
 his-y.sibling leave-3PAT-V2:TELIC: 3PAT
 ‘He went up to Wabuma (a holy place) and left his younger sibling down there ...’
 (Ebert, 1999, p. 108).

In this chapter, I confine myself to looking at landscape categories and nouns for these categories. To begin with, in 3.2, I examine the senses of some basic terms for kinds of elevated places, *mountain* and *hill* in English, and *puli* in Pitjantjatjara/Yankunytjatjara. Next, in 3.3, I look at some English words for larger places in which many elevated places appear together, such as *the mountains*, *the hills*, and *mountain range*. In 3.4, I discuss two Spanish words for places in which there are many elevated places congregated together, *cordillera* and *sierra*. In 3.5, I discuss the English language cliff words *cliff* and *precipice*, and the related Spanish terms *acantilado*, *precipicio*, and *despeñadero*.

3.2 *Mountain* and *hill* in English, *puli* in Pitjantjatjara/Yankunytjatjara

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) to (7).

- (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)

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”, or even something large which does not have a physical form, e.g., “a mountain of good will”.

Secondly, a ‘mountain’ is high above the places around it. Significant adjective collocates found on a wordsketch of *mountain* include *towering*, *high* and *tall*, as in (2).¹⁸ As well as being elevated, a ‘mountain’ has a certain shape. As previously mentioned, ‘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*, as in (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* or a *monolith*, rather than as a *mountain* or a *hill* (see 1.1). A Wordbanks wordsketch lists *steep mountain*, not *flat mountain*, and *mountain slope*, not *mountain flat*, as in (6). 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, Everett, & Dove, 2000).

According to James J. 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, p. 37)

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

18. All wordsketches referred to in this chapter were generated on 7 October 2017. The 25 most significant adjective modifiers showing up in the wordsketch of the lemma *mountain* are: *snow-capped*, *rugged*, *snow-covered*, *snowy*, *sacred*, *distant*, *craggy*, *towering*, *steep*, *tall*, *forested*, *snowcapped*, *volcanic*, *barren*, *nearby*, *majestic*, *spectacular*, *jagged*, *remote*, *undersea*, *icy*, *Afghan*, *high*, *snow-clad*, *Welsh*.

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, a children's encyclopedia writes of a 'hill' that it is "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, 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 necessarily the case with the previously explored long flowing-water places in Chapter 2, such as 'rivers', and standing-water places, such as 'lakes' (see Bromhead, 2017). While *nearby* is a significant collocate for *river*, *lake*, *mountain*, and *hill*, only *mountain* and *hill* frequently take the adjective *distant*, as in (4). A 'mountain' is particularly prominent because of its height, size, and shape. *Visible* is a significant collocate of *mountain*, but not of *hill*. Geographer Roderick Peattie wrote in his 1936 book on 'mountains' that "[a]n essential and yet indefinite element in the definition of a mountain is the conspicuousity" (Peattie, 1936, p. 3).

The conspicuous aspect of a 'mountain' is connected to the relative nature of landscape concepts. A commonly given 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; see also Peattie, 1936, p. 3).

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 in their immediate environment 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 roughly the same.

Arthur observes that "[t]he flatness of Australia has bothered many colonists" (Arthur, 2003, p. 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, p. 90; Carter, 2010 [1987], p. 48).

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:

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, 2010 [1987], pp. 50–51)

In contemporary times, Australians do not necessarily conceptualize many places which include the words *Mountain*, or *Mount*, in their proper names as actual ‘mountains’ – they often prefer to call them ‘hills’ (CRNT, 2006–07). To illustrate, playwright Louis Nowra says in his memoir, *The Twelfth of Never*, that Mount Sugarloaf in Victoria is, typical of Australia, “not really a mountain but a hill” (Nowra, 2000, p. 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 & English, 1999, p. 127; Debenham, 1960, pp. 448–449; Haggett, 2002, p. 3209; Heintzelman & Highsmith, 1961, p. 300; Parker, Lanceley, & Owens, 2009, p. 20; Rayburn, 1995, p. 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 kinds 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.

[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 *puli*. 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 book. Its significance to the conceptualization of these places can be seen in compounds such as *mountain top* (or *mountaintop*), as in (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 a place of this kind. 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 significant collocates of *mountain* such as *snowy* and *snow-covered*. These collocates appear more frequently with *mountain* than with *hill*. 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 & Gwartney, 2006, p. 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*. Moreover, particularly because of their visibility, ‘mountains’ can be said to dramatically *soar* and *loom*, as in (7). By contrast, ‘hills’ are not frequently described in that manner.

I will now move down from a ‘mountain’ to discuss the concept of a ‘hill’. A ‘hill’ is smaller than a ‘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 are joined with *mountain*, and did not appear in a Wordbanks wordsketch of *hill*. Conversely, the wordsketch did reveal the collocation *low-lying hill*.

Examples of *hill* follow in (8) to (12).

- (8) ... a tightly packed community at the foot of a **steep hill**.
(Wordbanks Br Books)
- (9) Beneath them lies a broad and **gentle hill** ... (Wordbanks Oz News)
- (10) A cold wind had whipped up over the **rolling brown hills**.
(Wordbanks US News)
- (11) I walk my dog on the **hill** every morning. (Wordbanks Can News)
- (12) ... 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 significant 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 ascending a ‘mountain’ as requiring more effort than ascending a ‘hill’.

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 in the wordsketch as 'rolling', as in (10), 'rounded', as in (12), and 'undulating'. By contrast, *rolling*, *rounded*, and *undulating* are not among the significant collocates of *mountain*.

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 of *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 actual assessment, in lines 2 to 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.

In Anna Wierzbicka's discussion of the human-centred nature of landscape terms, 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, p. 54)

Wierzbicka 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”. 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 made in 2.2 in the 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”.

Component (d), too, rules out an ‘anthill’. If someone were to move so they were on top of an ‘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 more appropriate.

Having explicated *mountain* and *hill* in English, I now turn to an elevated place concept in Pitjantjatjara/Yankunytjatjara. The lexical forms of a number of vocabulary items in the two language varieties, Pitjantjatjara and Yankunytjatjara, differ, and the terms *apu* (Yankunytjatjara) and *puli* (Pitjantjatjara) are one example of this variation. Our discussion in what follows will use the form *puli*, although some examples given use the Yankunytjatjara version, *apu*, and others the Pitjantjatjara version, *puli*.

Puli is polysemous. In one of its meanings, it can denote ‘rock’ or a ‘stone’. This meaning will be called *puli*₁, and is illustrated in Examples (13) and (14) by means of the Yankunytjatjara version *apu*.

- (13) *apu*: (1) rock, stone:
Mungartji ngayulu liru atunu apungka.
 mungartji ngayulu liru atu-nu apu-ngka.
 yesterday 1SG snake hit.with.a.stone-PST apu-INS
 ‘Yesterday I killed a snake with a stone.’ (PYED, p. 11)
- (14) *Apu pitjiltjunanyi, pakalpaingka, pitji lipi ngaranytjala.*
 apu pitjil-tjuna-nyi, pakal-pai-ngka, pitji lipi ngara-nytja-la.
 apu pile.rocks-put-PRS come.out-CHAR-LOC hole wide stand-CIRC-LOC
 ‘You pile up rocks, so it (perentie lizard) can’t get out where the burrow’s wide.’
 (PYED, p. 139)

The geographic meaning of *puli* (*puli*₂) can be glossed as ‘hills, mountain’ or ‘rocky outcrops’. Examples of this meaning follow in (15) to (19).

- (15) apu: (2) hills, mountain:
Kala Mulga Parkala wirkara ngaringu. Apu pulka itingka ngaringi.
 ka-la Mulga Parka-la wirka-ra ngari-ngu apu pulka
 CONJ-1PL Mulga Park-LOC arrive-SER camp-PST apu big
 itingka ngari-ngi.
 near camp-PST.IMPV
 ‘When we arrived at Mulga Park Station we camped. We were camping near
 the big hill (there).’ (PYED, p. 11)
- (16) *Puli nyara katu nyawa. Walu ngaranya ka tjukula ngaranya tjukutjuku.*
 puli nyara katu nya-wa walu ngara-ny i ka tjukula
 puli DEM top see-IMP rockface stand-PRS CONJ rockhole
 ngara-ny i tjukutjuku.
 stand-PRS small
 ‘Look up at the top of the hill. There’s a rockface and there’s a rockhole, a
 small (one).’ (PYED, p. 184)
- (17) *Munula palulanguru ruta wiya anu tali pulkangka – tali paluru pulka mulapa, panya puli purunypa.*
 Munu-la palula-nguru ruta wiya a-nu tali pulka-ngka –
 CONJ-1PL there-ALL road no go-PST sandhill big-LOC
 tali paluru pulka mulapa, panya puli purunypa
 sandhill 3SG big really DEM puli like
 ‘From there on we went cross-country, through the sandhills – the sandhills
 are really big, like hills.’ (PYED, p. 158)
- (18) *Puli panya nyara taan nyinanyi, palula ngura ngaranya.*
 puli panya nyara taan nyina-ny i palula ngura ngara-ny i.
 puli DEM DEM hump sit-PRS there place stand-PRS
 ‘In the hills, where that hump is, that’s where the place is.’ (PYED, p. 157)
- (19) *Puli nyangatja lalpa. Mapalku ma-tatira ma-ukalingku-ku.*
 puli nyangatja lalpa mapalku
 puli DEM flat in.no.time
 ma-tati-ra ma-ukalingku-ku
 towards-climb-SER 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, p. 60)

Firstly, in my discussion, I will consider the polysemy of *puli*. 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 word and an attempt is made to form a single paraphrase that predicts the correct range of use (Goddard, 2000, pp. 132–133). In the case of *puli*, 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 ‘*puli₂*’ as “a place of one kind”, rather than as “something”. In examining the use of the word *puli* in this selection of examples, the two meanings emerge. Some examples show the *puli₁* meaning of something one can do things with, such as kill a snake, as in (13), or pile up, as in (14). Based on the discussion above, explication [C] is proposed for the meaning of *puli₁*.

- [C] *puli₁* (Pitjantjatjara/Yankunytjatjara)
- something of one kind
 - things of this kind are very hard [m]
 - people can do things of many kinds with things of this kind
(e.g., kill snakes, make tools, pile up)

Other examples show *puli₂* as a place where one can do things, such as camp near (‘ngarinyi’), as in (15), and climb (‘tatini’), as in (19). Another illustration of the specific place meaning of *puli₂* is the contrast between *puli₂* and terms for places of other kinds, such as *taan* ‘rise, hump, outcrop’, as in (18), and *tali* ‘sandhill’, as in (17). Explication [D] is proposed for *puli₂*:

- [D] *puli₂* (Pitjantjatjara/Yankunytjatjara)
- a place of one kind
 - places of this kind are big places
 - the top [m] of a place of this kind is far above the places
on all sides of this place
 - when someone sees a place of this kind, they can think like this:
“there is a lot of rock [m] (*puli₁* [m]) in this place”

Component (b) expresses the idea that to be a ‘*puli₂*’, a place must be of a reasonable size. Example (17) shows how ‘*puli₂*’ are thought of as big, when ‘*tali*’ (‘sandhills’) are likened to ‘*puli₂*’ 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. ‘*Puli₂*’ 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 *puli₂* with the spatial adverb *katu*, which can mean ‘above, on top of’ and ‘high, high in’, as in (16). One can also use the verb *tatini* ‘climb, get up on’ with *puli₂*, as in (19).

There is no steepness component in the explication of *puli₂*, 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 *puli₂*.

Component (e) covers the material from which a ‘pul_i₂’ must be made – rock. It is the material of a ‘pul_i₂’, not simply its elevation, which distinguishes it. In this component, ‘pul_i₁’ (‘rock’) is used as a semantic molecule.

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 3.1 (O’Connor & Kroefges, 2008, p. 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 (Ngarutjaranya), are called *puli*.

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, p. 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 case in Seri, see O’Meara & Bohmeyer, 2008, pp. 324–325).

Other Pitjantjatjara/Yankunytjatjara terms for elevated places include *puli murpu* (lit., *puli* + ‘spine’) ‘mountain range’, *warara* ‘cliff’, and *tali* ‘sandhill’. As is the case with water sources (see also Bromhead 2017), the material from which a feature is composed is important in the conceptualization of elevated places. The lexical form *tali* resembles *puli* in that it is polysemous between a geographic meaning ‘sandhill’ and a substance meaning ‘sand’.

The lexical form *puli* has other meanings apart from *puli*₁ and *puli*₂, which are not discussed in detail here. *Puli* also has the senses, roughly, of ‘tool made from stone’ and ‘coins’. Similar “rock” polysemies operate in many other Australian Aboriginal languages (see Nash, 1983–84, on Warlpiri). One further meaning of *puli* is as a particular type of eco-zone, glossed as ‘rocky, hilly country’. This sense of *puli*, *puli*₃ will be discussed in Chapter 5 together with other Pitjantjatjara/Yankunytjatjara eco-zone terms, such as *puti* and *pila*.

3.3 Mountain and mountains

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 kinds of places are distributed in the natural world (see also Wierzbicka, 1988, pp. 538–539). ‘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. 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, 2002, p. 3).

In a Wordbanks search carried out on 21 September 2011, at least 40 per cent of all occurrences of the nouns *mountain* and *hill* were found to be in the plural, yet the corresponding figures for *river* and *lake* were less than 25 per cent. The fixed expressions *the mountains* and *the hills*, with a definite article, accounted for approximately a fifth of all instances of the nouns *mountain* and *hill*. By contrast, fixed expressions of this kind did not occur much with either *river* or *lake*. Less than 5 per cent of all cases of the nouns *river* and *lake* were found in the constructions *the rivers* and *the lakes*.

‘The mountains’ and ‘the hills’ are kinds of places where there are many ‘mountains’ and ‘hills’. In (20), ‘the mountains’ is put on a 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 (21), in which a village is “*up in the hills*”.

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

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

One could explicate *the mountains* and *the hills* as in [E] and [F], respectively.

[E] *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,
this someone can’t be in this other place after a short time
- e. [not many people live in this place]

[F] *the hills* (English)

- a. a place of one kind
- b. there are many hills [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,
this someone can’t be in this other place after a short time
- e. [not many people live in this place]

Components (b) of explications [E] and [F] state that there are many ‘mountains’ and ‘hills’, respectively, in these places. In this component, ‘mountains’ and ‘hills’ appear as derivational bases (see 1.8). Therefore, they bring with them all the components of the senses of *mountain* and *hill* contained in explications [A] and [B] (see 3.2).

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, but may in fact 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”. This use can be seen in (22), 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”.

- (22) 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 (23), or figuratively, as in (24) :

- (23) On their march through Greece, the Nazis overpowered the small Allied expeditionary forces ... Many **took to the hills**. (Wordbanks NZ News)
- (24) “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)

On the first page of the children’s educational book *Mountains*, under the heading “What are mountains?”, the third fact one reads about is “Mountains are usually clustered together in ranges” (Blaxland, 2000, p. 4).

The next word for a kind of place formed by many ‘mountains’ that 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, p. 17). In ordinary English, the terms *mountain system*, *mountain chain*, and *mountain belt* are generally not used. To illustrate, in a Wordbanks search carried out on 22 September 2011, *mountain range* was approximately nine times as common as *mountain chain*, eleven times as common as *mountain belt*, and 43 times as common as *mountain system*.

Mountain range is often used in ordinary English 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 one of the dictionaries I consulted (RHUD), and in a travel guide (Rowthorn, Landragin, & Daly, 2002). By contrast, in an article in the journal *Geophysical Research Letters*, the Great Dividing Ranges is called a *mountain belt* (Mariethoz, Baker, Sivakumar, Hartland, & Graham 2012, p. 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* here. Illustrations of the use of *mountain range* appear in (25) to (29).

- (25) They had already crossed the Toba Kakar **mountain range** from Pakistan ...
(Wordbanks Br Books)
- (26) cut off from the rest of the continent by a **long mountain range**.
(Wordbanks US Books)
- (27) ... the **mountain ranges run** from north to south. (Wordbanks Br Books)
- (28) a wild, desolate Eastern Siberian landscape containing a **vast mountain range stretching** for 500 miles ...
(Wordbanks US Books)
- (29) 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 (26). A ‘mountain range’ can be described as a “row”, and the combination “along the mountain range” can be found. Furthermore ‘mountain ranges’ can “run” and “stretch”, also suggesting that they are conceptualized as long in shape and covering some distance, as in (27) and (28).

Moreover, a ‘mountain range’ can be described as a physical geographical boundary. ‘Mountain ranges’ 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 or states within states (e.g., the Drakensberg mountain range in South Africa, which 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 (25), ‘traversing’, or even ‘trekking across’.

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

[G] *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 2 (see 1.8 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 impassable long flowing-water places, such as *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 2.2, 2.3).

As in explication [E] 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 (29).

3.4 *Cordillera* and *sierra* in Spanish

According to a 19th century British traveller and Hispanophile, “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, p. 9). As it is put on the website IberiaNature: “24% [of Spain] is above 1000m and 76% between 500 and 1000m. Spain has an average altitude of 660 metres. In Europe only Switzerland is higher ...” (Lloyd, n.d.). 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, saying “it should come as no surprise that Castilian is so rich in words for mountains, hills, cliffs and plateaus”.

Provided on IberiaNature is a list entitled “Synonyms for mountain and hill in Spanish”; it includes some fifty words, the majority of which have entries in the *Diccionario Clave* (DC), a dictionary which only contains words currently in use. 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 DC and confirmed by native speakers):

alcor: hill.

altozano: small hill.

cerro: isolated hill.

colina: hill.

collado: highland; hill; mountain pass.

loma: hill; low ridge.

otero: hill, viewpoint.

There are a number of threads dealing with the differences between some of these terms on the WordReference.com language forums, which are popular with language learners and translators.¹⁹ 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.

19. See <http://forum.wordreference.com/showthread.php?t=1848393> (accessed 21 April 2017).

In 3.3, 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 usually finds two terms in the definition, which often reads something like “cordillera; (shorter) sierra”. In the Spanish-English section of WRESA, both *cordillera* and *sierra* are rendered as *mountain range*. 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 *sierra* in terms of *cordillera* (DC; ECDLE).

Before discussing *sierra* and *cordillera* in depth, I will look at a molecule which will appear in their explications, ‘montaña’. The Spanish word *montaña*, translated into English as *mountain*, is used as a molecule. In bilingual dictionaries, the two words are used to define each other, e.g., *mountain*: montaña; *montaña*: mountain (CSD; WRESA). Based on examples of use and consultations with Spanish native speakers, I propose that many of the components used in the explication of *mountain* (see 3.2) are part of the meaning of *montaña*. Most likely, some details vary, but the two words are, I believe, very close in meaning. I will now move to look at the words *cordillera* and *sierra*, the explications of which include ‘montaña’ as a semantic molecule.

Cordillera is defined as a “serie de montañas unidas entre sí y con características comunes” ‘a series of connected mountains with common characteristics’ (DC). The same 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 (30) to (34).

- (30) *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, p. 117)
- (31) *... la cordillera del Atlas, que se extiende de forma más o menos paralela
 hasta la costa por el noroeste y el norte ...*
 ‘the Atlas cordillera, which stretches more or less parallel to the coast to the
 northwest and north’ (CDE)
- (32) *La otra cordillera corre sin interrupción ...*
 ‘The other cordillera runs without interruption’ (de Solano, n.d., p. 3)

- (33) ... *la Cordillera como un límite natural, como un muro, una barrera infranqueable* ...

‘The Andes as a natural boundary, as a wall, an impassable barrier’

(Hevilla, 2007, p. 68)

- (34) *¿como para hacerte cruzar la cordillera con mulas y todo?*

‘How do you cross the cordillera with mules and everything?’

(CDE)

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 an English ‘mountain range’. A ‘cordillera’ can be described as *larga* ‘long’ in dimension, as in (30), 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 (31) and (32). In (31), a ‘cordillera’ stretches *paralela* ‘parallel’ to *la costa* ‘the coast’.

A simple Spanish language encyclopedia, the *Enciclopedia Álvarez* (2009), provides a list of descriptions of ‘cordilleras’ within the confines 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 (35), which describes “La cordillera Carpetana”.

- (35) *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.*

‘The cordillera Carpetana originates in cordillera Ibérica ..., separating

León and Castilla la Vieja from Extremadura and Castilla la Nueva. Its most significant sierras are Sierra Ministra, sierra Ayllón, Somosierra ..., the cordillera continues through the south of Salamanca ..., finishes in Portugal with sierra de la Estrella.’

(Álvarez, 2009, pp. 327–328)

A ‘cordillera’ is so long that it can consist of many ‘sierras’. Álvarez (2009) mentions the important ‘sierras’ of each ‘cordillera’ listed, as in (35). One can say that a particular ‘sierra’ *pertenece a* ‘belongs to’ a certain ‘cordillera’.

Like a ‘mountain range’, a ‘cordillera’ acts as a barrier. The descriptions of ‘cordilleras’ in Álvarez (2009) state which regions each ‘cordillera’ separates, using verbs such as *limitar* ‘border’, *dividir* ‘divide’ and *separar* ‘separate’, as in (35). 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 (33).

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 (34) (CDE; Google Books, accessed 5 October 2011).

An explication of *cordillera* is presented 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 after some time
 - 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 [G] 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 native speaker, 'cordilleras' are not places in the landscape which one sees (Auxí Barrios Rodríguez, personal communication). Rather, they are vast concepts which people must learn about at school or in books.

Explication [H] differs in a notable respect from explication [E] of *the mountains* and explication [G] of *mountain range*. As mentioned before, [H] uses 'montaña' as a semantic molecule, whereas in [E] and [G], 'mountain' is used as a derivational base. The reason for this difference is that there is 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*.

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, and 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, p. 257; Penny, 2002, p. 311).

The ‘montañas’ that compose a ‘sierra’ have distinctive pointed summits which are visible to people from a distance. One Spanish native speaker says that when people see a ‘sierra’, they can see many peaks (Auxil Barrios Rodríguez, personal communication). In their definitions of *sierra* as a kind of place, ECDLE speaks of “*cimas picudas*” ‘sharp peaks’, and DC uses the expression “*peñascos cortados*” ‘sharp rocky crags’. Example (36) 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*. ECDIE (2000) gives the following definition: “*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 (36) to (39) :

- (36) *Las enhiestas cimas de la Sierra Nevada, las mas altas y majestuosas de toda España, cubiertas de nieves y de hielos ...*
 ‘The soaring peaks of the Sierra Nevada, the highest and most majestic in all Spain, covered with snow and ice ...’
 (de Dios de la Rada y Delgado, 2002, p. 12)
- (37) *La sierra de la Plata se extiende hasta la misma línea de costa ...*
 ‘The Sierra de la Plata stretches to the same line of coast’
 (Bejarano Palma, 1997, p. 215)
- (38) *... a lo largo del flanco oriental de las sierras Morada y de Las Bandurrias ...*
 ‘along the eastern flank of the sierras Morada and Las Bandurrias’
 (Parker, 1974, p. 241)
- (39) *La sierra larga de Ricote muy montuosa ...*
 ‘The long sierra of Ricote, very hilly ...’
 (Madoz, 1847, p. 389)

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 (37), and the use of *a lo largo* ‘along’ with *sierra*, as in (38). There are also some examples of *sierra* with the adjective *larga* ‘long’, as in (39). However, a place that 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 CDE, but not on the list of frequent collocates of *sierra*.

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 [H] of *cordillera*, some of the ‘*montañas*’ are portrayed as *very* far from one another. By contrast, in explication [I] of *sierra*, the intensifier is not used due to the shorter length of ‘*sierras*’.

Component (e) is specific to explication [I] of *sierra*. The component conveys the visual impression of the jagged summits of a ‘*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’.

3.5 Cliff words in English and Spanish

In their article on Yindjibarndi ethnophysiology, 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, p. 15). They then give the example of labels for cliff places that depend on the perspective of a viewer. *Gank-angga* is the Yindjibarndi term which takes the view of a person looking up at the place, and *gunkurr* is used for the perspective of looking down at the place from the top. They also give a comparable example from the Amerindian language Navajo (see also Turk, 2011, p. 49).

In this section, I propose that visual perspective in the categorization of landscape features is also important in two Standard Average European languages, English and Spanish. Some cliff terms in English and Spanish will be examined – the English words *cliff* and *precipice*, and the Spanish words *acantilado*, *precipicio*,

and *despeñadero*. 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.

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 (40) to (46) :

- (40) A man plunged to his death from a **100 ft cliff** ... (Wordbanks SunNOW)
- (41) The **towering, vertical cliffs** had forced them to march west to find a route to my position. (Wordbanks Br Books)
- (42) After a half-mile rise, the slope turned into **cliff face** – nothing but stone – and we began to climb. (Wordbanks US Books)
- (43) Two Alberta climbers spent the night on a **cliff ledge** in the Rocky Mountains ... (Wordbanks Can News)
- (44) ... the views don’t stop until they’ve plunged off the **cliff tops** at Seven Sisters ... (Wordbanks Times)
- (45) Rescue technicians rappelled down a **rocky cliff** ... (Wordbanks Oz News)
- (46) ... 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. Significant collocations of *cliff* include measurements of height, such as *100 ft*, as in (40), and the adjective *towering*, as in (41).²⁰

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 term *cliff face* denotes the rocky, flat, elevated side of a ‘cliff’, as in (42). *Cliff edge* and *cliff ledge* refer to the part of the top of the place before it drops on one side, as in (43). One can also talk of the top of a ‘cliff’,

20. The 10 most significant adjective modifiers showing up in a Wordbanks wordsketch of the lemma *cliff* were: *towering, steep, sheer, rugged, precipitous, vertical, 100 ft, rocky, 300 ft, and craggy*.

generally using the compound *cliff top*, as in (44).²¹ These combinations 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 most significant adjective modifiers which occur with *cliff* in the Wordbanks corpus, as in (45). Common noun modifiers for *cliff* include the names of varieties of rock, such as *chalk*, *limestone*, and *sandstone*, as in (46).²²

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 can be called *flat*₁.

A ‘cliff’ is not a horizontal surface like the ground; indeed, an indicative collocate of *cliff* is *vertical*, as in (41). 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, then, that a forehead, the front of trousers, or indeed a cliff face, are 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 *flat*₃.²³

Finally, like a ‘mountain’, a ‘cliff’ can be described as *steep*, but, unlike a ‘mountain’, a ‘cliff’ is also described as *sheer*.

In Section 3.2, when discussing *mountain*, I invoked Gibson’s notion of “the affordances 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* and *hill*, the slope of these places was captured with reference to the time and effort required to climb them. 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, p. 37). A further terrain feature relevant to the discussion of ‘cliffs’ is the barrier. As Gibson notes, “[a] *vertical*, flat, extended, and rigid surface such as a wall or a cliff face is a barrier to pedestrian locomotion” (Gibson, 1979, p. 132). To illustrate, (41) describes an exploration team having to change course due to the obstacle of ‘cliffs.’

21. The 10 most significant words modified by the lemma *cliff* were: *edge*, *face*, *ledge*, *dwelling*, *top*, *plunge*, *diver*, *path*, *overhang*, and *rescue*.

22. The 10 most significant noun modifiers of the lemma *cliff* were: *sandstone*, *chalk*, *limestone*, *basalt*, *granite*, *mesa*, *thousand-foot*, *canyon*, *seaside*, and *sea*.

23. There is a further common sense of *flat*, *flat*₂, as in flat objects which can be manipulated such as plates and coins.

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.

An explication of *cliff* follows 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 *puli* 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) to (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.

I 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 is often 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 uses of *precipice* appear in Examples (47) to (52).

- (47) ... near the top of a **rocky precipice** (Wordbanks Br Books)
- (48) ... it was pretty scary stuff coming over the top of an **80 ft precipice** with a sheer drop ... (Wordbanks SunNOW)
- (49) ... the mountain fell away in a **sheer precipice**. (Wordbanks Br Books)
- (50) ... the village of Habala built on a **rockface precipice**. (Wordbanks Times)
- (51) ... the “spendaholic” Jackson is \$300 million in debt and “on the **precipice of bankruptcy**.” (Wordbanks US News)
- (52) ... 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 (47). The elevation of a ‘precipice’ is also indicated in collocations. *Precipice* can combine with measurements of height, such as *80 ft precipice*, as in (48). The flat side of a ‘precipice’ is shown in collocations such as *steep*, *abrupt*, and *sheer*, as in (49).

The word *precipice* comes into English via the Middle French *précipice*, which in turn comes 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’ (CEDEL). 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*, 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, p. 37).

The word *precipice* is often used figuratively. 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 (51) and (52). In fact, the word

precipice may well be more salient in a figurative context rather than a physical one because risks to people now tend to come more from events like bankruptcy than falling from a height.

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 some thing or some place 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, pp. 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, p. 37).

As mentioned in Section 3.4, Spanish has many terms for elevated places, and this extends to terms for what I call, roughly, cliff concepts. Looking up the word *cliff* in the English-Spanish section of a dictionary fails to yield a single translation equivalent (WRESO). 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. In this discussion, I will point out some of the similarities and differences with the English words, and make some suggestions for potential semantic components.

Examples of the three words follow in (53) to (57).

- (53) *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*.’ (DC)
- (54) *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, p. 259)
- (55) *La crisis económica mantiene a algunos Ayuntamientos catalanes al borde del precipicio.*
 ‘The economic crisis keeps some Catalan municipalities on the edge of the *precipicio*.’ (El País, 13 October 2011)
- (56) *Y se hallan tan pobladas de encinas, quejigos y pinos laricios que cuesta verlas hasta estar a un paso del despeñadero.*
 ‘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 *despeñadero*.’ (El Viajero El País, 15 January 2011)
- (57) *Las políticas que impuso durante su desempeño como presidente de aquel país lo están llevando al despeñadero de la economía.*
 ‘The policies imposed during his tenure as president of that country are leading to the *despeñadero* of the economy.’ (CDE)

Firstly, an ‘*acantilado*’ is specifically a cliff on the sea, as seen in (53). 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 ‘el mar’ (i.e., ‘the sea’, in Spanish) as a semantic molecule: “a place of this kind is near ‘el mar’ [m]”.

Secondly, the word *precipicio* is cognate to the English *precipice* and 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 (54), 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*. In (55), 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.

Thirdly, the less common word *despeñadero* also denotes a place from which a person can fall. DSEL defines *despeñadero*, in part, from the perspective of the effect such a place can have on people: it is “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’. Most contemporary examples of *despeñadero* are figurative, but I include one literal example, which is given in (56), where *despeñadero*, according to the first definition listed in ECDLE, means: “Precipicio, lugar escarpado” ‘precipice, sheer place’. ECDLE’s second definition (“Riesgo, peligro grande” ‘risk, great danger’) is illustrated in Example (57), which describes the policies of a president leading to the ‘despeñadero’ of the economy.

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.

3.6 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 book 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 respective components 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 are found in the semantics of *hill* and *mountain* in English, *puli* in Pitjantjatjara/Yankunytjatjara, and, most likely, *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 previously treated in this book, 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 explications as “places of this kind are long places [m]”) formed by many ‘mountains’ in English and ‘montañas’ in Spanish next to one another (stated as “many mountains/montañas are parts of places of this kind”).

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

Importantly, 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 do not come in different sizes, so to speak. By contrast, as in a number of other languages (e.g., Seri; see O’Meara & Bohmeyer, 2008), material composition is an important factor in landscape categorization in Pitjantjatjara/Yankunytjatjara, as shown in the use of the molecule ‘*puli*₁’ ‘rock’ in the semantics of *puli*₂ ‘hill, mountain, rocky outcrop’, and the molecule ‘*tali*₁’ ‘sand’ in the semantics of *tali*₂ sandhill’.

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 some elevated place terms have senses that refer to the negative interactions people can have with the natural environment. The kinds of places treated in the previous chapter, such as 'rivers', 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 category status 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.

CHAPTER 4

Semantics by ‘the sea’

The Beach, the Coast, the Shore

4.1 The sea is in our being

Hitherto, I have been exploring what can be referred to as landscape terms. This chapter turns to look at what can be called seascape terms. In Section 4.2, I treat the English terms for wide areas of salt water, *the sea* and *the ocean*. In Section 4.3, I discuss the terms for recreational places, *the beach* in both British English and Australian English, and *the seaside* in British English. English language boundaries between ‘land’ and ‘sea’, *the coast* and *the shore* are examined in Section 4.4. In Section 4.5, I look at words for places surrounded by ‘sea’. The English terms *island* and *peninsula* are treated, with reference to Swedish *holme* and *skärgård*. Next, Section 4.6 explores 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 4.7, I offer some concluding remarks. But, firstly, I 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 & 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:

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

(Genesis 1: 9–10, NIV)

In English the pairing of ‘land’ and ‘sea’ implies the Earth’s surface, as in (1).

- (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 monitoring sea turtles, which live both in ‘sea’ and on ‘land’, is called “Vanua-tai”. *Vanua* means, roughly, ‘land’ and *tai*, roughly, ‘sea’ in some Melanesian languages (Johannes & Hickey, 2004, p. 25).²⁴

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

...: 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. (Sobceki, 2008, p. 5)

‘Land’ is the place where people can live and do the activities mentioned by Sobceki (and, naturally, many others). I propose that, semantically, *land* is a word denoting 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’, ‘the 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’.²⁵

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 (Cablit, 2006, p. 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 Gabriele Cablit’s *Marquesan: A Grammar of Space* (2006).

24. *Vanua* is not identical in meaning to the English *land* and has a number of meanings (see Patterson, 2006, pp. 324–327).

25. These observations may not apply to all people and languages of the world. It has often been written about that coast-dwelling Australian Aboriginal groups “do not make a distinction between land and sea country” (Russell, 2004, p. 14, see also Section 6.7 on ‘country’).

- (2) Te horave ma tai o te tumu 'akau t'ohi = 'ia atu
 ART horse PREP sea POSS ART trune wood look.at-PERF DIR
 'i tai.
 LD 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 DU trune wood NUM one cow
 'One cow is inland of these two trees.' (Cablitiz, 2006, p. 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, pp. 2–3). Sobecki writes, “[s]omeone 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” (*loc. cit.*). 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], p. 104, cited in Sobecki, 2008, p. 1). In late 18th century England, opinion-makers promoted the idea 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, p. 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, “[w]e are a maritime race. The sea is in our being.” (Tabili, 1996, p. 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 both Polish and Ukrainian, cognitive linguists Adam Gład and Serhiy Potapenko write, “[t]he 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” (Gład & Potapenko, 2009, pp. 4–5). Furthermore, classicist and philologist George Davis Chase notes the influence of nautical language on the figurative use of English (Chase, 1980).

4.2 *The sea, the ocean*

English has both *the sea* and *the ocean* to talk about the saltwater which covers most of the Earth. Danish does not make the same kind of *ocean-sea* distinction,

and has the one term *hav* (Carsten Levisen, personal communication; EDO). (In addition, present in Danish 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, p. 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 & Dirven, 2007, pp. 104–105).²⁶

Ocean is a Latinate word which came into English via Norman French, whereas *sea* is Germanic in origin. In keeping with its classical 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 (Collin, 2011, p. 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*. 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 to the semantics of *the sea* than it is to those of *the ocean*, as evidenced in the ‘sea’-‘land’ pairing discussed earlier. Examples of *sea* and *ocean* appear in (4) and (5).

26. The question of the difference in semantics between landscape concepts in English framed with the definite article vs. the indefinite article will not be covered here. It remains a topic for future investigation.

- (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 significant collocate of *ocean* which indicates this property is *vast*, but this adjective is not present on a wordsketch of *sea*. 'The sea' and 'the ocean' are both understood to be deep. *Deep sea* and *deep ocean* are significant collocations. However, 'the sea' is conceived of as shallower than 'the ocean'. A combination of *shallow* with *sea* is significant (see (4)), but a combination of *shallow* with *ocean* is not.²⁷

Because 'sea' is a more human-near kind of place, the physical qualities of this place are more salient than those of 'ocean'. Looking at wordsketches for *sea* and *ocean* bears out this observation. The vast majority (16) of the 20 most significant adjective collocates in a wordsketch of *sea* pertain to physical qualities, whether they be colour, temperature, movement of the water, etc. By contrast, one finds fewer physical quality adjectives in a wordsketch of *ocean* (6) of (20). Half of the significant adjective collocates of *ocean* are ocean names or relate to geographic location (10) of (20).

The water in 'sea' and 'ocean' is of a particular type. It is salty, unlike the water in other places which often people can drink. Yet, as commented on in the previous paragraph, the saltiness is less relevant to the concept of 'sea'. *Salty* appears in the wordsketch of *sea* but not that of *ocean*.

Another aspect of 'sea' and 'ocean' is the movement of the water. Both kinds of places have currents, and waves, and move according to the weather. There are more significant adjective collocates which emphasize the action of 'sea' than 'ocean'. Collocates of *sea* include: *choppy*, *rough*, and *lumpy*.²⁸

'Sea'-type concepts can serve as prototypes for colour terms. One of the prototypes of the English *blue* is 'the sea' (Wierzbicka, 1996, pp. 309–310). Indeed, *blue* appears in a wordsketch for *sea*, but not one for *ocean*. The Polynesian word *moana* 'sea' in, for example, Cook Islands Māori, and *lanumoana* ('colour moana') in Samoan have the sense of 'deep blue' (Buse, 1996; Milner, 1993).

27. All wordsketches referred to in this chapter were generated on 13 December 2017.

28. 7 of the 20 most significant adjective collocates of the lemma *sea* relate to movement. In the wordsketch of the lemma *ocean*, there is only one.

An 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 where people can live
- e. this water [m] is not like the water [m] in places of other kinds
because something of one kind is part of this water [m]
- f. because of this, people can feel something bad in their mouths,
if this water [m] is in their mouths [m]
- g. often this water [m] moves a lot, not like water [m] moves
in places of other kinds where there is a lot of water [m]
- h. 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). The physical consequences for humans of this saltiness is depicted in component (f) – it is bad for people to drink this water.

Component (g) 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 (h), 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 where people can live
- e. often this water [m] moves a lot, not like the water [m] moves
in places of 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 where people can live, whereas in the explication of *the sea* “far” is used. The movement component (e) is the same as the relevant component in [A]. The explication of *the ocean* does not contain a component like component (h) 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*, the components of [B] are less human-centric, and the salty quality of the water is not captured.

4.3 *The beach, the seaside*

The seascape can be a place of recreation, as seen in *the beach* and *the seaside*. Examples of *the beach* appear in (6) to (8).

- (6) ... you can look beyond **the sandy beach** ... (Wordbanks Oz News)
- (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 Br Books)

‘The beach’ is a place which has significant cultural meanings in English-speaking, some European, and many other cultures (Mathewman, 2004, p. 1). To take one small example, some 20th century English language novels and films represent ‘the beach’ as a symbol of freedom, pleasure, sensuality, sexuality, escape from the built environment of cities and towns, and use ‘the beach’ as a springboard to discuss the place of human beings in the natural world (Annesley, 2004, pp. 551–552). ‘The beach’ as primarily a place of recreation in Anglophone and many European cultures is a relatively recent phenomenon (Lenček & Bosker, 1998, p. xx; 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. Significant collocates of *beach* in a Wordbanks word-sketch are substance terms such as, *shingle*, *pebble*, *black-sand*, *sand*, *cobble*, and *white-sand*. 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, p. 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, p. 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” (*loc. cit.*).

In a wordsketch based on the Australian material of 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 a British English wordsketch which includes collocations, such as, *shingle beach*, *pebble beach*, and *cobble beach*, as well as those relating to ‘sand’.

‘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, p. 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, p. 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 & Bosker, 1998, p. 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 (*loc. cit.*).

Collocational evidence for the significance of a human presence in the term of 'the beach' is indicated in significant collocate of which *beach* is an object on word-sketches. In both British English and Australian English wordsketches, 5 of the 10 most significant of these kinds of collocates related to the humans, such as *patrol* and *crowd*. *Desert* is also a revealing collocate (*deserted beach*) 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*. In order to pursue these activities, people prefer to be on 'the beach' when the weather is good. *Sun-kissed* and *sun-drenched* (see (8)) are significant collocates of *beach*, but *cloudy* and *overcast* are not.

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 and for many, holidays are spent at 'the beach' (Dutton, 1985, p. 53). As explored in this book, the seat of Australian identity is sometimes said to be found in 'the bush' (see Chapter 7). 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, p. 48).

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

[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 warm [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 warm [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. 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 warm 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' denotes resorts beside the sea in England, and this dates back to the mid 18th century (Walton, 1983, p. 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, p. 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 because of the climate of England. Some children's activities include donkey rides, Punch and Judy (puppet) shows, and sandcastle competitions.

Collocations with *seaside* used as a noun modifier taken from a Wordbanks wordsketch of the British English material are also telling. Of the 20 most significant collocations, 11 reflect 'the seaside' as a holiday destination, including, *seaside resort*, *seaside holidaymakers*, and *seaside tripper*. 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*.²⁹ The only adjective collocates found on the wordsketch were *English* (see (11)) and *British*, as 'the seaside' is considered a uniquely English or British kind of place.

The seaside holiday town rose between the mid-18th century and the First World War (Walton, 1983, p. 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, p. 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, pp. 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, p. 109). These

29. The remaining 5 of the 20 collocates pertain to location.

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, Bigné, & Cooper, 2001 on the image of Spain as a destination for British tourists). Nonetheless, ‘the seaside’ continues as a nostalgic national and cultural concept, as evidenced by the sizable amount of contemporary children’s literature set there (Walton, 2000, pp. 1–3).

Looking at the Oz News subcorpus of Wordbanks, it appears that *the seaside* is not used in Australian English. Just 2 per cent 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 Oz News, and also composed of newspaper material), 17 per cent of all hits of *seaside* are in the frame *the seaside*.

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*, often referring to English seaside resorts, such as Margate and Bournemouth. By contrast, tokens of *seaside town* in Oz News refer to more residential 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, p. 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 some things in this place
- f. people do things of many kinds in this place
because they want to feel something good
- g. places of this kind are in one country [m], this country is England [m]

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 explanations 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.

Component (g) captures national location of ‘the seaside’ – in England (see mention of country concepts in the meaning of landscape words in 2.2 on *billabong*; also Chapter 7).

4.4 *The coast, the shore*

The coast and *the shore* are illustrated in (12) to (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.
(Wordbanks US Books)
- (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 *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, p. 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, p. 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 1.6). *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’. 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 coast* can be used to denote 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 significant combination using *coast* as a noun modifier in a wordsketch (cf. **shore guard* in a similar sense). *Patrol* is one of the ten most significant verbs of which *coast* is the object, as in (13), but does not appear in a wordsketch of *shore*.

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 significant collocates of which *shore* is the object, as in (14), yet not on a wordsketch of *coast*. The physical composition of ‘shore’ is sometimes indicated in collocations, such as *sandy shore* and *pebbly shore*. Adjectives of this kind are not significant collocates *coast*. 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 collocations in which *shore* is a modifier).

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 New South Wales.

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, p. 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). *Batter* and *pound* also appear frequently with *shore* on Wordbanks, as in (16). 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*. 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], respectively.

[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 others 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.

4.5 *Islands, peninsulas*

In the discussion of semantics by the sea the topic of ‘islands’ and ‘peninsulas’ recalls again a 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, p. 170)

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

- (17) ... the dark blues and greens of the tropical waters **surrounding the island** ...
(Wordbanks Oz News)

- (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, p. 271; Edmond & Smith, 2003, p. 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, pp. 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, pp. 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-rich countries in North Western Europe – English, Finnish, and Swedish – have many words for different kinds of islands (*ibid.*, p. 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 (although this would naturally not account for Finnish) (Royle, 2007, p. 33). Languages of countries with few islands appear to have fewer words for islands. For example, Slovak has the one term *ostrov* (*ibid.*, p. 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, p. 173).

English has the terms *isle*, *islet*, *holm* (uncommon), *reef*, *rock*, *ait* (uncommon), *atoll*, and *key* among others. Swedish, in addition to the general *ö* ‘island’, has elaborate island vocabulary. I will touch on two Swedish terms, *holme* and *skärgård* later in the section.

Islands come in different sizes. However, as Smith and Edmond write, “The defining idea of an island is its boundedness” (Smith & Edmond, 2003, p. 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, p. 40).

In some languages, the locative preposition used with island words, particularly those for small islands, differs from the preposition used with the name of 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 convey the special island status of Gotland (Holmes & Hinchcliffe, 2003, p. 387; Ronström, 2009, p. 176). In Danish, by contrast, many Danes use the ‘on’ preposition when talking about Greenland, whereas Greenlanders prefer to use the ‘in’ preposition to signal their country as just as significant as Denmark (Carsten Levisen, personal communication; Jespersen, 2014).

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, p. 44).

I 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 in 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 explanations, ‘land’ is taken as a 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, p. 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 in an ‘island’, as captured in component (f).

Peninsula is illustrated in (20) to (22).

- (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 & Smith, 2003, p. 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 *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 significant collocate of *peninsula* is *jut* (as in (20)), which is, naturally, not found frequently with *island*. 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, *holme* and *skärgård* (much of this discussion is drawn from personal communication

with Hedvig Skirgård). A ‘holme’ is “an island with some trees and other vegetation, often smaller and somewhat flatter than ‘islands’” (Ronström, 2009, pp. 173–174; see also SAOB). Folkets dictionary gives the English definition of *holme* as ‘islet’. The suffix *-holm* appears in proper nouns for small islands, such as, Långholm, Tallholm, and Lillholm. Most ‘holmar’ are uninhabited but, in some cases, people can live on them because of their favourable conditions.

An explication of *holme* may include components such as “places of this kind are (very) small places”, “many things grow in places of this kind”, “there is water in places of this kind”, and components similar to those found in the explication of the English *island*.

Another Swedish ‘island’ word I will mention is *skärgård*, which can be translated into English with the word *archipelago* (Folkets), although they are not exact equivalents. A Swede who works a lot in Samoa would not necessarily apply *skärgård* to an ‘archipelago’ in the Pacific (Hedvig Skirgård, personal communication). One of the elements in the word is *skär*, now obsolete, which used to denote a small, rocky islet, a landform found in Northern Europe (Ronström, 2009, p. 174). These small, rocky islets combine with larger inhabited islands to form a ‘skärgård’.

An explication of *skärgård* may include reference to one of the substances from which it is composed, using the molecule ‘rock’. Furthermore, ‘skärgård’ could be regarded as a Swedish national cultural concept, and therefore, the molecules ‘country’ and ‘Sweden’ may also have to be included.

4.6 Bays, coves

In this section, I 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 words of this kind. I discuss the Polish *zatoka*, glossed in English as ‘bay’. To begin with, before examining the individual words, I 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, and Point Upright.

Paul Carter 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, 2010 [1987], p. 13). The same can be said for the classification of places as 'bays', or 'points', or 'inlets'.

I begin with the term *bay* because the other English words treated in this section (*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*. *Secluded* and *protected* are also frequent collocates of *bay* and *cove*. Antonyms of these adjectives, *exposed*, *unprotected*, and *open*, are not found frequently with *bay*, *cove*, and *inlet*.

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 significant collocations, whereas the numbers of *hidden bay* are negligible in Wordbanks. Width terms such as *wide* and *narrow* are on the wordsketches of *bay* and *inlet*. By contrast, *wide cove* and *narrow cove* are not significant collocations. 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. 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 significant 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*.

I will now set out the meanings of the English terms *bay*, *cove*, *inlet*, and *harbour* in semantic explications [J]–[M].

- [J] *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 to humans 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.

[K] *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 [J] 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.

[L] *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 [L] 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, [L] contains the shape component (g) which likens a ‘cove’ to something round.

[M] *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 4.1, 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” (Gład & Potapenko, 2009, pp. 4–5). The relevant Polish word is *zatoka*, glossed in English as ‘bay’ or ‘gulf’ (bab.la). 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 *zatoeczka*. However, the diminutive could be explicated using *zatoka* as a derivational base.) *Zatoka* is explicated in [N]

[N] *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

Explication [N] 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.

4.7 Concluding remarks

In this chapter, I have uncovered the meanings of a number of seascape terms in English, as well as elucidating differences between British English and Australian English in Section 4.3, and with, in two sections, contrastive reference to seascape terms in Swedish and Polish. 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, personal communication.).

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 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 book. 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. One example can be found 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, p. 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.

Desert in Australian English and Pitjantjatjara/ Yankunytjatjara eco-zones

5.1 People say it's just a desert

In this chapter, I contrast some words which can be used to refer to the same kind of environment in Australia. One of these words, *desert*, as used in Australian English, comes from the language of the colonizers; the other words, eco-zone terms, come from Pitjantjatjara/Yankunytjatjara, a language of Aboriginal Anangu. By comparing these words from the two languages, we can gain an insight into how different groups of people think and speak about the same landscape and the same referents in diverse 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 5.2; Haynes, 1998, p. 88) but that is nonetheless quite different from the picture afforded by the semantics of Pitjantjatjara/Yankunytjatjara eco-zone terms, such as *puti* and *puli*, which reveal these kinds of places as ecologically rich.

Bi-cultural observers testify to the differences between the two conceptualizations. Three examples from Australians who have lived in both Anglo-Australian and Australian Aboriginal cultures follow. Pat Lowe, a non-Indigenous writer who has lived in both Anglo Australian and Walmajarri (Great Sandy Desert) cultures, and married a Walmajarri man, articulates her evolving ideas about 'desert', which were informed by her experience with the Walmajarri language, as follows:

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, p. 91)

Jack Davis, a Noongar poet from South-Western Western Australia, writes of two different perspectives on the Australian landscape in a poem titled "From the plane window". He opposes an Aboriginal perception of a place that is full of life to a non-Aboriginal view of 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, p. 73)

In radio broadcast, Scott McConnell, a non-Aboriginal 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. (Scott McConnell in Miller, 2007)

In this chapter, I explore first of all the Australian English term *desert*. Next, I discuss eco-zone terms in Pitjantjatjara/Yankunytjatjara. I look at Pitjantjatjara/Yankunytjatjara eco-zones generally before turning my attention to the Pitjantjatjara/Yankunytjatjara words *puti* and *puli*. The chapter also includes some comments on two other eco-zone words, *pila* and *tali*, and ends with some concluding remarks.

5.2 Desert in Australian English

Australia is the second driest continent on Earth, after Antarctica (Haynes, 1998, p. 2). 68 per cent of the Australian land mass is classified as arid or semi-arid by geographers (Brown, Taylor, & Bell, 2008, p. 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 labelled '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, pp. 2–3)

In the Anglo folk picture of the world, '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 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, and so on (Robinson, Copley, Canty, Baker, & Nesbitt, 2003).

The English word *desert* derives etymologically, through Old French, from the Latin *dēsertum* meaning “abandoned, deserted, left waste” (OED; for mention of ‘waste’ and ‘wasteland’, see also 6.3). *Desert* originally could be applied to any wild, uninhabited region. However, it 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*, as in (1), *desert regions*, as in (2), *desert area*, and *desert country* are considered good collocations by native speakers of Australian English. 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)
- (2) ... it covers Australian birdsong from suburban gardens and parks to **arid desert regions**. (ABC Online)

Jay Arthur observes that the relative lack of water in Australia, in comparison with the British Isles, has caused disquiet among non-Aboriginal Australians (2003, p. 107; see also Cathcart, 2009). Places without water are seen as deprived – ‘desert’ (see also, 2.2):

... 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, p. 107)

The ‘desert’ is without water, dry, as seen in collocations like *arid desert*, illustrated in (2), and *parched desert*. In addition to water, another thing that ‘desert’ lacks, in comparison with other kinds of places, is vegetation. Combinations such as *treeless desert* and *barren desert* are found in Australian English, as in (3).

- (3) The economic potential of what lies deep underneath **the barren desert** in South Australia ... (ABC Online)

‘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 with 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. (Wordbanks 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)

People unfamiliar with 'desert' can get easily lost, whereas Aboriginal people of arid areas have knowledge of the country and strong way-finding 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, pp. 93–94)

Moreover, the experiences of European explorers lost, or indeed dying, in harsh 'desert' forms part of Australia's foundational narratives (e.g., Carter, 2010 [1987], 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. The 1860–61 expedition from the

South to the North of the country, led by Robert Bourke and William Wills, which ended in their deaths in ‘desert’, is also a seminal national story, as a 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. Their remains were brought back to Melbourne to lie in state before a funeral that attracted more than 50,000 mourners. The pencilled diary of their final days holds pride of place in Victoria’s state library. (Macintyre, 2016, p. 104)

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, unable to access their lands. These sites were chosen on the basis that, to white authorities, ‘desert’ was uninhabited (Lester, 1993, pp. 174–183; Davison, Hirst, & Macintyre, 2001, pp. 42–43, 414).

It is worth noting that although ‘desert’ remains a place of deprivation to many non-Indigenous Australians today, this state is not always perceived in Australia as an undesirable 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 explorers who died in ‘desert’, H.B.]” (Lowe, 2005, p. 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”.

Kim Mahood (2016) suggests that the white Australian conceptualization of ‘desert’ as a place of deprivation is being challenged, yet not necessarily displaced, particularly prompted by the popularity of Aboriginal art from ‘desert’ regions of Australia among white Australians. This art often portrays the richness of the country. She points out that viewing the country as *deserts* as opposed to *the desert* goes some way towards recognizing the diversity of arid areas.

Indeed, some change in the recognition of detail and nuance in ‘desert’ can be seen by comparing two biographical dictionaries featuring Aboriginal artists from Central Australia. *Aboriginal artists of the Western Desert: A biographical dictionary*, published in the 1990s, includes profiles of, for example, Alyawarr speaking artists from the Northern Territory’s (Central Desert) Utopia community, along with artists who could be more accurately described as being part of the Western Desert cultural block (Johnson, 1994). The author addresses the inclusion of non-Western Desert artists, title notwithstanding, in her introduction: at the time, many Central Australian artists were regarded as painting in

the Western Desert style, which originated in Papunya. By contrast, the title of *Aboriginal artists dictionary of biographies: Western Desert, Central Desert and Kimberley region* (Birnberg & Kreczmanski, 2004), published ten years later, differentiates between Western Desert and Central Desert artists. Mahood writes, “Recognising that the desert is rich with stories of real people and particular places has not displaced the metaphoric space it occupies in our cultural imagination, but it has destabilised it, opened it up to challenge and re-interpretation” (Mahood, 2016, p. 28).

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 population centres, not on the environmental features which are part of the meaning of *desert* (AND; Moore, 2008, p. 110). Central Australia has been called *the Centre* in Australian English since the late 19th century (AND).

The expanded *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. *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 this chapter.

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*. 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 Oz News)

Drawing on the evidence given 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 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*₁ (see 7.3). However, while in the explication of *the bush*₁ “many parts of this place” are said to be “far from many other parts of this place”, explication [A] above uses the qualifier *very*, in “very far”. It would be unusual to speak of *vast bush*, but *vast desert* is a natural sounding collocation.

Unlike the other words for places of some kinds explicated in this book, 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 lines of components (c) to (f) draw 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 with 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.

5.3 Pitjantjatjara/Yankunytjatjara eco-zone words – an overview

Regarding land as distinct zones is common among Australian Aboriginal groups, including those who live in landscapes unlike those of Pitjantjatjara- and Yankunytjatjara-speaking Anangu of Central Australia. For example, the Alawa of the Gulf country of Northern Queensland distinguish various kinds of country and their typical species, for example, ‘ulbul’ ‘lagoon country’, ‘ngayiwurr’ ‘cliff country’, and ‘urai’ ‘blacksoil’ (Layton, 1999, pp. 22–25).

Eco-zone concepts are also found among many other groups, for example the Baka of the Congo basin, in Africa. 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, p. 583). (See also Widlok, 2008, on the Khoisan ≠Akhoe Hai//om language spoken in Namibia.)

In describing his country Yankunytjatjara leader and elder Yami Lester contrasts a non-Indigenous view of the landscape of Central Australia with an Aboriginal view of the same area. While many non-Indigenous people see this landscape as, in his words, “just a desert”, the Aboriginal people of the region 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 *ilīs* (‘wild figs’) growing, and that *kupaṭa* (‘wild plums’), round there, and these rock holes and euros ..., wallabies. Then away from the rock we call *puṭi*, which is thick timber land. And *puṭi*, which is *karukaru*, that’s where the kangaroos live in the watercourse way, because more grass grows there ...

(Lester in Miller, 2007)

A senior Anangu woman, reputed for her knowledge of the land, tells a story about her experiences in ‘*puṭi*’, an eco-zone often glossed in English as ‘woodland, bush’, and the abundance of ‘*mai*’ ‘plant food’ and ‘*kuka*’ ‘game’ there, in Example (8).

- (8) *Ngayulu ankupai puṭikutu. Ngayulu nyinapai mai punungka – kampurara-pa. punu mai kutjupa-kutjupa tjuta tjuta – kulypurpa mai kutjupa wiriny-wirinyapa, tawal-tawalpa. Uwa nyara palu tjunama manama mai ngalkupai. Munu rapita, kuka rapita, tinka mamalu kuku katipai maḷu kankuru mamangku.*

ngayulu anku-pai puṭi-kutu ngayulu nyina-pai mai–
 1.SG go-CHAR puṭi-ALL 1.SG sit-CHAR plant.food
 punu-ngka kampurara-pa punu mai kutjupa-kutjupa tjuta
 tree/bush-LOC desert.raisin tree/bush plant.food various PL
 kulypurpa mai kutjupa wiriny-wirinyapa tawal-tawalpa. Uwa
 gooseberry plant.food kind bush.tomato gooseberry yes
 nyara palu tjuna-ma mana-ma mai ngalku-pai. munu
 DEM of.course put-IMP get-IMP plant.food eat-CHAR CONJ
 rapita kuka rapita tinka mama-lu kuku kati-pai
 rabbit game rabbit goanna dad-ERG game bring-CHAR
 maḷu kankuru mama-ngku.
 plains.kangaroo kangaroo dad-ERG

‘I would go into *puṭi*. There would be *mai* in the *punu* – desert raisin, a lot of kinds of *mai* in the trees – large wild gooseberry, bush tomato, small wild gooseberry. Yes, but of course, those ones there, keep putting them aside, keep getting them, we would eat the *mai*. And rabbit, rabbit meat. Dad would bring goanna, he would bring kangaroo.’

(Field recording, NE.PYW.020609, see Appendix 1)

In this section, I provide a general introduction to words for eco-zones in Pitjantjatjara/Yankunytjatjara. To put these eco-zone words and concepts into context, I provide some background on Anangu culture at large.

The *Visitor Guide* to the Uluru-Kata Tjuta National Park, jointly managed by Anangu traditional owners and the Director of National Parks, contains the following information 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.

(UKTNP Guide, 2012, p. 28)

The following kinds of places are among Anangu eco-zones (I include English glosses in brackets): *puti* (‘woodland, bush’), *puli*₃ (‘rocky, hilly country’, henceforth mostly referred to as *puli*), *tali*₃ (‘sandhill country’, henceforth mostly referred to as *tali*), *pila* (‘spinifex plains’), and *karu*₂ (‘creeks and their banks’).³⁰

Anangu, traditionally, lived nomadically, harvested food and other resources, and hunted game (Bryce, 1997; Gould, 1969; Wingfield & Austin, 2009). Today in Anangu communities, and on Anangu homelands, going on bush trips to pursue these activities is a popular cultural practice. These activities are not, in the main, solely used for food, but rather for recreation, and maintaining connection to, and caring for, their country. Anangu use guns to shoot game, metal crowbars and shovels to dig in the ground (shovels can also be used to kill small animals), and storage containers for storing plant material, edible grubs, and edible ants (see also Young, 2001, p. 40). These tools have replaced spears, wooden hitting or throwing sticks, wooden digging sticks, and wooden bowls, which were formerly used (Hamilton, 1990, p. 212).

The traditional diet of Anangu consisted of about 85 per cent plant food, known as ‘mai’. More than 100 species of plants could be eaten in the west of the Western Desert (Keen, 2004, pp. 31–32, 80). This variety of foods reflects the depth of the ecological knowledge of Anangu who lived traditionally (Lester, 1993, p. 10; Goddard, Kalotas, & Yankunytjatjara speakers, 1995). In addition to being used as food, plants also provided material for medicine, tools, weapons, ceremonial objects, and shelter (see, e.g., Clarke, 2012, p. 6). As discussed in Section 2.4, the scarcity of water in the dry environment of the Western Desert used to be a

30. Other distinctions may also be made, for example, *ulupuru*, a subdivision of *puti* (‘woodland, bush’), particularly associated with the *malu* (‘plains kangaroo’) (Baker & Mutitjulu community, 1992, p. 179). On the slightly different ecological zones of Martu, another Western Desert group, see Walsh (1990).

dominant factor in the traditional way of life of Anangu, whose food supply was dependent on rainfall (Keen, 2004, p. 32).

The availability of different foods according to the time of year is reflected in season vocabulary. In the words of a traditional owner of the park:

Anangu don't go by piranpa [white people, H.B.] dates, we only go by our own seasons ... We know which fruits and foods we get during our seasons – that's what is important to us. (UKTNP Guide, 2012)

One such season is 'piriyakutu':

This is when the piriya comes – a warm steady wind from the north and west. Animals breed. Food plants flower, fruit and seed. Hibernating reptiles come out and the honey grevillea is in bloom. This is a good time for hunting malu (kangaroo). (*loc. cit.*)

'Piriyakutu', which is followed by the season of 'mai wiyaringkupai' (literally 'food would finish'; PYED, p. 65) is when Anangu have the richest food supply (on Ngaatjatjara seasons, see also Ellis, 2016, p. 84). 'Piriyakutu' is a time for hunting (Lester, 1993, p. 20) and plant food is in abundance as well, as evidenced by Example (9):

- (9) *Ka piriyakutu mai pulka pakani.*
 ka piriya kutu mai pulka paka-*ni*
 CONJ Spring plant.food a.lot grow-PRS
 'In spring, lots of plant food comes up.' (PYED, p. 137)

The Anangu division of the country into certain eco-zones or locales is based on the landscape, and the plants and animals which live within them (Goddard et al., 1995, p. 11). The eco-zones of Anangu are well documented in literature from various disciplines. Anangu and non-Anangu researchers have worked on collaborative projects about these zones which document traditional ecological knowledge. An example is provided by the biological surveys of Pitjantjatjara and Yankunytjatjara lands (e.g. Baker & Muñitjulu community, 1992; Robinson et al., 2003). One collaborative study gives a table containing the Pitjantjatjara classifications alongside the scientific classifications, for example, "puli – monoliths" (Baker & Muñitjulu community, 1992). In some other documents put out by the Uluru-Kata Tjuta National Park, species of flora and fauna are given their Pitjantjatjara/Yankunytjatjara names and their habitats are specified, as in Table 5.1, which reproduces an excerpt from a larger list.

Table 5.1. Excerpt from *Animals: Checklist of the vertebrate fauna of Uluru-Kata Tjuta National Park* (UKTNP Animals, 1996)

ini Ananguku (Anangu name)	common name	scientific name	park habitats
itjaritjari	marsupial mole	<i>Notoryctes typhlops</i>	pila, tali

It is important to note that places such as ‘puti’ and ‘puli’ are habitats. What grows and lives in them is important, as is what one does in them. A lot of the time, these eco-zone terms are used with the locative suffix *-ngka*, for example, *putingka* ‘in the woodland, bush’, *pilangka* ‘on the spinifex plains’, and so on. In (10), a Yankunytjatjara man speaks about how in ‘puti’ (*putingka*), one keeps an eye 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.

- (10) *Ka ma-nyakukatira putingka nyakukatira nyakupai ilurangkula nyangatja ngaranytjala. Uti kutu.*

ka ma-nyakukati-ra puti-ngka
 CONJ outward-looking.while.going.along-SER bush-LOC
 nyakukati-ra nyaku-pai ilurangku-la nyangatja
 watching.while.going.along-SER see-CHAR stand.out-SER DEM
 ngara-nytja-la. Uti kutu.
 stand-NMLZ PRT really

‘Keeping a look out as you go along – as you travel through the scrub country you see the desert mulga standing out clearly there. Really plainly.’

(Kanytji in Goddard et al., 1995, pp. 45–46)

The suffix *-tja*, meaning ‘of/from/associated with’, which derives adjectives from nouns, can be added to eco-zone words (PYED, p. 166). In (11), ‘mai’ ‘food’ is described as *putitja* ‘belonging in the woodland, bush’, and this common combination is translated into English as either ‘bush food’ or ‘bush tucker’.

- (11) *Palu nganana wanka para-ngarapai. Nganampa mai tjuta nganana putitja ngalkupai tjala, maku, malu.*

Palu nganana wanka para-ngara-pai Nganampa mai
 PRT 1PL healthy around-stand-CHAR 1PL.POSS plant.food
 tjuta nganana puti-tja ngalku-pai tjala
 PL 1PL bush-ASSOC eat-CHAR honey.ant,
 maku malu
 witchetty.grub plains.kangaroo

‘We used to be healthy moving around (the country). Our food would be bush food, honeyants, witchetty grubs, kangaroo.’ (PYED, p. 148)

Today, in Ernabella, it is mainly senior people who possess a deep knowledge of the country, and its flora and fauna. Younger Anangu in the community told me that they do not necessarily have a reason to use eco-zone words, even though they may know them, having been told about them by grandparents (Narelda Adamson, Priscilla Adamson, personal communication, Ernabella 2009). Often the word *puti* is applied to all the country outside settlements (Sandra Ken, personal communication, Ernabella 2009).

5.4 *Puti* eco-zone in Pitjantjatjara/Yankunytjatjara

The first eco-zone word I discuss is *puti*. The translation of *puti* given by Anangu to English speakers is ‘bush’. *Puti* is explicated in [B]. The explication contains both Pitjantjatjara/Yankunytjatjara semantic molecules, indicated with [m], such as, ‘mai’ ‘plant food’, and relevant Pitjantjatjara/Yankunytjatjara exemplars, indicated with [m*], such as, ‘kampurarpa’ ‘desert raisin’. The components are justified and discussed after the explication.

- [B] *puti* (Pitjantjatjara/Yankunytjatjara)
- a. places of one kind
 - b. these places are very big places
 - c. people can see a lot of manta₂ [m] ‘earth’ in these places
 - d. there are punu [m] ‘trees/bushes’ of many kinds in these places
 - kurku [m*] ‘mulga’ is one, ilykuwara [m*] ‘witchetty bush’ is another
 - e. small things of many kinds grow in these places
 - tjanpi [m] ‘spinifex grass’ is one of these kinds
 - f. at some times, there is mai [m] ‘plant food’ of many kinds in these places
 - kampurarpa [m*] ‘desert raisin’ is one of these kinds
 - g. at some times, there is kuka [m] ‘game’ of some kinds in these places
 - malu [m*] ‘plains kangaroo’ is one of these kinds
 - h. at some times, there are things under the manta₁ [m] ‘ground’ in these places
 - i. at some times, there can be kapi [m] ‘water’ on the manta₁ [m] ‘ground’
 - j. people think about these places like this:
 - “often people want to do things of many kinds in these places”
 - k. they can know it is like this:
 - “it is good to do some of these things at some times, not at other times
it is good to do some of these things to some things, not to other things”

I will now discuss the components of explication [B] of *puti* and provide background information about this kind of place.

Component (b) is concerned with the size of ‘puti’ – it must be a substantial area.

Component (c) covers the place of ‘earth’ or ‘manta’ in the Pitjantjatjara/Yankunytjatjara concept of ‘puti’. As written in one of the collaborative studies cited earlier, soil is an important part of Anangu landscape identification (Baker & Mutitjulu community, 1992, p. 179). The material from which a kind of place is composed is a prominent distinction in the semantics of Pitjantjatjara/Yankunytjatjara landscape terms, as in the case of the standing-water place words *tjukula*, based on ‘rock’ ‘puli’, and *tjintjira*, based on ‘earth’ ‘manta’ (see Bromhead, 2017, pp. 198, 201, 203). I propose that ‘earth’ (‘manta₂’) features as a semantic molecule in the meaning of

puti. Furthermore, the ‘earth’ (*manta*₂) – ‘rock’ (*puli*₁) distinction is borne out in the difference in the semantics of the eco-zone terms *puti* and *puli*.³¹

Component (d) treats the vegetation of ‘*puti*’, its ‘*punu*’ ‘trees, bushes’. The lexical form *puti*, like the Australian English *bush*, is polysemous (see Chapter 7). *Puti* can denote a kind of vegetation which grows in the eco-zone ‘*puti*’, as well as the area itself. In PYED, this meaning is defined as “bushes, scrub”; it is illustrated in (12). ‘*Puti*’ in this sense can be described as *tjata* ‘thicket’, or as relatively thin, *puti mankurpa*, lit., ‘*puti* few’ – descriptions which reflect the importance of the traversability of land for the people who live in it (Garde, 2009; Rosemary Armstrong, Narelda Adamson, personal communication, Ernabella 2009).

- (12) *Tjitji tjuta, mamu pulkanya nyinanyi puti nyarangka.*
 Tjitji tjuta, mamu pulkanya nyina-nyi puti nyara-ngka
 child PL monster big sit-PRS bush there-LOC
 ‘Kids, there’s a big monster over there in the bushes.’ (PYED, p. 148)

Punu is not exactly equivalent in meaning to the English word *tree*. In its core meaning, *punu* denotes a large woody plant, and this sense can be glossed as ‘trees, bushes.’³² Example (13) illustrates this sense of *punu*:

- (13) *Tjitji tjuta punungka kalpanyi.*
 tjitji tjuta punu-ngka kalpa-nyi
 children PL tree/bush-LOC climb-PRS
 ‘The children are climbing a tree.’ (PYED, p. 145)

The first line of component (d) states that there are *punu* ‘trees/bushes’ of many kinds in ‘*puti*’. As touched on in Section 1.8, the explications for Pitjantjatjara/Yankunytjatjara eco-zone words include exemplars, salient examples of categories used in the explications, e.g., ‘*punu*’, ‘*mai*’, and so on. As Goddard notes in his introduction of exemplars in NSM research, they have a “correspondence with ‘natural’ explanatory strategies” (2017a, p. 255). In stories about eco-zones, particular examples of categories were mentioned.

The fact that all the molecules and exemplars in the reductive paraphrases of eco-zone words would have to be themselves explicated indicates the vast amount of compressed ecological knowledge embedded in the semantics these locale terms.

31. As noted in 2.4, the word *manta* (*pana*) is polysemous. Subscripts are used to distinguish *manta*₁ ‘ground’ from *manta*₂ ‘earth’.

32. The word *punu* is polysemous, and can also denote a piece of wood, a stick, anything made of wood (especially artefacts and implements), and plants in general, including grasses, vines, and fungi (PYED, p. 145).

Two salient examples of ‘*punu*’ were prominent among those mentioned by senior *Anangu* women I consulted on the APY Lands. The second line of (d) gives these two highly salient exemplars of ‘*punu*’ which grow in ‘*puti*’: ‘*kurku*’ ‘*mulga*’ and ‘*ilykuwara*’ ‘witchetty bush’.

The first exemplar of ‘*punu*’, ‘*kurku*’, an acacia, is a kind of low, stunted, hardy tree with longish leaves (Goddard et al., 1995, p. 38). ‘*Kurku*’ dominate ‘*puti*’, and have many uses (UKTNP Handbook, 2012, p. 130). Their wood can be used for manufacturing objects and constructing shelters, or for firewood. Seeds from ‘*kurku*’ can be processed and eaten. The tree also secretes sap that can be consumed. *Kurku* is a general word; there are specific varieties such as ‘*wintalyka*’. The following snippet (14), which includes the words *kurku* and *wintalyka*, refers to the use of ‘*kurku*’ wood as a material for constructing a ‘*wiltja*’ ‘shelter’.

- (14) *kurku uwa wintalyka punu tri ... kampa wiltja.*
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, NE.PYW.020609, see Appendix 1)

The second exemplar, ‘*ilykuwara*’, is a grey-green shrub with rounded leaves. It can also have either a single trunk or a number of trunks. The plant’s leaves are long with rounded tips (Goddard et al., 1995, p. 62). ‘*Maku*’ (‘witchetty grubs’) live in the roots of ‘*ilykuwara*’ and are dug out for food in the right seasonal conditions, mostly by women. This will be touched on later in this section.

In addition to the larger ‘*punu*’, small plants of many kinds grow in ‘*puti*’. Component (e) treats the small things of many kinds that grow there. Referred to in (e) is ‘*tjanpi*’ ‘*spinifex*’, a common, dry grass which grows in clumps in ‘*puti*’ (and also in other eco-zones, particularly ‘*pila*’ ‘*spinifex plains*’). ‘*Tjanpi*’ was traditionally used to make shelters, to make ‘*kiti*’ (an adhesive gum), and for weaving, a practice which continues to the present day (PYED, p. 172). In (15), a senior *Anangu* woman expands on the use of ‘*tjanpi*’ to make ‘*kiti*’.

- (15) *Tjanpi panya kiti. Kiti. Kiti palyalpai. Mirungka, wanangka, nyaangka kulū palyalpai. Wira katakaṭinyangka kiti tjunku-pai kulatangka kiti tjunku-pai.*
tjanpi panya kiti. kiti. kiti palyal-pai. miru-ngka
spinifex PRT resin resin resin make-CHAR spear.thrower-LOC
wana-ngka nyaa-ngka kulū palyal-pai wira
digging.stick-LOC what-LOC else make-CHAR carrying.dish
katakaṭi-nyangka kiti tjunku-pai kulata-ngka kiti
break-CIRC resin put-CHAR spear-LOC resin
 ‘Spinifex, you know, resin, they would fix it onto spearthrowers, digging sticks, on what else as well? They would fix carrying dishes when they’d cracked. They would put resin on spears.’ (Field recording, TS.P.UR.110609, see Appendix 1)

Components (f) and (g) cover the two main Anangu categories of food, i.e., ‘mai’ ‘plant food’ and ‘kuka’ ‘game’, both of which are found in ‘puti’. Example (8) named a number of kinds of ‘mai’, and attests to the importance of ‘mai’ “of many kinds” (“mai kutjupa kutjupa tjuṯa”) to the concept of ‘puti’.

The exemplar included in (f) is ‘kampurarpa’ ‘desert raisin’, sometimes known as ‘bush tomato’, an important kind of ‘mai’, a sweet, yellow fruit that can be eaten either fresh or dried (PYED, p. 33; UKTNP Handbook, 2012, p. 135). The word *kampurarpa* and its association with ‘puti’ is illustrated in (16).

- (16) *Ka tjana kampurarpa nyanga palunya tjananya iriti ngalkunu. Ka kuwari kulu nganana ngalkupai. Minyma tjuṯangu kampurarpa uralpai putiṅka munu ngura kutu katipai. Ka tjitji tjuṯa pukularinyi. Munuya pukulpa ngalkupai mai kampurarpa, mai wirunya.*

Ka tjana kampurarpa nyanga palunya tjananya iriti
 CONJ 3PL kampurarpa DEM 3S.ACC 3PL.ACC old.days
 ngalku-nu. Ka kuwari kulu nganana ngalku-pai minyma
 eat-PST CONJ today too 1PL eat-CHAR senior.woman
 tjuṯa-ngku kampurarpa ural-pai puti-ngka munu ngura kutu
 PL-ERG kampurarpa gather-CHAR puti-LOC CONJ place ALL
 kati-pai ka tjitji tjuṯa pukulari-nyi munu-ya pukulpa
 bring-CHAR CONJ child PL feel.pleased-PRS CONJ-3PL happy
 ngalku-pai mai kampurarpa mai wiru-nya
 eat-CHAR mai kampurarpa mai lovely-ACC

‘Our ancestors ate *kampurarpa*, then. And nowadays we eat them, too.
 Women gather desert raisin in *puti* and carry them home. This pleases the
 children. They enjoy eating *kampurarpa*. Wonderful food!’

(Makinti Minutjukur, in HALT, 1991, p. 38)

Common kinds of ‘kuka’ ‘game’ in ‘puti’ include, most prominently, ‘malu’ ‘plains kangaroo’. It is used as an exemplar in (g). ‘Malu’ 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 Example (8) in Section 5.3, in which the story teller’s father brings home ‘kuka’ for his family. Example (17) similarly depicts a father hunting ‘malu’ in ‘puti’.

- (17) *Ka ngayuku mama maluku rawa ankupai putikutu.*
 ka ngayuku mama malu-ku rawa
 CONJ 1SG.POSS father plains.kangaroo-PURP always
 anku-pai puti-kutu
 go-CHAR puti-ALL

‘My father was always going into *puti* to hunt for plains kangaroos.’

(PYED, p. 153)

‘Tinka’ ‘goanna’ and, since their introduction from Britain, ‘rapita’ ‘rabbits’ are also hunted for food in ‘puti’. Example (18) is a description of adult men taking uninitiated boys into ‘puti’ to teach them how to hunt for ‘kuka’.

- (18) *Tjana wati pulka tjuṭaṅku tjananya para-katingi anku-pai puti kutu, kukaku katipai. Munuya ngalya-pitjapai mungatji.*
 Tjana wati pulka tjuṭa-ṅku tjana-nya para-kati-ṅgi anku-pai puti
 3PL man big PL-ERG 3PL-ACC around-take-PST go-CHAR puti
 kutu kuka-ku kati-pai munu-ya ngalya-pitja-pai mungatji
 ALL game-PURP take-CHAR CONJ-3PL this.way-come-CHAR evening
 ‘All of them were taken into the puti by the older men to hunt and bring
 back game. They’d return at dark’ (Munti in HALT, 1991, p. 28)

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 that, in the right seasonal conditions, can be found under the ground in ‘puti’. A lot of collection of food was done by digging in the earth and extracting foodstuffs. The most salient of these kinds of foods are ‘tjala’ ‘honey ants’ and ‘maku’ ‘witchetty grubs’, both delicacies. These foods are still collected by contemporary Anangu women, both young and old (see descriptions in Ellis, 2016, p. 76; HALT, 1991; Young, 2006, pp. 43–44).

Women go on bush trips and dig down into honey ant chambers with crowbars and shovels. Children especially love the sweet liquid that can be squeezed from the bellies of the ants. The word *tjala* was prominent in accounts about ‘puti’, and ‘tjala’ are often described as *wiru* ‘lovely’ because of their sweet taste. In Example (19), a senior woman tells of going into ‘puti’ where ‘tjala’ are collected.

- (19) *Putiṅka nganana nyakupai nganana anku-pai puti-kutu maiku mai wiru tjuṭaku. ... munu nganana piruku mukuringkupai tjalaku. wiru tjala ngalkupai wiru.*
 puti-ṅka nganana nyaku-pai nganana anku-pai puti-kutu
 puti-LOC 1PL search-CHAR 1PL go-CHAR puti-ALL
 mai-ku mai wiru tjuṭa-ku. ... munu nganana piruku
 plant.food-PURP plant.food lovely PL-PURP CONJ 1PL next
 mukuringku-pai tjala-ku wiru tjala ngalku-pai wiru
 like-CHAR honey.ant-PURP lovely honey.ant eat-CHAR lovely
 ‘We would search in puti, we would go into puti for food ... And next we
 liked going for honey ants – we love eating honey ants.’ (Field recording,
 ADC.PA.EAC.240609, see Appendix 1)

Anangu also dig for ‘maku’ ‘witchetty grubs’, as mentioned earlier in the discussion of ‘ilykuwara’ ‘witchetty bush’, and illustrated in (20).

- (20) *Paluru tjana makuku yanu, maku ilykuwaraku.*
 paluru tjana maku-ku ya-nu maku ilykuwara-ku
 3PL 3PL grub-PURP go-PST grub witchetty.bush-PURP
 ‘They went for grubs, witchetty grubs.’ (PYED, p. 65)

Component (i) accounts for the all-important desert resource of water. For example, in ‘puti’ can lie ‘tjukula’ ‘rockholes’ like small dots, which are unspectacular compared with those in the hills (‘puli’), but can contain water deep inside. After rain in ‘puti’, there can also be ‘tjintjira’ ‘claypans’ (see Bromhead, 2017, pp. 200–202).

Component (j) portrays the Anangu perception of ‘puti’ as a place where people obtain resources based on their knowledge of the land and the seasonal conditions. It includes all the human activity which takes place to get ‘punu’, small plants, ‘mai’, ‘kuka’, ‘things under the ground’, and ‘water’. Examples of the “things of many kinds” which people often want to do in ‘puti’ are: ‘katinyi’ ‘take’ (as in *katipai*, characteristic form), in (8), (16), and (18); ‘nyakunyi’ ‘search’ (as in *nyakupai*, characteristic form), in (19); as well as ‘nyaruni’ ‘burn off country’, to create new growth, clear vegetation, and manage the land (see 6.4).

There are also common collocations of the verb *ananyi* ‘go’ and a noun with the purposive suffix *-ku*; the collocations describe going after 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 ‘puti’, and do so today during ceremonial business and sorry (mourning) camps, as well as on extended bush trips (Young, 2001, pp. 41–45).

Component (k) is a broad knowledge component. It portrays the fact that to move through ‘puti’ and use its plants, food, game, water, and other resources, it is necessary to know when it is best to do these particular things. For example, there are particularly good times to dig ‘maku’ and some ‘ilykuwara’ are good sites to choose.

5.5 *Puli* eco-zone in Pitjantjatjara/Yankunytjatjara

The second eco-zone word I will discuss is *puli*₃, which can be glossed ‘rocky, hilly country’ and consists of rocky hills and outcrops and the area around their base (see 3.2 on the polysemy of *puli*). Traditionally, men climbed the steep country in pursuit of animals well adapted to a steep rocky environment. Women, by contrast,

tended to pick plant food at the base of the steep slopes (Ukula Minutjukur, in HALT, 1991, p. 22).

One source of plant food that grows in ‘pul̩i’ is ‘il̩i’ ‘wild fig’, a kind of fruit bearing tree, as in (21). The fruit from ‘il̩i’ used as food is referred to as *mai il̩i* ‘wild fig as plant food’. According to Goddard et al., *il̩i* ‘wild fig’ is spoken of as an important food, *mai pul̩ka*, *mai* ‘plant food’, *pul̩ka* ‘big, important’ (1995, p. 137). They go on to write, “the red, ripe fruits [of ‘il̩i’, 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” (*loc. cit.*).

- (21) *Ili pul̩ingka ngarapai punu pul̩kanya, munu kur̩uringkula mai wir̩uringkupai.*
 il̩i pul̩i-ngka ngara-pai punu pul̩kanya munu kur̩uringku-la
 il̩i pul̩i-LOC stand-CHAR punu big CONJ ripen-SER
 mai wir̩uringku-pai.
 plant.food become.nice-CHAR
 ‘Ili is a large tree found in pul̩i, and the fruit is nice when it’s ripe.’
 (PYPD, p. 115)

Today, many women know the locations of particularly good ‘il̩i’, and drive out to collect fruit in season.

Other kinds of ‘mai’ ‘also grow in ‘pul̩i’, as in (22), which speaks of *awalyuru* ‘bush currant’.

- (22) *Awalyuru mai maru tju̩tatjara pul̩ingka ngarapai.*
 awalyuru mai maru tju̩ta-tjara pul̩i-ngka ngara-pai.
 bush.currant plant.food dark PL-HAVING pul̩i-LOC stand-CHAR
 ‘The bush currant has many dark fruits and grows in pul̩i.’ (PYPD, p. 115)

‘Pul̩i’ is hard to traverse, one often *tatini* ‘climbs’ in this kind of place, as discussed in 3.2. The animals ‘kanya̩a’ ‘hills kangaroo’ and ‘waru’ ‘rock wallaby’ have feet designed to grip rock, which enable them to live in steep environments, as opposed to ‘malu’ ‘plains kangaroo’ (associated with ‘put̩i’), which have large claws for digging into soil. This distinction is explained in (23) and (24) (see also UKTNP Fauna, 2007, pp. 1–2).

- (23) *Ka kanya̩a apungka kutju nyinapai, munu apungka wala anukupai. Panangka paluru put̩u anukupai.*
 ka kanya̩a apu-ngka kutju nyina-pai munu apu-ngka wala
 CONJ hills.kangaroo apu-LOC only live-CHAR CONJ apu-LOC fast
 anku-pai pana-ngka paluru put̩u anku-pai
 go-CHAR ground-LOC 3.S can’t go-CHAR
 ‘And the hills kangaroo only lives in the rocky hilly country, and travels fast on the rocks. He can’t travel on the flat ground.’ (Kirke, 1987, p. 74)

- (24) *Maḷu panangka nyinapai, ka kanyaḷa apungka nyinapai.*
 maḷu pana-ngka nyina-pai ka kanyaḷa
 plains.kangaroo ground-LOC live-CHAR CONJ hills.kangaroo
 apu-ngka nyina-pai
 rocky.country-LOC live-CHAR

‘The plains kangaroo lives on the plains, and the hills kangaroo lives in the rocky country.’ (ibid., pp. 74–75)

Returning to the vital desert resource of water, Anangu collect water in ‘puli’ ‘rocky, hilly country’, as well as in ‘puti’. As Young points out, “[r]ocky hills create run-off as well as containing rock holes, so in this sense hills and water go together for Anangu” (Young, 2006, p. 241). ‘Puli’ contains ‘tjukuḷa’ ‘rockholes’, ‘warku’ ‘rockpools’, and ‘waḷa’ ‘waterfalls’ (see Bromhead, 2017, pp. 197–200; James, 2006).

As mentioned, men would often venture into ‘puli’ on hunting trips, but women tended to stay at the base. And, for all, ‘puli’ is a harder environment to traverse than ‘puti’ (see, Garde, 2009, on landscape categorization in Western Arnhem Land).

An explication of *puli*₃ follows in [C].

- [C] *puli*₃ (Pitjantjatjara/Yankunytjatjara)
- a. places of one kind
 - b. these places are very big places
 - c. people can see a lot of puli₂ [m] ‘rocky outcrop, hill’ in these places
 - d. because it is like this, people can’t move in these places,
 like they can move in other places
 - e. there are not many punu [m] ‘trees/bushes’ in these places
 - f. not many small things grow in these places
 - g. at some times, there is mai [m] ‘plant food’ of some kinds in these places
 - ili [m*] ‘wild fig’ is one of these kinds
 - h. at some times, there is kuka [m] ‘game’ of some kinds in these places
 - kanyaḷa [m*] ‘hills kangaroo’ is one of these kinds
 - i. at some times, there can be kapi [m] ‘water’ in these places
 - j. people think about these places like this:
 “often people want to do things of many kinds in these places”
 - k. they can know it is like this:
 “it is good to do some of these things at some times, not at other times
 it is good to do some of these things to some things, not to other things”

Explication [C] includes the same first two components as explication [B] for *puti*.

In component (c), as follows on from the regular polysemy of the eco-zone word under discussion, *puli*₂ ‘rocky outcrop, hill’ (see 3.2) is included as a molecule. ‘*Puli*₂’ ‘rocky outcrops, hills’ are the essential make-up of ‘*puli*₃’ ‘rocky, hilly country’. Therefore, this molecule brings with it the semantic components contained in the explication of *puli*₂. 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] (*apu/puli*₁ [m]) in this place”. Furthermore, given that the meaning of *apu/puli*₂ contains the molecule ‘*apu/puli*₁’ ‘rock, rocks’, this molecule also comes into the meaning of *apu/puli*₃. 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 *puli* rise out, so to speak, from one another. The red rock ‘*puli*₁’, which one sees as a great mass, becomes a rocky outcrop or hill ‘*puli*₂’, and the rocky outcrop or hill becomes part of the eco-zone ‘*puli*₃’.

Component (d) portrays the hindrance that ‘*puli*’ causes people when they want to move in the area. This component is not included in the explication of *puti* as that place is traversed more easily.

Component (e) presents ‘*puli*’ as relatively clear of ‘*punu*’ ‘trees/bushes’, unlike ‘*puti*’, which has many ‘*punu*’. Likewise, component (f) portrays ‘*puli*’ 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 grow in ‘*puli*’; rather, there are not many. ‘*Puli*’ is “sparsely vegetated by spinifex *tjanpi* and various Acacias or wattles” (Goddard et al., 1995, p. 12).

One prominent plant which grows in the lower parts of ‘*puli*’ is ‘*mingkulpa*’ ‘native tobacco’, the large leaves of which are harvested by Anangu women. Dried leaves mixed with ash can be sucked on to obtain a slightly narcotic effect. ‘*Mingkulpa*’ from ‘*puli*’ is the strongest kind and the favoured one (Wari & Summerfield, 2016, pp. 209–210; Young, 2005, pp. 68–69). The picking of ‘*mingkulpa*’ from favoured places, *minkul* farms, is portrayed in the following quotation from Mavis Wari and Jennifer Summerfield’s piece ‘The bush tobacco story’ in the collection *Desert Writing*:

Spring is the best harvest. *Minkulpa* grows everywhere in the Anangu Lands at that time. It has a white flower and broad green leaves. It is not a really tall plant but stands by itself. Often *minkulpa* grows in clumps for easy picking. Certain places are known for their regular and abundant crops. These places are often called *minkul* farms; it’s an affectionate term. When the farms are ready to harvest we might pick enough to fill one blanket each, or more.

(Wari & Summerfield, 2016, pp. 209–210)

Component (g) 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, ‘pul̩i’ is not as abundant in food as ‘puti’. However, some foods, ‘il̩i’ ‘wild fig’ in particular, grow there, especially around the base of ‘pul̩i’, as discussed above. ‘Il̩i’ 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”.

Component (h) treats the ‘kuka’ ‘game animals’ which live in ‘pul̩i’. As with ‘mai’ in ‘pul̩i’, the amount of ‘kuka’ is said to vary, and the phrase “at some times” is used. *Kanyaḷa* ‘hills kangaroo’ appears as an exemplar in this component. Example (25) illustrates the use of the words *kuka* and *kanyaḷa*; it is taken from an account about traditional Anangu hunting. (See also Lester, 1993, pp. 31–32 on climbing in the hills ‘pul̩i’ to hunt ‘kanyaḷa’ around Mimili on the Anangu Pitjantjatjara Yankunytjatjara Lands.)

- (25) *Munuya rawa ankupai exercise pul̩kanya palyalpai para ngurira kukaku ankupai kutjupa kutjupa kutjupa tjuṭa pul̩ingka tatilpai kanyaḷaku munuya wakara katipai tjitjiku munuya munga winkingga ...*

munu-ya rawa anku-pai exercise pul̩kanya palyal-pai para
 CONJ-3PL always go-CHAR exercise big make-CHAR around
 nguri-ra kuka-ku anku-pai kutjupa kutjupa tjuṭa pul̩i-ngka
 seek-SER game-PURP go-CHAR kind kind PL pul̩i-LOC
 tatil-pai kanyaḷa-ku munu-ya waka-ra kati-pai
 climb-CHAR hills.kangaroo-PURP CONJ-3PL spear-SER bring-CHAR
 tjitji-ku munu-ya munga winki-ngka ...
 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 pul̩i 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 ...’ (Jennifer Summerfield, in HALT, 1991, p. 78)

The association between water and ‘pul̩i’ has been treated in the previous discussion. It is reflected in component (i), which is the same as the component that appeared in explication [B] of *puti*.

In component (j), one finds a conceptualization of ‘pul̩i’ as a place of activity. As in the case of the explication of *puti*, there is the line “often people want to do things of many kinds in these places”. Two examples are ‘wakan̩i’ ‘spear’ (as in (25), which uses *wakara*, serial form of *wakan̩i*), and ‘tatin̩i’ ‘climb’ (as in (25), which uses *talilpai*, characteristic form of *tatin̩i*). The combination of the verb *ananyi* ‘go’

and a noun with the purposive suffix *-ku*, used to describe the action of going to get a certain resource, is also used in relation to ‘puli’. One example is “ankupai kukaku” (*ankupai*, characteristic form of *ananyi* and *kuka* + *-ku*) in (25).

As in explication [B] of *puti*, component (k) conveys more of the nature of the knowledge about ‘puli’. It encompasses seasonal knowledge and familiarity with the land. As shown in the quote from Mavis Wari and Jennifer Summerfield, minkul farms are dependant on women’s knowledge of the best sites and when they will be fecund.

5.6 *Pila* and *tali* in Pitjantjatjara/Yankunytjatjara

Further Pitjantjatjara/Yankunytjatjara eco-zone words include *pila* ‘spinifex plains’ and *tali* ‘sandhill country’. Full discussions of *pila* and *tali* will not be pursued in this book. However, I will suggest a few components that could form explications of *pila* and *tali*.

Pila is illustrated in Examples (26) and (27), which include the word *tjanpi* ‘spinifex’.

- (26) *Mutinka panya pilangka ngarapai tjanpitjarangka.*
 mutinka panya pila-ngka ngara-pai tjanpi-tjara-ngka
 skink PRT pila-LOC stand-CHAR spinifex-HAVING-LOC
 ‘The skink lives in plain country covered with grass.’ (PYPD, p. 112)

- (27) *Tjanpi panya pilangka ngarapai tjuta kititjara watingku mantjintjaku.*
 tjanpi panya pila-ngka ngara-pai tjuta kiti-tjara
 spinifex PRT pila-LOC stand-CHAR PL resin-HAVING
 wati-ngku mantji-ntjaku
 man-ERG get-PURP

‘The spinifex grass that grows in *pila* has resin that the men gather.’
 (PYPD, p. 71)

Component (b), “these places are very big places”, found in the explications of *puti* [B] and *puli*₃ [C], would be likely part of the meaning of *pila* as it is also an eco-zone. I posit a component for *pila* which accounts for the fact that they are relatively open plains and allow people to move without obstacle. The component is phrased in terms of people’s visual experience in ‘pila’: “people can see many parts of these places because there is not a lot of ‘punu’ ‘trees/bushes’ [m] in these places”.

‘Tjanpi’ ‘spinifex’, referred to in Example (26), is the most notable type of vegetation in ‘pila’; it 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, p. 13, on the plant food in ‘pila’). It is unclear to me whether this ‘mai’ would be “of some kinds” or “of many kinds”. Furthermore, I also posit the component “at some time, there is ‘kuka’ ‘game’ of some kinds in these places”.

To Anangu, ‘pila’ is a place where people manage the land and obtain resources. The same components (j) and (k) which were used in the explications of *puti* and *puli* could be used for *pila* (see also 6.4 on *nyaru*). One example of a kind of thing people want to do in ‘pila’ is ‘mantjinyi’ ‘gather’ (as in *mantjintjaku*, purposive form of *manytjinyi* in (27)) which would be dependant on season and specific ecological knowledge.

Secondly, I will briefly treat the Pitjantjatjara/Yankunytjatjara eco-zone word *tali* ‘sandhill country’. As mentioned in Section 3.2, *tali* is a polysemous word form which means 1) ‘sandhill sand’ (*tali*₁), 2) ‘sandhill’ (*tali*₂), and 3) ‘sandhill country’ (*tali*₃). Here, I will use *tali* for the eco-zone meaning. *Tali* is illustrated in Examples (28) and (29).

- (28) *Liru panakura talingka nyinapai munu anangu patjara iluntankupai.*

liru panakura tali-ngka nyina-pai munu anangu
snake death.adder tali-LOC sit-CHAR CONJ people
patja-ra iluntanku-pai
bite-SER kill-CHAR

‘The desert death adder lives in sandhill country and when it bites people it kills them.’ (PYPD, p. 113)

- (29) *Wiriny-wirinyapa mai wiru talingka ngarapai tjiwuru-tjiwurungka.*

wiriny-wirinyapa mai wiru tali-ngka
bush.tomato plant.food lovely tali-LOC
ngara-pai tjiwuru-tjiwuru-ngka
stand-CHAR dead.wood-LOC

‘The banana flavoured bush tomato makes good eating and grows in sandhill country where there is dead wood.’ (PYPD, p. 115)

As in the case of *pila*, component (b), “these places are very big places”, found in explications [B] and [C], would be likely part of the meaning of *tali* as it is also an eco-zone. The meaning of *tali*₃ ‘sandhill country’ would contain, as a semantic molecule, “tali₂” ‘sandhill’, because ‘tali₃’ ‘sandhill country’ is composed of ‘tali₂’ ‘sandhills’. In turn, ‘tali₂’ ‘sandhills’ is composed of ‘tali₁’. The relationship between the three senses of *tali* is similar to the relationship between ‘apu/puli₂’ ‘rocky outcrop, hill’ and ‘apu/puli₃’ ‘rocky outcrop, hill’, as seen in component (c) of explication [C].

Another potential component for *tali*₃ is: “people can see a lot of *tali*₂ ‘sandhills’ [m] in these places”. Furthermore, an explication of *tali*₃ would also likely

mention ‘tjanpi’. Components treating the presence of ‘mai’ and ‘kuka’ at some times in these places could also be included. Finally, I propose the component portraying people wanting to do things in places of this kind, as well as a broad knowledge script, both of which appear as components (j) and (k) in explications [A] and [B].

5.7 Concluding remarks

In this chapter, I have compared the meaning of the word *desert* in Australian English with the meanings of a selection of words in Pitjantjatjara/Yankunytjatjara. The Australian English *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 words in the two languages sheds light on two different world-views – a non-Indigenous Australian one, and an Anangu one.

The sense of the Australian English *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 – *desert*. This conceptualization is a result of non-Indigenous Australians’ ways of life and 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, p. 30). More importantly, the food Australians eat comes in the main from agriculture in regions with relatively high rainfall (DAFF, 2012, p. 27). Therefore, non-Indigenous Australians have little 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”. This would be in addition to most, or at least some, of the components included in the explication of the word *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 *puti*, *puli*, *pila*, and *tali* 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 ‘*punu*’ ‘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 over the years. These changes are particularly important to nomadic people 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 explications also include components about human activity in these places, as well as people’s knowledge of the land and the wider environment, which allows them to manage and use the resources of these eco-zones.

One innovation in the explications of eco-zone words in Pitjantjatjara/Yankunytjatjara is the inclusion of exemplars. I hypothesize 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 hypothesis 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 (Baker et al., 1992, pp. 179–180). That said, the two 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 changes occurring over 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, p. 186).

The eco-zone words treated in this chapter are not as widely used in Ernabella as the Pitjantjatjara/Yankunytjatjara words discussed in previous chapters. Words such as *karu* ‘creekline, creek’ and *puli*₂ ‘rocky outcrop, hill’ are part of the ordinary lexicon of Pitjantjatjara/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 ‘*puli*₂’ within Ernabella, and a lot of residents are proud of the larger ‘*puli*₂’ of the Musgrave Ranges around the community.

Eco-zones, by contrast, are of concern to people who move from camp to camp, and obtain food and other resources across different kinds of landscape. Therefore, they need words with which to talk about these kinds of places (see Enfield, 2008, 2015, on the utility of words for landscape categories; also, Mihas, 2015, on discourse functions of landscape terms). For this reason, younger Aṅangu who live in settlements do not have as much reason to be concerned with eco-zone words as they do with words like *karu* and *puḷi*₂. This is a similar situation to the decline in the use of many British landscape terms as a result of urbanization, as discussed in Macfarlane (2015).

As mentioned in 5.3, the word *puḷi* now often denotes all country outside settlements. This sense of *puḷi* fulfils an important discourse function in contemporary times. Aṅangu, for the most part, live in communities, yet remain engaged with surrounding country. Therefore, they need a way to talk about it. Furthermore, the enormous changes wrought by colonization have meant that some older Aṅangu have experienced a more traditional and nomadic way of life in childhood, yet lived in communities in later life. This move into settlements sets up a contrast, e.g., Ernabella vs. ‘puḷi’, not only for these individuals but for the whole community of speakers as part of their consciousness of Aṅangu history. Life stories of senior Aṅangu often begin with, something like, “I was born in the bush”, using *puḷi* with the locative suffix, *puḷiṅka*.

Human intent in the landscape

Paddocks and Meadows

6.1 Modification of the environment is the essence of agriculture

This chapter explores the meanings of a selection of words for kinds of places used for growing food and pasturing animals, and those for places people construct in order to make use of water. Places of this kind are somewhat different to most others explored in this book. Agricultural and pastoral kinds of places, and man-made water sources, have been created by humans: essentially, they are there because people want them to be. Places of this kind may be more subject to “human control and manipulation” (Gelling, 1984, p. 230). Therefore, in semantic explications of these kinds of places, one recurring phrase is “people want this”, or similar.

By contrast, the vast majority of other kinds of places which have been treated thus far in this book are picked out by people to be lexicalized (e.g., *mountain*, *river*), but they were not constructed by people.³³ The human interest comes into the semantic structure 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.

The vocabulary of agricultural and pastoral places, and man-made water sources, is where landscape terminology clearly intersects with social cognition, or, in simpler terms “how people think about other people” (Goddard, 2013, p. 245). The semantics of some landscape terms of these kinds convey notions of personal or private property, also an area of social cognition (see Schlatter, 1973 [1951]). Furthermore, the concept of technology, or people knowing how to do some things with some things, comes into the meanings of the terms under discussion.

33. The exceptions are ‘the seaside’ (4.3), ‘the bush₂’, ‘the bush as a human domain’ (7.4), and ‘the bush₃’, referring to the places in Australia that are outside the major cities (7.5).

In this chapter, I look at a selection of words for plots of land used for agriculture and pasturing animals: *paddock* in Australian English (6.2), *meadow* and *field* in British English (6.3), and *nyaru* in Pitjantjatjara/Yankunytjatjara (6.4). Words for two human-created places from which people gather water are also treated: *dam* in Australian English (6.5) and *tjukitji* in Pitjantjatjara/Yankunytjatjara (6.6). In 6.7, I offer some concluding remarks. The meanings of these words provide an illustration of human intent in the landscape. Furthermore, their senses reflect the different geographies and uses of the land in Britain and Australia.

6.2 Paddocks in Australian English

The word *paddock* in Australian English denotes a pastoral kind of place. This term is from a land that is large and dry in comparison with Britain, the yardstick against which Australia has traditionally been judged.

In the early days of colonial Australia, the word *paddock*, which was used in British English to refer to a small enclosed pasture, underwent semantic change. *Paddock* now means, according to AND, “a piece of land, fenced, defined by natural boundaries, or otherwise considered distinct; usually a section of a rural property and, on a sheep or cattle station, often of considerable size”.

Bruce Moore links the development of this meaning to the colonizers’ process of transforming the Australian landscape from what was, in their eyes, an uncultivated place into a pastoral one (see also 6.5; 7.3). He provides evidence for this change through a series of quotations from 19th century Australian English in which the size of a ‘paddock’ goes from being 20 acres to being “many thousands of acres”.

Once controlled by felling, burning off, and clearing, land needed to be further controlled by being enclosed. Since the land that was enclosed was often quite extensive, this produced a shift of meaning for the word *paddock* (...). The way the amount of land that might be covered by the term increased is indicated by this sequence of quotations:

1809: A Capital Fifty-Acre farm at Prospect ... containing two fine paddocks of 20 acres inclosed.

1831: This road passes over the very fine enclosure or paddock of 400 acres of grazing land.

1849: In one instance I have surveyed a bend of the Murray, (or series of bends) of six miles, enclosing for my fortunate employer, a paddock of many thousand acres (for no enclosed tract of land is too large to be designated a ‘paddock’ in these colonies) by a fence of a few rods. (Moore, 2008, pp. 35–36)

Moore also emphasizes the importance of fences to the concept of a ‘paddock’: “Although the *paddock* can be defined in part by natural boundaries, most of the early evidence for the use of the term *paddock* stresses the fact that they are safely enclosed by some form of fence.” (*ibid.*, p. 36)

The noun *paddock* is illustrated in (1) to (5). The use of the compound *paddock fence*, which receives its own entry in the AND, is found in (6), and the use of the archaic verb *to paddock* in (7).

- (1) Fed up with their **green spring paddocks** turning into **dustbowls** in summer ... (Wordbanks Oz News)
- (2) The property ... featuring stables ... and **well-fenced paddocks** with shedding. (Wordbanks Oz News)
- (3) the ... fire may have started in a Wangary **sheep paddock** ... (Wordbanks Oz News)
- (4) ... irrigation installed to create **lush green paddocks**. (Wordbanks Oz News)
- (5) ... a hellish tableau of charred trees and **sandy, barren paddocks**. (Wordbanks Oz News)
- (6) ... the softer ground there is more suitable for riding horses over **paddock fences** than in other states. (Wordbanks Oz News)
- (7) 1873 When a run is ‘**paddocked**’, shepherds are not required; but boundary-riders are employed, each of whom is supplied with two horses, and these men are responsible not only for the sheep but for the fences. (AND)

Paddock is explicated in [A]. The explication is followed by comments on its components. These comments refer to collocational evidence and to Australian culture and history.

[A] *a paddock* (Australian English)

- a. a place of one kind
- b. places of this kind are parts of many places because people want this
- c. often when someone is in one part of a place of this kind,
this someone can’t see all parts of this place
- d. often there is grass [m] in many parts of these places
- e. sometimes there is not a lot of grass [m] in these places
- f. often there are big animals [m] of some kinds in these places
because people want this
- g. people want this because these animals [m] can eat [m] the grass [m]
in these places

- h. there is something of one kind on all the sides of a place of this kind because people do some things
- i. the top [m] of this thing is far above the ground [m] in these places
- j. because this thing is there, these animals [m] cannot be on the other side of this thing if people don't want it
- k. someone can say about a place of this kind: "it's mine"
- l. other people can know this
- m. when people see things of some kinds on all the sides of a place of this kind, people can know this

Component (b) depicts 'paddocks' as being parts of many places, i.e. a station ('ranch') can have many 'paddocks'. One can describe 'paddocks' by their different locations on the one station, for example, *top paddock*, *back paddock*, and *home paddock*. There is an Australian idiom involving the word *paddock* that applies to people: it can be said of someone that he or she has "a few roos [kangaroos] loose in the top paddock", which means that this person is "a bit daft, strange or loopy" (AWM). Component (b) also contains the key phrase "because people want this".

Component (c) portrays the large size of 'paddocks' – often, people in a 'paddock' cannot see all parts of this place. This large size of 'paddocks' was stressed in the examples adduced by Moore (2008).

Components (d) and (e) account for the varying amount of grass in 'paddocks', which is, naturally, the result of the variable nature of the Australian climate. These two components have parallels with components that convey the varying amount of water in a 'creek' and a 'billabong' (see explications [C] and [D] in 2.2). The first component states that, often, there is grass in many parts of this place. At times of higher rainfall, 'paddocks' can be described as *grassy*, *green* and *lush* (see (4)). The second component states that, sometimes, there is not a lot of grass growing in 'paddocks'. During drier times, a 'paddock' can be called *dusty*, *bare*, *sandy* and *barren* (see (5)). In a Wordbanks wordsketch of *paddock* based on Australian material, seven of the lemma's twenty most significant adjective modifiers refer to the fertility or lack of fertility of 'paddocks'.³⁴ The variation in the amount of grass available is very different in the case of 'meadows' in British English, the word I will turn to next (6.3).

The fact that farm animals often graze in 'paddocks' is stated in components (f) and (g). The significant aspect of these components is the phrasing "because

34. Four adjective modifiers relate to farming activity, three to fencing, three to location, two to light, and one modifies *paddock* in a different sense. Unless stated otherwise, all word-sketches referred to in this chapter were generated on 12 April 2017.

people want this”, which suggests the human intent in this kind of place. The word-sketch referred to in the previous paragraph gives the noun collocations *cow paddock*, *horse paddock*, *pony paddock*, and *sheep paddock* illustrated in (3).

In components (h) to (m), the fences that surround ‘paddocks’ are portrayed. What is significant about components (h) to (m) is the human intent in building fences. They are there “because people do some things in these places”, and so that big animals of some kinds cannot be on the other side if people don’t want it.

As non-Indigenous people colonized the country for grazing and agriculture, they erected fences to mark property and to keep in animals. This is expressed in components (h) to (j). As Bruce Pascoe writes in his book *Dark emu, black seeds: Agriculture or accident?*, “[f]encing is one of the great differences between Aboriginal and European land use” (2014, p. 128, see also Gammage, 2011, especially Chapter 10). Arthur notes there are terms for many different kinds of fences that can be built around ‘paddocks’, for example, *post-and-rail fence*, *six-wire fence*, *chock-and-log fence* (2003, pp. 69, 115). In addition, the word *fencer* denotes ‘a person who erects fences’ (Moore, 2008, pp. 36–37). Furthermore, AND gives the archaic verb *to paddock*, which is illustrated in Example (7); one of its senses is “to fence or enclose (an area) in a paddock”. Indicative adjective collocations on Wordbanks include *fully-fenced paddock*, *unfenced paddock*, and *well-fenced paddock*, as in (2). One can also *fence a paddock*, and speak of *paddock fencing* and *paddock fence*, as in (6).

Components (k) to (m) convey the notion that ‘paddocks’ belong to particular individuals (see also discussion of the history of ‘fields’ in 6.3). Until the last few decades of the 20th century, pastoral history was a major theme in the general history of Australia dominated by white Australian themes (Mitchell, 2001). This history included the way in which land was distributed by the state in colonial Australia to ‘squatters’, graziers who initially simply staked claim to large tracts of land without title, and to ‘selectors’, small agricultural landholders, and the conflict between these two groups (Macintyre, 2016, pp. 99–104). Historian Heather Goodall writes of the importance of the distribution of land, with reference to fences, in the establishment of colonial Australia:

From the earliest colonial governors, the goal of the settler state had been to bring order to the colony by defining and allocating its land. Survey lines, later materialised as fences, have symbolised this focus on land as a basic structure of the economic, political and social order of the nation, as they marked out the freehold, the leasehold and the reservations, giving boundaries to the names traced onto the parish maps which testified to the consolidation of this symbolic as much as material order.

(Goodall, 2008, p. 129)

Other historians, too, have observed that the creation of ‘paddocks’, and particularly their fencing, which accelerated after the introduction of wire to Victoria in the 1850s, was a key factor in the emergence of a profitable pastoral industry (Macintyre, 2016, p. 103; Shann, 1938, pp. 123–127). In fact, the historical Example (7) indicates one reason why fencing was introduced – it cut down on the need for shepherds, who were costly to employ and hard to come by during the labour shortage of the late 19th century (Shann, 1938, p. 123).

Component (k) uses the semantic prime (IT’s) MINE to convey possession. The notion of ‘ownership’ is more than just that of simply someone claiming ‘possession’: this ‘possession’ must be socially recognized (as in law) (Goddard & Wierzbicka, 2016, p. 108; Taylor, 1996, p. 341). One example of this social recognition is the leaseholds that the ‘squatters’ were eventually able to obtain (Linn, 2001). Component (l) conveys this recognition. This ownership is signalled by the barriers, as depicted in component (m). The historian Stuart Macintyre writes of the relationship between fences and ownership with reference to ‘squatters’ and the expansion of the pastoral industry in the last half of the 19th century:

Before 1850 a traveller could have proceeded through the pastoral crescent of eastern Australia without opening a gate. Now lines of posts spanned with fencing wire marked the grazier’s transition from squatter to landowner.

(Macintyre, 2016, p. 103)

In sum, the meaning of *paddock* in Australian English is suggestive of Australia as a large, expansive country, with variable rainfall, and also as a settler colonial nation following post-British Enlightenment notions of land title and a nation with a history of a pastoral economy. It also reflects the fact that there are kinds of places in the landscape which exist through human design and for human purposes, in this case, the grazing of animals.

6.3 *Meadows and fields* in British English

Next, I will examine the word *meadow* in British English. A ‘meadow’ is a kind of place created by people, filled with lush grass and flowers. People mow ‘meadows’ and use the grass to make into hay. Farm animals can also be grazed in ‘meadows’, and this kind of place abounds with wild birds and animals. The word *meadow* has positive associations and implies a picturesque kind of place.

‘Meadows’ are found in Britain and North America, but speakers rarely label places in Southern hemisphere Englishes, *meadows*. This includes Australian English (Gordon & Sudbury, 2002, p. 84): in the Australian material of Wordbanks, only two of the tokens of *meadow* refer to places in Australia. In fact, the

absence of any land resembling ‘meadows’ around Botany Bay caused consternation among some members of the First Fleet, the group of ships sent from England as part of the establishment of a British penal colony in Australia. Some people, one of them being marine officer and writer Watkin Tench, were disappointed with the landscape because they were familiar with a description of Botany Bay as having “some of the finest meadows in the world” in the 1770 diary of James Cook (Carter, 2010 [1987], pp. 36–42; Lloyd, 1988, pp. 23–24). Furthermore, the semantics of *meadow* are not exactly identical in British and American English (Patricia Hampl in Lopez & Gwartney, 2006, pp. 223–224; OED). In this section, I will only discuss *meadow* in British English.

Definitions of *meadow* include “a grass field full of wild flowers and plants” (McKie, 2003) and “an area of grassland, often used for hay or for grazing of animals” (CED). Examples appear in (8) to (13).

- (8) ... standing in the middle of **lush green meadows** where fat cows **graze** ...
(Wordbanks Br Books)
- (9) Scenery very green and pretty with lovely **flowery meadows** ...
(Wordbanks Br Ephem)
- (10) ... he strode across the **sheep meadow** towards the vineyard ...
(Wordbanks Br Books)
- (11) Birds of open grassland – skylark and **meadow pipit** – are abundant ...
(Wordbanks Br Books)
- (12) ... There is no man **mowing a meadow** ... but sees them at one time or another.
(Wordbanks Br Books)
- (13) Positive visualisation means using “mental pictures”, creating harmonious, uplifting and safe images – a flowery **sunlit meadow** ...
(Wordbanks Br Books)

Meadow is explicated in [B]; the components are justified after the explication, with reference to collocational evidence.

- [B] *a meadow* (British English)
- a. a place of one kind
 - b. there are places of this kind in some places because people want this
 - c. often, when someone is in one part of a place of this kind,
 this someone can see all parts of this place
 - d. there is a lot of grass [m] in all parts of places of this kind
 - e. when people see this grass [m], they can think like this:
 “there is always water [m] in these places”

- f. many small flowers [m] grow [m] in many parts of these places
- g. often, there are big animals [m] of some kinds in these places
because people want this
- h. people want this because these animals [m] can eat [m] the grass [m]
in these places
- i. there can be small creatures [m] of many kinds in this place,
not because people want this
- j. 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 else
- k. when people see places of this kind,
they can feel something good because of this

Component (b) covers the man-made nature of ‘meadows.’ There is a, possibly archaic, verb *to meadow* meaning “to devote (land) to the production of grass, esp. for hay; to use as meadow” (OED). The phrase “because people want this” indicates the human objective to change the landscape and create ‘meadows.’

Component (c) is the area component of [B]. It states that a ‘meadow’ is a restricted area. For the most part, unlike ‘a paddock,’ all parts of a ‘meadow’ can be seen at the one time.

Component (d) accounts for the large amount of grass in ‘meadows,’ as indicated by significant collocations such as *grassy meadow* and *herb-rich meadow*. There are also kinds of grass with the word *meadow* in their names, such as *meadow barley grass*, *meadow cat’s-tail*, and *meadow fescue* (OED).

The grass in ‘meadows’ is particularly lush and green, as suggested by collocations such as *lush meadow*, *green meadow*, both illustrated in (8), and *verdant meadow*. There is also a shade of green called *meadow green* (OED). Component (e) captures the lushness of the grass in ‘meadows’ by stating that, “when people see this grass [m], they can think like this: ‘there is always water [m] in these places’”. OED also tells us that a meadow is “a tract of low well-watered ground” (see also Muir & Muir, 1989, pp. 59–60). Collocations such as *marshy meadow*, *damp meadow*, and *moist meadow* indicate the wet nature of ‘meadows.’ Conversely, one cannot find the collocations *?brown meadow*, *?dusty meadow* and *?parched meadow* on Wordbanks.

Component (f), “many small flowers [m] grow [m] in many parts of these places”, portrays the flowers in a ‘meadow’ (see Muir & Muir, 1989, pp. 161–187). Collocates of *meadow* in a Wordbanks wordsketch include *flowery*, as in (9), *flower-filled*, *flower-rich*, and *flowered*. There are also kinds of flowers found in ‘meadows’ with the word *meadow* in their names. Examples include *meadow saxifage*, *meadow vetchling*, and *meadow saffron*.

Components (g) and (h) are the same as those used in explication [A] of *paddock*. They state that some kinds of big animals are in ‘paddocks’ because people want this, and that they are there to graze because people want this. Indicative collocations in the abovementioned wordsketch include *sheep meadow*, as in (10), *grazing meadow*, and *graze a meadow*.

The wild birds and animals found in ‘meadows’ are accounted for in component (i). The phrasing “not because people want this” indicates that, unlike the farm animals in ‘meadows’, these creatures are wild. A significant collocate of *meadow* is *species-rich*, and there are a range of birds and animals with the word *meadow* in their names, such as *meadow pipit*, *meadow campion*, and *meadow vole*. The first two of these are birds, the third is a rodent. *Meadow pipit* appears in Example (11).

Component (j) depicts the use of ‘meadows’ for hay. *Meadow hay* is an indicative collocation, as is *mow a meadow*, illustrated in (12), which describes the cutting of the grass in a ‘meadow’ (for hay).

The positive associations of ‘meadows’ are portrayed in component (k). Essentially, people can feel something good when they see a ‘meadow’. This perception is most likely due to the greenness of ‘meadows’ and the flowers growing in them. ‘Meadows’ were the most valuable type of land in the Medieval and Early Modern period. Because they needed a good water supply, there were only a limited number of places where they could be (Gelling, 1984, p. 230; Tate, 1967, p. 33–34). There is evidence that the positive perception of vegetation and water is a human universal. This perception is for the obvious reasons that we need these resources for our survival (Romero-Trillo, 2013, p. 209). Pleasant and poetic combinations include *sunlit meadow*, as in (14) relating to a positive visualization, *sunny meadow*, *moonlit meadow*, *spring meadow*, and also *meadow bathed* (in light).

Next, I will look at a more general and more common word than *meadow*, i.e., *field* in British English. A ‘field’ is a kind of place created by people and often devoted to a particular crop, as illustrated in collocations such as *wheat field* and *field of corn*. As with ‘meadows’, farm animals can also be grazed in ‘fields’, although ‘fields’ are more strongly associated with crops. LDOCE defines *field* as “an area of land where crops are grown or animals feed on grass: a field of wheat”, and a British children’s encyclopedia defines it as “[a] piece of land for growing crops or grazing animals” (McKie, 2003). The word *field* is used in both UK and North American English, and I am not aware of any difference in meaning in the two varieties. Yet, as with *meadow*, I will restrict my data to British English.

Field is a polysemous word with a large number of meanings. To give just a few of the senses of the word, *field* can mean a place where sports are played, e.g., *rugby field*; a place where practical study is carried out, e.g., *field site*; and an area of

study, e.g., *the field of psychology*. American writer Barbara Kingsolver explains her take on this polysemy in relation to the agricultural meaning of the word:

A field of cleared or open ground is presumed to have some purpose: a cornfield, a pasture field, a minefield, and a fallow field all have their special jobs to do. (...) And so it is that field has crept increasingly into our language as a means of describing a specific area of cultivation, albeit of culture or the mind: the field of anthropology and a baseball field share in common the task of drawing each one's adherents into a dedication to its unified purpose.

(Kingsolver in Lopez & Gwartzney, 2006, pp. 134–135)

Because of its multiple meanings, the word *field* is far more common in Australian English than the word *meadow*. According to Gordon and Sudbury (2002, p. 84), speakers of varieties of Southern hemisphere English do not use the word *field* in an agricultural sense very much, as with the word *meadow*. Corpus data suggests that the word *field* is not used as often in Australian English as it is in British English, particularly in reference to places in Australia.³⁵

In the discussion of *field*, some mention must be made of the history of farming in Britain. Like Australia, Britain, too, has been cleared of trees to make way for agriculture, but this occurred farther in the past than large-scale clearing did in Australia (see Wood, 1995, p. 16). As Oliver Rackham writes in his book on the British countryside, “[f]ields are subject to fashion” (2000, p. 155). The OED writes of the history of the semantics of the word *field*, “[t]he original sense of the word appears to have been ‘open country’ (...), i.e. land unencumbered by obstruction, as contrasted with forest, hill, or marsh”, and notes that this sense continues, often when the word is used in the plural, but says that it is now rare. (A possible component in an explication of this sense could relate to the ease of traversing such an environment.) In the dictionary, reference is also made to the influence of the open-field system on the diachronic semantics of *field* (see also Gelling, 1984, pp. 235–237).

The open-field system of agriculture, sometimes called common arable or strip-cultivation, used in the Middle Ages and Early Modern period in Europe, was a practice in which the arable land of a human settlement was worked by a number of farmers. Land was divided into ‘strips’, these ‘strips’ were aggregated into ‘furlongs’, and these ‘furlongs’ into large areas called ‘fields’, which

35. I searched for the lemma *field* in the UK material in Wordbanks, took a random sample of 250 tokens, and found 63 examples using the word *field* in its agricultural sense. The same process was repeated using the Australian material in Wordbanks, but I only found 13 tokens of *field* used in its agricultural sense, and, of these, only 5 in reference to Australia. All searches were performed on 2 April 2017.

could be hundreds of acres in size (Hoskins, 1956, pp. 39–42; Rackham, 2000, pp. 164–179).

The open-field system was gradually dismantled in England beginning in the 13th century, and most notably by the enclosure Acts of Parliament in the 18th and 19th centuries (Tate, 1967; Wood 1995, pp. 73–75). ‘Fields’ became smaller and were enclosed with hedges, walls, ditches, fences, or banks, although hedges were not unknown in the older open fields (Muir & Muir, 1989, pp. 136–144; Rackham, 2000, p. 155). As the historian W. E. Tate writes, “[t]he hedge, the fence and the wall are the makers of modern rural England” (Tate, 1967, p. 30). Thus, the sense of the word *field* explicated in this chapter in [C] may not have been exactly the same as one of the meanings used in Medieval and Early Modern times.

The use of word *field* in present-day English is illustrated in Examples (14) to (18):

- (14) ... the land tabled onto an immense plain of **wheat fields** ...
(Wordbanks Br Books)
- (15) ... he took his hunting gun and walked to a **field of corn** ...
(Wordbanks Br Reg News)
- (16) We **plough the fields** and scatter the good seed on the land.
(Wordbanks Br Books)
- (17) The trees grew darker. Fields were no longer **cultivated but left as meadows** and grazed by tan goats and cows.
(Wordbanks Br Books)
- (18) ... the Englishman’s heart beats most freely in **green fields**.
(Wordbanks Times)

The meaning of *field* in present-day British English is captured in explication [C]:

- [C] *a field* (British English)
- a. a place of one kind
 - b. places of this kind are parts of many places because people want this
 - c. often, when someone is in one part of a place of this kind,
this someone can see all parts of this place
 - d. often, there are things of some kinds growing [m] out of the ground [m]
in a place of this kind
because, sometime before, some people did some things to the ground [m]
in this place
 - e. after some time, when things growing [m] in these places are big,
people do some things with some things to
these things growing [m] in the ground [m]
because they want to do some other things with these things somewhere else

- f. after this, sometimes people can eat [m] these other things,
sometimes people can make [m] some other things with these things
- g. there can be grass [m] in places of this kind
- h. sometimes, there are big animals [m] of some kinds in these places
because people want this
- i. people want this because these animals [m] can eat [m] the grass [m]
in these places
- j. there are things of some kinds in places on all the sides of a place of this kind
because people do some things
- k. because these things are there, animals [m] cannot be on one side of this thing
if people don't want it
- l. someone can say about a place of this kind: "it's mine"
- m. other people can know this
- n. when people see things of some kinds on all the sides
of a place of this kind, people can know this

Component (b), shared with the explication of *paddock* and similar to that used in the explication of *meadow*, accounts for the man-made nature of 'fields'. The key phrase "because people want this" is used in this component. Many accounts of the history of agriculture in England describe how people created 'fields' out of areas which were previously called 'wilderness', 'waste', or 'wasteland', a process known as improvement (e.g., Di Palma, 2014, Chapter 2; Hoskins, 1956, pp. 13, 138).

In the first part of component (b), "places of this kind are parts of many places", the phrase "many places" refers to farms each of which may be identified as having a discrete owner or leaseholder. The English system of land tenure has evolved over the centuries. During the open-field system, as Di Palma (2014, p. 27) writes, "[t]he lord of the manor and his tenants were enmeshed in a complex system of mutual rights and obligations that governed the cultivation of the manor's land, and occupation of one of the village's tenements came with rights over the manor's arable fields, its pastures, and its wasteland". Therefore, the "many places" of which a 'field' in the open-field system was a part may have been conceptualized differently in Medieval and Early Modern England, and thought of as being held in common. (On the concepts of the 'common', 'common right', and 'commoners', see Neeson, 1993; E. P. Thompson, 1991).

By contrast, the post-enclosure 'farms' of today may be conceptualized as 'private property', which, as a modern concept, arose during the British enlightenment championed by philosophers such as Thomas Hobbes, James Harrington, and John Locke, and was strongly connected to the enclosure movement (Di Palma, 2014, Chapter 2; Schlatter, 1973 [1951], Chapter 5–7; Thompson, 2013, p. 8).

Component (c) depicts the limited size of ‘fields’ and also appears in the explication of *meadow*. This semantic component would not have been part of the meaning of *field* in earlier English. Another size component depicting a larger geographic area would be more appropriate for an explication of the earlier meaning of *field*, perhaps one more similar to that used in the explication of *paddock*.

The fact that people use ‘fields’ to grow crops is portrayed in components (d) to (f). Component (d) conveys the sowing and cultivation of ‘fields’. Component (e) depicts the harvesting of ‘fields’. Component (f) shows how the crops grown in ‘fields’ are used as food and other resources for people. The collocational profile of the word *field* reflects this purpose of ‘fields’. Of the ten most significant noun modifier collocates of *field* in a Wordbanks wordsketch, five are the names of crops, for example, *wheat* as in (14).³⁶ In terms of the nouns that appear after *field*, in prepositional phrases beginning with *of*, of the ten most significant nouns, two are the names of crops, *corn*, as in (15), and *wheat*.³⁷ A number of the ten most significant verbs of which the word *field* appears as an object relate to human agricultural activity in ‘fields’: *plough* as in (16), *cultivate* as in (17), and *till*.³⁸

Component (g) treats the grass which can be found in ‘fields’. In components (h) and (i), the use of ‘fields’ as pastures for animals is addressed. The word *field* in present-day English usually refers to a place in which a crop is grown. This is reflected in (17), in which ‘fields’ that are not cultivated are described as being “left as meadows”. However, one can also graze farm animals in ‘fields’. Evidence from Wordbanks indicates that the word *field* is more commonly used in reference to arable land, but the pasture use is also found.³⁹

Components (h) and (i) are almost the same as those used to cover animals feeding on grass in ‘paddocks’ and ‘meadows’ (see explications [A] and [B]). They differ in that in the explications of *paddock* and *meadow* the word “often” is used to modify the rest of the component “there are big animals [m] of some kinds in places of this kind because people want this”. By contrast, in component (h) of

36. The other five of the ten most significant noun modifier collocates of *field* relate to the sense of *field* as a place where people play sports.

37. The other eight of the ten most significant nouns used in prepositional phrases modifying *field* and beginning with *of* related to other senses of the word *field*.

38. Of the other seven of the ten most significant verbs of which *field* is an object, four relate to other senses of the word *field*. Three of the verbs related to the physical setting of agricultural ‘fields’.

39. My sample of 63 tokens of *field* in its agricultural sense included 14 examples that referred to ‘fields’ used for crops; 7 pertaining to ‘fields’ used for grazing; 2 for both these uses; and 40 in which the purpose of the ‘fields’ was not evident.

[C], the word “sometimes” is used because pasture is a less common use of ‘fields’. Earlier in the explication, component (d), which introduces the growing of crops in ‘fields’, is modified by “often”.

The use of ‘fields’ for pasture, as well as their use for growing crops, is reflected in some of the ten most significant adjective modifiers of *field* found in the wordsketch referred to previously: *green* as in (18), *muddy*, *grassy*, and *fertile*. As mentioned in Section 6.2 and earlier in the present section, the adjective *green* was also found to collocate with *paddock* and *meadow*, reflecting the presence of ‘grass’ in these kinds of places. As we saw, the words *parched* and *dusty*, on the other hand, are significant collocates of *paddock* but are not found at all with the word *meadow*. By contrast, combinations of *parched* or *dusty* with the word *field*, though not found in the wordsketch, are attested in the UK material in Wordbanks, mostly in reference to places outside the UK with drier climates.⁴⁰ These results can be explained by the fact that the semantics of *field* does not include reference to being well-watered, as does the semantics of *meadow* (see component (e) of explication [B]).

The collocational possibilities of *field* and *meadow* also differ in that *muddy* is a significant collocate of *field* but no combinations of *muddy meadow* are present in Wordbanks. I suggest that this is because more grass is found in ‘meadows’ than in ‘fields’. This difference is reflected in the components which account for grass in both kinds of places. Component (d) of the explication of *meadow* states that “there is a lot of grass in all parts of places of this kind”, whereas component (g) of the explication of *field* merely states that “there can be grass in places of this kind”.

Components (j) to (n) account for the borders which now enclose ‘fields’ in Britain. Such components would not have been part of the semantics of the word *field* in earlier English. These components are similar to components (h) to (m) used in the explication of *paddock* to depict the fences which surround ‘paddocks’, but there are some differences. Because of the variety of borders edging ‘fields’ mentioned in previous discussion (e.g., hedges, ditches, and fences), the type of barrier is not specified in [C], unlike the semantic components used in explication [A] of *paddock*, which point to a ‘fence’.

Component (k) of explication [C] is also slightly different to the matching component in the explication of *paddock*. While the main purpose of ‘fences’

40. 6 examples of the lemma *field* modified by *parched* were found in the UK material in Wordbanks. 4 of these referred to places outside the UK, and two to ‘fields’ within the UK. 6 examples of the lemma *field* combined with *dusty* were found, 5 referring to places outside the UK, and 1 to a place within the UK.

surrounding ‘paddocks’ is to keep animals in, borders around ‘fields’ are often designed to keep animals from entering ‘fields’, where they may eat and trample crops (Muir & Muir, 1989, p. 136). Therefore, component (k) does not specify whether the barriers are there to keep animals in or out. The phrase “on one side” is used rather than the phrase “on the other side” in component (j) of the explication of *paddock*.

Components (l) to (n) of explication [C]] are the same as those used in the explication of *paddock*; they convey the fact that places of these kinds are ‘private property’ and that their barriers are also there for the purpose of marking this property (as well as to keep animals either in or out). As Richard and Nina Muir write in their book *Fields*, “[f]ields must have boundaries to avoid disputes about the ownership of land.” (1989, p. 136)

To end the discussion of *meadow* and *field* in British English, the semantics of these words reflect the fact that Britain is a small country, with a high rainfall and a farming and pastoral history. The present-day sense of *field* also reveals the post-Enlightenment concept of discrete land ownership, and the history of enclosure in Britain. In addition, looking at these words confirms that there are kinds of places in the landscape created by people for human purposes (e.g., the grazing of animals, the making of hay, the growing of crops).

6.4 *Nyaru* in Pitjantjatjara/Yankunytjara

The next word I will discuss is the Pitjantjatjara/Yankunytjara *nyaru*. Traditionally, Anangu, like other Aboriginal groups, burnt off the vegetation in parts of the country. They did this for a number of reasons: to create paths for travel, to flush out game, to manage the growth of plants, to maintain sacred places, to create smoke signals, and to prevent the spread of bushfires (Jones, 1969; Kimber, 1983, pp. 40–41; Latz, 1995: pp. 19, 22). This burning off of the country is often called, in English, patch or mosaic burning (or fire-stick farming; see Jones, 1969). A relevant Pitjantjatjara/Yankunytjara verb is *nyaruni*, defined in PYED as “clear (country) by burning off”, and illustrated in (22). There is also the intransitive verb *nyaruringanyi* “to get burnt out” (PYED).

- (19) *Nyaratja pula ma-kutjara wanara, ma-nyarura wanara wanti.*
 nyaratja pula ma-kutja-ra wana-ra ma-nyaru-ra
 DEM 2.DU outward-light-SER follow-SER outward-burn.off-SER
 wana-ra wanti.
 follow-SER leave.off.IMP

‘You two burn off along that area, clear it all along to over there.’

(PYED, p. 111)

By clearing some parts of the country but leaving others, Anangu created a mixture of vegetation at different stages of growth. As historian Bill Gammage writes, “about 70 per cent of Australia’s plant species need or tolerate fire” (2011, p. 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, 2007, pp. 134–135). Most burning took place in the cooler seasons or following heavy rains (UKTNP, 2000, p. 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, as discussed in Chapter 5, but rather a burnt-off, regenerating part of some kinds of eco-zone. Baker and Muṭitjulu community write, “[r]egenerating areas of both tali [‘sand-hill country’, H.B.] and pila [‘spinifex plains’, H.B.] become *nyaru*, which supports its own suite of plants and animals” (1992, p. 179). Young reports that on the APY Lands, “[t]he re-growth of green plant tips on black ground is cause for comment and often created in paintings for the market” (2011, p. 266).

Since the colonization of traditional Pitjantjatjara and Yankunytjatjara lands, less burning off of vegetation ‘nyaruni’ has taken place. The reason for this is the transition of Anangu from a traditional nomadic lifestyle to one in communities and on homelands (Lester, 1993; Tiger, 2008). The burning of country declined because the practice was discouraged by station owners, even in the times when many Anangu still lived a traditional lifestyle (see Yates & Morse, 2003, p. 6).

Today, Anangu work on Land Management schemes burning the country, as reported in an Anangu Pitjantjatjara Yankunytjatjara Land Management document ‘Caring for Country with Fire’ (APYLM, 2010). The purpose of this controlled burning is to prevent the spread of bushfires, to encourage diversity of vegetation, and to increase new green growth that provides feed for wildlife (Yates & Morse, 2003, pp. 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, which describes ‘nyaru’, follows in (20).

- (20) *Panya nyaru tjuku-tjuku tjuta ngura winkiku nyara ngarapayi. Ka ngura wingkingka ukiri pulka munu punu tjata pakalpayi itjanu pulka.*
 panya nyaru tjuku-tjuku tjuta ngura winki-ku nyara
 PRT regrowth.area small PL country whole.lot-PURP DEM
 ngara-payi. ka ngura winki-ngka ukiri pulka munu punu
 stand-CHAR CONJ country whole.lot-LOC grass big CONJ tree/bush

tjata pakal-payi itjanu pulka
 thicket grow-CHAR green big

‘There were always lots of little patches of new burnt ground, and lots of country that was growing back.’ (Yates & Morse, 2003, pp. 74, 79)

The English version of the first sentence of (20) 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 illustrated in (21), which describes the necessity of fire for nice and abundant ‘mai’.

- (21) *Paluru tjanpi tilintja wiya ngaranyangka, mai wiru pakalpai wiya.*
 paluru tjanpi tili-ntja wiya ngara-nyangka mai wiru
 3.SG tjanpi light-NMLZ NEG stand-CIRC plant.food lovely
 pakal-pai wiya
 grow-CHAR NEG

‘If there was no firing of the spinifex, the nicest bush food wouldn’t grow.’ (PYED, p. 172)

Example (22) comes from a story about ‘nyaru’ recounted by 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 she says that everything grows in ‘nyaru’. At the end of the passage, she says that a lot of ‘ukiri’ grows in ‘nyaru’. (For another account of the practice of burning to create ‘nyaru’, see the oral history of Tjukapati James in Bowman, 2015, p. 9.)

- (22) *Putja kutjara, tjanpi tjuta kutjara nyarulpai. Nyarungka kuka ngurilpai mulapa nyarungka kuka ngurilpai. Nyarungka pakalpai kampurarpa, wiriny-wirinyapa, tawal-tawalpa munu kulypurpa. Ukiri tjuta pakalpai nyarungka. (...) Mai wakati. Wakati. Wirangka tjunkupai. (...) Ka wakati palu pulkaringkupai nyarungka mantjintjatjanu. Nyaru uwankara. Kampurarpa. Mai wangunu. (...) ukiri wiru tjuta pakalpai.*
 putja kutja-ra tjanpi tjuta kutja-ra nyarul-pai. nyaru-ngka
 grass light-SER spinifex PL light-SER burn.off-CHAR nyaru-LOC
 kuka nguril-pai mulapa nyaru-ngka kuka nguril-pai
 game search-CHAR really nyaru-LOC game search-CHAR
 nyaru-ngka pakal-pai kampurarpa wiriny-wirinyapa tawal-tawalpa
 nyaru-LOC grow-CHAR desert.raisin bush.tomato wild.gooseberry

munu kulypurpa. ukiri tjuta pakal-pai nyaru-ngka.
 CONJ wild.gooseberry green.grass PL grow-CHAR nyaru-LOC
 mai wakati wakati wira-ngka tjunku-pai. ka wakati
 plant.food pigweed pigweed dish-LOC put-CHAR CONJ pigweed
 palu pulkaringku-pai nyaru-ngka. mantji-nytja-tjanu. nyaru uwankara-
 PRT increase-CHAR nyaru-LOC get-NMLZ-SEQ nyaru all
 kampurarpa mai wangunu ukiri wiru tjuta pakal-pai
 desert.raisin plant.food woollybutt green.grass lovely PL grow-CHAR
 'Lighting the grass, lighting the spinifex, they would burn off the country.
 They would search hard for game in *nyaru*. Desert raisin, bush tomato, small
 wild gooseberry, and large wild gooseberry grow in *nyaru*. A lot of green
 grass grows in *nyaru*. Inland pigweed. You put inland pigweed in a dish.
 That inland pigweed. It all grew up in *nyaru* when we gathered it. Everything
 grows in *nyaru* – desert raisin, naked woollybutt. A lot of lovely green grass
 grows (there). (Field recording, IW.NY.N.030609, see Appendix 1)

An explication of *nyaru* follows 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. when someone sees a place of this kind
this someone can think like this about it:
- d. "something happened in this place not long before
there was waru [m] 'fire' in this place
because of this, after this, for some time,
things in these places are not like they were before
often people do some things because they want it to be like this"
- e. if a place is a place of this kind, it is like this:
- f. there is no tjanpi [m] 'spinifex grass' there anymore
- g. because of this, a lot of ukiri [m] 'green grass' grows in these places
- h. there is mai [m] 'plant food' of many kinds in these places
- i. there is kuka [m] 'game' of some kinds in these places
- j. people can think about these places like this:
"often people want to do things of many kinds in these places"
- k. when people see places of this kind,
they can feel something good because of this
- l. a place can't be 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 a place such as ‘puṭi’ or ‘pila’ (see Chapter 5). Components (c) and (d) give the relevant background about ‘nyaru’ – that recently there was fire in this kind of place.

Component (d) also tells us that, as a result of fire, for some time these places are different from how they were before. The component does not attribute this fire to human intervention in all cases because ‘nyaru’ result from both deliberate burning and wild fire (see Kimber, 1983 on fire in Central Australia). Rather, the component states that “often people do some things because they want it to be like this”, bringing in the human intent in the landscape.

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’ now grows there.

Component (h) is concerned with the ‘mai’ of ‘nyaru’. As in the explication of the eco-zone word *puṭi* in 5.4, the ‘mai’ is said to be “of many kinds” because a wide variety of plant food grows in ‘nyaru’, as set out in (21) and (22).

Component (i) treats the ‘kuka’ in ‘nyaru’. As in the explications of the eco-zone words *puṭi* and *puli* in Chapter 5, ‘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 the explications of *puṭi* and *puli*. ‘Nyaru’ are not eco-zones in themselves, but rather places which last only for a short period, often because of human intervention. During the period that they exist, they abound with ‘mai’ and ‘kuka’, unlike eco-zones whose fertility varies throughout the year.

Component (j) portrays a conceptualization of ‘nyaru’ as a place where people obtain resources. Two of the “things of many kinds” which people often want to do in ‘puṭi’ are: ‘ngurini’ ‘seek out’ (as in *ngurilpai*, characteristic form in (22)), and ‘mananyi’ ‘gather’ (as in *mantjintjatjanu*, nominalized, sequential form in (22)).

Component (k) is the same affective component used in explication [B] of *meadow*. It appears that positive feelings towards fecund, green places may be a human universal (Romero-Trillo, 2013, p. 209). Component (1) handles the temporary nature of ‘nyaru’.

Overall, the semantics of *nyaru* indicates the use of the land by desert dwellers in country where the vegetation increases after fire. ‘Nyaru’ is unique among the kinds of places treated in this book in that it is temporary (see also the description of ephemeral Pitjantjatjara/Yankunytjatjara water places in Bromhead, 2017).

6.5 Dams in Australian English

Dictionary definitions drawn from Australian (e.g., MD) and British (e.g., LDOCE) works suggest there are three main senses of *dam*: *dam*₁ as a man-made barrier intended to delimit a body of water and keep the water in place, *dam*₂ as a place where there is water (both of these are in British as well as Australian English),⁴¹ and *dam*₃ as a body of water created on a farm (in Australian English only). These impressions were subsequently confirmed by looking at the semantics of random samples of 250 tokens of *dam* in both the British and Australian material of Wordbanks. The use of the word *dam* in Australian English thus differs from that in British English. In this section, I will limit myself to a study of the third, uniquely Australian English, sense ('a body of water created on a farm'; henceforth *dam*, without subscript).

AND, a dictionary exclusively devoted to Australian meanings and usages, gives the noun *dam* the sense of "an artificial pond or reservoir for the storage of water" and notes that this Australian sense comes from a British dialect sense of *dam* as "the body of water confined by a dam or bank". The referent of *dam* in Australian English is a scooped earth structure used for harvesting rainwater and run-off on farms and properties in Australia. Sometimes, because of the polysemy of the form *dam*, people in Australia specify which sense is meant. For example, in his book *Water in Australia: Resources and management*, David Ingle Smith, an environmental scientist, distinguishes between "large state-owned dams" and "farm dams" when discussing Australian water sources (Smith, 1998, pp. 94–95). Based on corpus data and Te Ara, the compound *farm dam*, which indicates where places of this kind are found, is part of Australian, New Zealand, and South African varieties of English, yet is not found in British and American English.

It would appear that the initial term used by British colonists in Australia for places of these kind was *tank*, with *dam* establishing itself slightly later. In its entry for *dam*, AND refers the reader to the entry for *tank*, which (together with the compounds *ground tank*, *earth tank*, and *excavated tank*) is used in Australian English to convey a similar meaning to *dam*. The historian Heather Goodall (2008, p. 130) writes that the word *tank* came into Australian English with this sense via India, where it "describes a diverse, widespread and effective range of technologies for managing rainwater". Possible sources for the term are words from Indian languages (e.g., Gujarati *tank'h*), and the Portuguese *tanque* introduced by colonists in Southern India (Goodall, 2008, pp. 130–131; OED). The first AND citation for *tank* is from 1791 and the first citation for *dam* is from 1824. The early colonists at

41. *Dam*₁ is the most salient sense of *dam* in British English.

Sydney Cove found a source of water in a small watercourse at which they excavated ‘tanks’ to collect rainwater. For this reason, they named the watercourse the Tank Stream (Cathcart, 2009, p. 28).

According to Goodall (2008, p. 131), the word *tank* is still used in inland western New South Wales and Queensland. However, on the eastern seaboard, where a great number of Australians live, the word *tank* denotes a raised structure for the storage of water, and many people are unfamiliar with the meaning of *tank* in the relevant sense. Corpus data bears out this observation: in a 250 word sample of the lemma *tank* from the Australian material of Wordbanks, the vast majority of occurrences were of *tank* as a raised water structure, and only one of an excavated *tank*.⁴² Also, an examination of guidelines for water storage on properties found on the websites of Australian state and territory governments shows that only those of Western Australia and the Northern Territory mentioned the term *tank* in the relevant sense (or the compound *excavated tank* to distinguish places of this kind from raised ‘tanks’). The other websites tended to use the compound *farm dam*.

‘Dams’ were built by colonists as a way of making the most of rainwater in a dry climate. They were especially attractive as grazing spread further west. Given that the appropriation of this land was carried out illegally by ‘squatters’, they often took large amounts of land along the rivers but not the less productive back country. Latecomers were left with drier backblocks, which could be rendered productive via the sinking of ‘dams’ or ‘tanks’. (Lloyd, 1988, Chapter 4; O’Gorman, 2012, pp. 75–76). AND gives a number of archaic compounds referring to the construction of such places and the people who worked on this construction, such as *dam digging* and *tank-sinker* (see also Goodall, 2008, pp. 132–136). The sinking of ‘dams’ (as well as ‘tanks’, bores, and ‘wells’) was connected with the other major pastoral technology in colonial Australia – the fencing of ‘paddocks’ (see 6.2). Both kinds of developments were considered ‘improvements’. Historical evidence comes from Reginald Crawford’s *Windabyne: A record of by-gone times in Australia* (published in 1895, by which point the times depicted were effectively by-gone). *Windabyne* is a fictionalized account based on the testimony of ‘squatters’; it describes the construction of ‘dams’ and ‘fences’ as ‘improvements’ and as the key to grazing prosperity (see also Shann, 1938, p. 203).⁴³

42. In the main, the Wordbanks Australian material comes from newspapers produced on the eastern seaboard.

43. As noted in Section 6.3, the enclosure movement in Britain, too, was considered an ‘improvement’. The word *improvement* used in this sense is now rare (see also Friedel, 2007; OED).

Examples of *dam* (including *farm dam*) in Australian English follow in (23) to (26):

- (23) Snow fell on the peaks and **farm dams** filled overnight ...
(Wordbanks Oz News)
- (24) Mrs Thomas and her family found the fish in their **top dam** in 1999 ...
(Wordbanks Oz News)
- (25) “I’ve got three **dams** and they’re all bone dry – it’ll take a lot more than this to fill them up,” he said.
(Wordbanks Oz News)
- (26) Farms and properties. Do not dive or jump from rope swings into **murky dam water**.
(Wordbanks Oz News)

Dam in Australian English is explicated in [E]:

[E] *a dam* (Australian English)

- a. a place of one kind
- b. places of this kind are parts of many places because people want this
- c. someone can say about these places: “it’s mine”
- d. other people can know this
- e. because people want places of this kind to be in many places,
people do things of some kinds to the ground [m] in many places
- f. because of this, often there is water [m] in places of this kind
after there is rain [m] in these places, as people want
- g. sometimes there is a lot of water [m] in places of this kind
- h. often, in all parts of these places, the water [m] does not move
- i. 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 not far
from the place where I am”
- j. places of this kind are not big places
- k. 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

As in the explications of the words *paddock* [A] and *field* [C], in component (b), the explication of *dam* in Australian English states that places of this kind are parts of many places (e.g., ‘farms’, ‘stations’), as in “farm dam” in (23) and “top dam” in (24). Component (b) also portrays ‘dams’ existing because people want this. Components (c) and (d) convey the fact that ‘dams’ are generally part of places owned by an individual, as with ‘paddocks’ and ‘fields’. In (24) and (25), ownership of ‘dams’ is ascribed to a family and an individual, respectively. An explication of the meaning of *dam*₂ (a barrier) would have to have different

components indicating ownership since they are, for the most part, owned by the state.

In component (e), the construction of a ‘dam’ is portrayed, as indicated by the aforementioned compounds (e.g., *dam digging*). Component (f) depicts the result of this construction: a ‘dam’ filling with water after rain, as shown in (23). As in the case of other words for water places in Australia, the explication uses two components, (f) and (g), to convey the variable amount of water in ‘dams’ (see 2.2; 2.4). In (25), an Australian dairy farmer bemoans the dryness of his three ‘dams’.

Component (h) treats the still nature of the water in ‘dams’ (see also Bromhead, 2017 on standing-water places). ‘Dams’ have a closed environment, receiving water from rainfall and run-off. An indication of the quality of water in ‘dams’ can be seen in (26), which describes ‘dam’ water as “murky”.

Component (i) takes the perspective of a person on one side of this place. The size of a ‘dam’ is explained in the person’s thought that places on some other sides of the dam are not far from the place where the person is. In addition, component (j), “places of this kind are not big places”, also accounts for the size of a ‘dam’ (see discussion of these kinds of size components in relation to *billabong* in 2.2).

Component (k) treats the depth of ‘dams’. As discussed in an earlier work (Bromhead, 2017, p. 188), the concept of ‘depth’ relates to a human observer looking from top to bottom, whereas the concept of ‘height’ takes the point of view of a person looking from bottom to top (Wierzbicka, 2006b, p. 144). Yet, ‘depth’ and ‘height’ are not symmetrical concepts. It is possible to see more of a ‘high’ place, such as a ‘mountain’, than of a ‘deep’ place, such as a ‘dam’. The ‘bottom’ of a place like a ‘dam’ is not visible to the observer beside it, and its surface is not conceptualized as the ‘top’ (Wierzbicka, 2006b, p. 147). ‘Depth’ is presented in the explication of *dam* as resting within the relationship between the ground in the places on all sides of a lake, where a human observer would be beside the place. According to James J. Gibson (1979, p. 33), the ground serves as “the reference surface for all other surfaces”.

Overall, the semantics of *dam* in Australian English is indicative of a settler country in which the colonizers appropriated land for farming and pastoralism, and adapted technologically to an unfamiliar dry country.

6.6 *Tjukitji* in Pitjantjatjara/Yankunytjatjara

I will now turn to look at the Pitjantjatjara/Yankunytjatjara word *tjukitji*, glossed as ‘soakage’ or ‘soakage well’ in English. A ‘tjukitji’ is a hole people dig in the ground so that it fills with ground water. Once this happens, they can collect the water (see Moggridge, 2005, pp. 3–4). The word appeared in Chapter 2 in the discussion of the

collection of ground water from ‘karu’ (see 2.4). In the discussion of ‘tjukitji’, further elaboration on the relationship which Anangu have, or traditionally had, with water, and how that relationship is reflected in their language, will be provided.

To begin with, I will review the vocabulary in Pitjantjatjara/Yankunytjatjara for water itself. As mentioned in 2.4, the general word for water is *mina* in Pitjantjatjara, and *kapi* in Yankunytjatjara (henceforth, the latter form will be used in discussion). Because water is so scarce in Pitjantjatjara and Yankunytjatjara countries, ground water must be exploited when surface water is not available, as previously discussed in Section 2.4 on *karu*. There is a specific word in the language for surface water, *uru* (as seen in 2.4, as well as in Example (27) in this chapter). Likewise, there are terms for ground water, *kapi tjunu* and *kapi mantangka*.

- (27) *Ka uru kutjupa tjuta rutangka ngaringi.*
 Ka uru kutjupa tjuta ruta-ngka ngari-ngi
 CONJ surface.water some PL road-LOC lie-PST
 ‘There were some pools of water on the road.’ (PYED, p. 203)

In order to extract ground water, traditionally Anangu dug soakage wells. As in the case of other water sources, the knowledge of location, the movement required to get there, and when they should be dug is an important part of desert subsistence technology (James, 2006, pp. 91–94; James & Tregenza, 2014, pp. 47, 55).

For Anangu, as Young writes, “[w]hat goes on in the vertical dimension is important” (2006, p. 244). In the past, a lot of collecting and harvesting was done by digging in the earth (Hilliard, 1976, pp. 101, 114; see also 5.3, 5.4). Today, residents of Pitjantjatjara and Yankunytjatjara countries drink water from rain-water tanks and bores (James, 2006, pp. 95–99; Moggridge, 2005, pp. 36–37). However, there are accounts from senior men and women about collecting water in the country, as demonstrated in Section 2.4 and in Example (33) of this chapter (see also James, 2006, pp. 91–94; Lester, 1990, pp. 6, 10–12; Bromhead, 2017, pp. 196–202).

PYPD, a picture dictionary that uses illustrations common to a number of picture dictionaries of Central Australian languages (e.g., CAPD, 2003; KPD, 2004), also shows the continuing importance of the concept of ground water to Anangu. On the two pages devoted to water vocabulary, there are 12 pictures. These pictures cover vocabulary such as *kapingku puyini* ‘to rain’ and *tjukula* ‘rockhole’ (see Haseldine, 2016), but the verb *tjawani* ‘to dig’ is also included, with the example sentence in (28):

- (28) *Minymangku karungka kapi tjunu walypayatangka tjawani.*
 Minyma-ngku karu-ngka kapi tjunu walypayata-ngka tjawa-ni.
 woman-ERG karu-LOC water groundwater tin-INS dig-PRS
 ‘The woman is digging a soakage in the creek with a tin.’

The verb *tjawani* ‘to dig’ is a physical activity verb that is important in Anangu culture (see Goddard & Wierzbicka, 2009 on the relationship between cultural practices and these kinds of verbs). There is some lexical elaboration concerning digging and, broadly speaking, the vertical dimension in Pitjantjatjara/Yankunytjatjara. To illustrate, there are verbs associated with digging, such as *mantani* (from *manta* ‘ground’) “scoop earth from hole while digging”, and *walytjarpunganyi* “dig deep, narrow trench or drain” (PYED).

There are also a number of words associated with the burrows of creatures that are dug for, such as *ngari* “underground recess or alcove in honey-ant nest, where bloated syrup-filled honey ants are found”.

In her book *Drawn from the ground: Sound, sign and inscription in Central Australian sand stories* (2014), Jennifer Green writes, “[t]hose familiar with Aboriginal people of Central Australia often remark on their visual acuity and their finely tuned ability to read the surface of the ground. (...) The surface of the country preserves the marks of recent events.” (p. 18). (See Green, 2014 for references; also Edwards, 1988, pp. 108–111; 2014, p. 47).

Going back to the topic of soakages, there are a number of Pitjantjatjara/Yankunytjatjara words for these kinds of places. For example, PYED lists *warn-galyku* and *kapi piti* (*kapi* ‘water’, *piti* ‘hole’) as equivalents of *tjukitji*, and gives all of them the definition “soakage” (for more vocabulary, see also Layton, 1986; PYED).⁴⁴ *Kapi tjunu*, illustrated in (28) and again in (30), also has the meaning of “soakage”, i.e. place from which one obtains *kapi tjunu* ‘groundwater’.⁴⁵ This could be considered a case of metonymically motivated regular polysemy (Apresjan, 1974).

I have chosen to provide a reductive paraphrase of the word *tjukitji* as opposed to another word for a soakage because *tjukitji* was the only one of these terms that I heard in Ernabella (see also PYPD). The word *tjukitji* is of post-contact origin, and comes from the English *soakage* (rendered according to Pitjantjatjara/Yankunytjatjara phonology and orthography).

Next, I will return to the subject of holes in Pitjantjatjara/Yankunytjatjara. In addition to words for the burrows of creatures and for specific kinds of holes dug

44. Constructions such as *kapi piti* and *kapi tjunu* can be considered a kind of classifier construction (Wilkins, 2000). See also *kapi tjukula* ‘rockhole’ and *kapi warku* ‘rock pool’ (e.g., James, 2006, p. 87).

45. Wilkins (2000, pp. 179–180) comments on the “unity of the actual and the potential” in the senses of nominals in Australian languages, concentrating on the example of *kere* ‘game animal/meat’ in Arrernte and proposes a monosemous interpretation (see Wilkins, 2000 for further references; Evans, 1992, p. 479).

by people, there is one general term for a hole in the ground, *piti*, as in *kapi piti*, illustrated in (29) (with the verb *tjawani*).⁴⁶

- (29) *Nganana piti pulka tjawanu.*
 Nganana piti pulka tjawa-nu
 I.PL hole big dig-PST
 ‘We dug a big hole.’

The word *piti* would have to be used as a semantic molecule to explicate the meaning of many more specific Pitjantjatjara/Yankunytjatjara words for holes, as well as the word under discussion, *tjukitji*.

Tjukitji is explicated in [F], which is followed by a discussion of its semantic components. The discussion draws heavily on an account by a senior woman of the creation of a ‘*tjukitji*’ in (30). I have divided the story into three numbered sections to make the discussion clearer for the reader.

- (30) (1) *Tjukula tjikira wiyalpai munu wiyara ankupai ngura kutjupakutu ngarpartji, mina tjunukutu. Ankupai mina tjunu,*
 (2) *ngapartji tjawani. Mantangka tjunkunytja tjawara, tjawara, tjawara, tjawara, tjawara patini, kilinananyi. Ka palaru pakani. Pakara, pakara, pakara pulkaringanyi. Mina pulkaringanyi.*
 (3) *Tjutini piti panya palula piti panya mimpungka panya tjutira, tjutira, tjutira, tjutira, tjutira katinyi ngurakutu. Ngurangka katira tjunanyi yuungka. Waru kutjala, kutjala, kutjala, kutjala, kutjala wantinyi kutjani tjunkula wantinyi.*

Tjukula tjiki-ra wiyal-pai munu wiya-ra anku-pai ngura
 tjukula drink-SER use.up-CHAR CONJ use.up-SER go-CHAR place
 kutjupa-kutu ngarpartji, mina, tjunu-kutu. Anku-pai mina
 other-ALL in.turn water ground.water-ALL go-CHAR water
 tjunu, ngapartji tjawa-ni. Manta-ngka tjunku-nytja tjawa-ra,
 ground.water n.turn dig-PRS ground-LOC put-NMLZ dig-SER
 tjawa-ra, tjawa-ra, tjawa-ra, tjawa-ra pati-ni, kilinana-nyi. Ka
 dig-SER dig-SER dig-SER dig-SER close.off-PRS clean-PRS CONJ
 palaru paka-ni. Paka-ra, paka-ra, paka-ra
 3.SG come.up-PRS come.up-SER come.up-SER come.up-SER

46. The word *piti* is known to some Australian English speakers through the place name Coober Pedy, an opal mining town in northern South Australia. On the origins of this name, see Lennon (2000); Nasessan (2010; building on Hercus, 2005 and Hercus & Potezny (1999)).

pulkaringa-nyī. Mina pulkaringa-nyī. Tjuti-ni piti panya palula
 build.up-PRS water build.up-PRS fetch-PRS dish DEM there
 piti panya mimpu-ngka panya tjuti-ra, tjuti-ra, tjuti-ra,
 dish DEM bowl-LOC DEM fetch-SER fetch-SER fetch-SER
 tjuti-ra, tjuti-ra kati-nyī ngura-kutu. Ngura-ngka kati-ra
 fetch-SER fetch-SER bring-PRS place-ALL camp-LOC bring-SER
 tjuna-nyī yuu-ngka.
 put-PRS windbreak-LOC

- (1) Having drunk (it all) from the *tjukuḷa*, the water was all used up. It was finished so they went to another camp, to (a place with) ground water. They went to (a place with) ground water.
- (2) They dug, putting (a crowbar) into the ground, and dug and dug for a long time. They closed it off and cleaned it, and water came up. It kept coming up and welling up. The water welled up.
- (3) They collected the water in a dish, you know, a *mimpu* bowl. After they collected the water, they went back to camp. They brought it to camp and put it in the *yuu* (windbreak).⁷

(Field recording, IW.T.YW.100609, see Appendix 1)

[F] *tjukitji* (Pitjantjatjara/Yankunytjatjara)

- a. a place of one kind
- b. places of this kind are *piti* ('holes dug in the ground') [m]
- c. there can be *kapi* 'water' [m] in places of this kind, people want this
- d. at many times, people do some things in some places for some time
 because they want there to be '*piti*' [m] in these places
- e. they know it is like this:
 there is *kapi* 'water' [m] below the *manta*, 'ground' [m] in these places
 this *kapi* 'water' [m] can move if there are *piti* [m] in these places
 if this *kapi* 'water' [m] moves, after this
 there can be *kapi* [m] in these *piti* [m], as they want

Component (b) establishes '*tjukitji*' as '*piti*', holes dug in the ground. Component (c) states that '*tjukitji*' are places where there can be water, and that people want this. In section 1 of the account in (30), the story teller speaks of a group seeking out a place to dig a '*tjukitji*' because they had used up all the water in a '*tjukuḷa*'.

Component (d) portrays people digging in the ground and moving earth because they want to create '*piti*'. The senior woman explains in section 2 of (30) how *Anangu* dug in the ground with a crowbar, and then closed off the hole and cleaned it.

The final component (e) is framed with the introductory phrase “they (people) know it is like this”, which frames a technological knowledge scenario telling of the reasons why people dig these holes. The first line of the knowledge scenario sets up the location people chose to dig ‘tjukitji’, that is, in a known place where there is water below the ground. This place could be in a ‘karu’, or another piece of earth. The second line of the knowledge scenario portrays the potential for water to seep into these ‘piti’. Section 2 of (30) tells of the water rising to the surface and welling up in a ‘tjukitji’. The final line of the knowledge scenario presents the water as available in the ‘piti’ after it seeps in. Section 3 of (30) describes collecting the water in a dish and taking it back to camp.

To round off the discussion, the meaning of *tjukitji* indicates the water collection technology of dwellers of the desert, where water is scarce. It reflects the use of ground water by Anangu, their knowledge about these kinds of places, and the cultural salience of the vertical dimension.

6.7 Concluding remarks

In this chapter, I have examined the semantics of a number of words for kinds of places used for agriculture, pasture and water collection in British English, Australian English and Pitjantjatjara/Yankunytjatjara. The existence of these places of these kinds is the result of human intervention in the landscape. In the semantic explications of the words treated in this chapter, one frequent phrase is “people want this”, or similar. Furthermore, the examination of the meanings of this selection of words from Britain and Australia raises broader issues about the use and ownership of country.

The specific selection of nouns described in the chapter are from languages which come out of cultures with differing subsistence patterns. It testifies to the fact that peoples of diverse lifestyles intervene in their landscapes using varying technologies, and need ways to talk about this. In this chapter, I have shown how the human manipulation of land and water is part of the lexical semantics of place words in Pitjantjatjara/Yankunytjatjara, Australian English and British English.

In Australia, in academic discussion, and, in the minds of many non-Indigenous people, there has been a shift from a conceptual *terra nullius* (see Cathcart, 2009, p. 54). This is the notion that, prior to British colonization, the original inhabitants of Australia did not utilize the land in such a way that meant they had any claim to ownership over it. More recently, there has been some recognition of prior Aboriginal occupation, ownership, and management of the land, also in Australian law in the form of land rights and native title acts (CLC, 2008; Lester, 1993; Sutton, 2001; Toyne & Vachon, 1984).

One focus of the change in perception in Australia has been the acknowledgement that Aboriginal people deliberately burned country to create new growth, among other purposes. Prominent voices in this shift in the Australian consciousness include the archeologist Rhys Jones (1969), who coined the term fire-stick farming; the anthropologist Marcia Langton (1996, 2012), who challenges the way the ‘wilderness’ concept in the arts and in environmentalism erases Aboriginal ownership and use of land in Australia; the historian Bill Gammage (2011), who has written a widely-read book about Aboriginal land management and farming; and writer-cum-historian Bruce Pascoe (2014), who champions the concept of Aboriginal agriculture, drawing on the diaries of explorers and early colonists, who did recognize Aboriginal involvement with the landscape. The senses of the Pitjantjatjara/Yankunytjatjara *nyaru* and *tjukitji* reflect this Aboriginal intervention in the country via burning and digging for groundwater.

Another aspect of English-speakers’ conceptualization of human manipulation and the landscape that is revealed in this chapter is the notion of individual ownership contained in the English concept of ‘field’ and the Australian English ‘paddock’ and ‘dam’. This property concept is expressed in the semantic explications of *field*, *paddock*, and *dam*. The view of tracts of land or water as ‘private property’ is a product of the British Enlightenment, and would not have been part of the semantics of these words in earlier English.⁴⁷

A concept of discrete legislated individual ownership is not part of the Pitjantjatjara/Yankunytjatjara terms discussed in this chapter, *nyaru* and *tjukitji*. As one of Myers’ Pintupi interlocutors explained to him, “Pintupi country was not like a paddock that is fenced off” (Myers, 1991, p. 60).

My explications of Pitjantjatjara/Yankunytjatjara words could be seen as being in want of notions of land tenure, as well as spiritual aspects of place. I don’t see ownership as such as part of the semantic invariants of the Pitjantjatjara/Yankunytjatjara words discussed in this work, or indeed the words from European languages covered in previous chapters. Undoubtedly, an explication of the Pitjantjatjara/Yankunytjatjara word *ngura* ‘country’ would have to include reference to, roughly speaking, kinds of ownership (see Keen’s 2010, pp. 56–57 call for a nuanced understanding of Indigenous property) in terms of notions such as the association of ‘ngura’ with particular individuals and groups, ancestral beings, and the responsibility to care for ‘ngura’. A reductive paraphrase of Arrernte *pmere*, glossed as ‘(socially significant) place’ (Wilkins, 2000, p. 196;

47. Enclosure and individual ownership of land in Britain has been opposed by protest movements, such as the Levellers, in the 17th century (e.g., Kennedy, 2008), and contemporary critics (e.g., Fairlie, 2009).

2002, pp. 39–40) contains elements like those mentioned (see also Myers, 1991, 2002; Goddard, 2017b).

As with the discussion of other place concepts treated in this book, we have seen how the semantics of the selected nouns reflects both physical landscape and culture. The senses of the British English terms embody the fertility of the British landscape, whereas the Australian English meanings speak to the varying nature of the Australian climate – the perception of a settler colonial people with the default country concept. The semantics of the Pitjantjatjara/Yankunytjatjara words indicate the fecund nature of Anangu country at particular times, despite the fact that such country may be considered arid and infertile by some English speakers.

The bush in Australian English

7.1 The term *bush* has assumed great importance in the Australian lexicon

“The term *bush* has assumed great importance in the Australian lexicon.” (Moore, 2008, p. 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 the history, way of life, and psyche of settler Australians. More generally, the meanings of *the bush* can help reveal the relationships between settler colonial societies and their adopted lands.⁴⁸

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, pp. 7–8 on South-Western United States; Branford, 1994, pp. 446–450 on South Africa; Gordon & Deverson, 1985, pp. 30–42 on New Zealand; Zamora, 1982, pp. 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 sense of the word *creek* has changed 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 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, p. 28). The term *the bush* was taken up very early in the 19th century to describe country covered in native vegetation.⁴⁹ Dealing with the physical environment of the continent was one of the factors in shaping a distinctive Australian ethos and culture. Furthermore, as the

48. An earlier version of this chapter appeared in the *Australian Journal of Linguistics* (2011, 31(4), 445–471).

49. 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, p. 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, p. 28).

settlers made their way in a new country *the bush* acquired meanings related to culture and human geography.

In this chapter, I ask what exactly Australians mean when they say *the bush*. In doing so, I tease out three individual meanings of the term.⁵⁰ For each of these senses, I provide a statement of meaning which incorporates the intertwined physical and cultural aspects of *the bush*. Firstly, I briefly discuss a general sense of *the bush* that could apply to Englishes spoken across a number of former British colonies. Next, I examine *bush* as a type of vegetation, as in “the hill was covered with bush”. Then, 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”. I then explore *the bush* as a human domain in Australia, as in “this hardy woman of the bush”. The final meaning covered is *the bush* referring to the places in Australia that are outside the major cities, as in “Sydney or the bush”. The last section 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 demonstrates 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, pp. 2–3). Furthermore, in my examination of *the bush*, I also show that the portrait of one word can help shed light on languages and their users.

7.2 *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.⁵¹ It was through South African

50. There are, naturally, further meanings of *bush* and *the bush* which go beyond the bounds of this study. To give one example, Australians who live outside the major cities are as a collective called *the bush*.

51. Neither New Zealand English nor South African English are homogeneous (Starks & Thompson, 2009; Coetzee-Van Rooy & Van Rooy, 2005). I am looking at the term within

English that the term *bush* came into Australian English (AND). (The South African English term comes from the South African Dutch, *bosch* ‘wood, forest’ (DSAE, 1996)).⁵² 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). In his book *Fairness and Freedom: A history of two open societies: New Zealand and the United States*, historian David Hackett Fischer writes that, “what New Zealanders call bush: [is, H.B.] a dense green tangle of forest, fern, and shrub. Overhead [is, H.B.] a canopy of magnificent old trees that are unique to these islands” (Fischer, 2012, p. 139).

‘The bush’ or ‘bushveld’ of South Africa, by contrast, often consists of rolling grassland dotted with acacias and clumps of thornbush (Bainbridge, 2009, p. 124). Furthermore, in South Africa ‘the bush’ can be opposed to ‘the veld’ (‘open undeveloped countryside’) which is itself a distinctive national landscape concept (DSAE, 1996).

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 & Hughes, 2007, pp. 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 towns (Fischer, 2012, pp. 140–141). In contemporary times, in New Zealand, ‘the bush’ is often prized and protected (Dunlap, 1997, p. 84). The indigenous silver fern is a New Zealand national emblem, as are native birds, in particular, the kiwi (*ibid.*, pp. 98–99).

I propose that the meanings of *the bush* in different varieties of settler English have a common core, which I will label *the bush*₀. 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*₀ captures the intersection of meanings but it is outside the scope of the present chapter focusing on *the bush* in Australian English.

mainstream standard New Zealand English and the historically ascendant British White South African English.

52. There is too the English term *bush* in the sense of “a medium sized thing growing out of the ground, shrub”. Moore (2008, p. 29) suggests that this meaning and that of the South African Dutch *bosch* (‘wood’, ‘forest’) were conflated.

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 5). The discussion of this use too goes beyond the scope of this chapter.

7.3 *The bush of the Australian landscape*

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’. 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: “[n]atural vegetation of any kind; a tract of land covered in such vegetation”, and “[c]ountry 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 (see 4.2 on the definite article).

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.

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, pp. 167–168)

There is a variety of vegetation which composes 'bush' including trees, bushes, undergrowth, and grasses. A list of frequently asked questions on the Bushwalking NSW website seemingly aimed at non-Australians describes the concept of 'bush' in (3).

- (3) “**Bush**” is just an Australian term for our unique combination of Eucalypt forests, wildflowers and scrub.

During early British settlement, *bush* was often described as “monotonous” (Moore, 2008, pp. 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, p. 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 significant adjective collocates in the Australian subcorpus of Wordbanks, as in (4).⁵³ There are no antonyms, such as *sparse* and *thin*, included in the list.

- (4) ... steep hills covered in **dense bush** ...⁵⁴

53. The other ten most significant 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*.

54. Unless otherwise indicated, all examples used in this chapter are from the Oz News Australian English subcorpus of Wordbanks

The vegetation which makes up ‘bush’ grows in relatively dry soils (Taylor, 1994, p. 60). Australia’s landscape is often characterized with reference to its deviation from European norms. The country is said to be ‘dry’ and ‘brown’ in comparison to ‘green’ England, although this description may not be a disparaging one (Arthur, 2003, pp. 25–26; see also Section 1.7). Writings of early colonists contain descriptions of the foliage of Australian trees as “brownish-olive” and “sombre” (Moore, 2008, pp. 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).

- (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 Moore writes, “[i]n 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” (2008, pp. 24–25). One of these terms is *bush*. For example, Australian native plant species include the *bush tomato* and the *bush rose* (Arthur, 2003, p. 81).

‘Bush’ is seen as 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** ...

Recent publications have challenged the established idea that the Australian landscape was natural (a word used in the AND in its definition of *bush*) on the arrival of British colonists. Writers such as Gammage (2011), Pascoe (2014), and Watson (2014) draw on diaries of settlers and explorers. Many of these colonists often described the Australian landscape as a ‘park’, rather than ‘wild’, based on their observations of Aboriginal land management. Pascoe (2014, Introduction) dates the adoption of a white Australian conception of the landscape as natural to the late 19th century. This change in perception was influenced by the disruption to Aboriginal culture and economy by frontier violence, as well as the degradation of land from pastoralism.

Traditionally, Indigenous people burned off vegetation for a variety of purposes (e.g. Pyne, 1991, pp. 85–135, see also discussion of the Pitjantjatjara/Yankunytjatjara word *nyaru* and references in Section 6.4). Since the establishment of the British colonies in Australia, plant growth has been cleared from the

land to make way for agriculture, towns and cities (Arthur, 2003, pp. 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)

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 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
 because some time before people did something in these places

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.

I next discuss ‘the bush’ in the sense of an area of the Australian landscape (*the bush*₁) 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 white child lost in ‘the bush’ has formed part of the Australian psyche, and has surfaced in art and literature (Pierce, 1999; see also Tilley, 2012 who expands the discussion to look at adult vanishing narratives). 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, pp. 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 writes, “bushwalking has become the most popular way that urban non-indigenous Australians have come to know the bush” (2007, p. xi). Byrne and Goodall in a study of placemaking among recent Arab and Vietnamese immigrants to Sydney report that these newcomers regard bushwalking as an exclusively Anglo-Australian pastime (2013, p. 67). They do, however, visit a national park for picnics.

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 & Mulcock, 2005). The environmental movement and the creation of National Parks and Nature Reserves also reflect the Australian reverence for ‘the

bush' (Harper, 2007, pp. 242–271; Kynaston, 1977, p. 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, pp. 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, pp. xiii–xvi).⁵⁵ 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, p. 46) (see also Australian attitudes towards 'desert' discussed in 5.2). 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, pp. 85–86).

*The bush*₁ can be explicated as in [B].

[B] *the bush*₁ (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

55. 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, pp. 81–86).

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’ – birds, animals, insects, etc. – and component (e) specifies that they are Australian.⁵⁶ Component (f) depicts ‘the bush’ as isolated from human settlement.

7.4 *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*₂. ‘The bush₂’ does not primarily relate to the land. It concerns people living on the land outside the cities near ‘the bush₁’. 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*₂ 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*.⁵⁷

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’.

56. 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 but “the naïve picture of the world” or folk concepts (Apresjan 1992, pp. 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, pp. 199–200).

57. The sample of *the bush* is taken from a 250-word random sample of *the bush* the Oz News subcorpus of Collins Wordbanks. From this data I extracted instances according with the meaning of *the bush*₂.

- (10) 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, p. 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.⁵⁸

... 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], pp. 1–2)

This ideal of a distinct bush character is born out in the examples from the sample, as in (12).

58. Ward’s book 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). Also, the ideas contained therein have been accused of being exclusionary (Nile, 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, p. 171).

- (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, p. 22)

Lawson also portrays 'the bush' as a meeting point of Aboriginal people 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 Aboriginal people, 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 Aboriginal people of mixed-descent who are barred from fully participating in the life of the properties and townships of 'the bush' (Prichard, 1967). Goodall points out that the myth of the white 'bushman' erases the history of Aboriginal workers of 'the bush', both men and women, who have undertaken a variety of occupations (2008, p. 135).

Another stereotype of the 'bushman', that of a heavy drinker, also finds expression in (13) about a representation of a shearer in the 1970s film *Sunday Too Far Away*.

- (13) ... our finest film about **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, 1982b). Example (14) is a snippet of a review of the film *Dad and Dave*.

- (14) ... affectionate retelling of the **Aussie bush legends** created by Steele Rudd. It's the **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 *bush* can be used as a qualifier to mean rustic, rough, crude or simple. There are compounds concerning occupations such as *bush lawyer* and *bush carpenter*. A *bush carpenter* is a man who does rough minor carpentry work but lacks formal qualifications. Example (15) is an affectionate example of *bush carpenter*.

- (15) ... the knockabout **bush carpenter** who loved a punt on the horses and brewing his own beer ...

The compounds *bush balladeer*, *bush ballad*, and *bush poetry*, as seen in (16), also help illuminate the meaning of *the bush*₂.

- (16) It wouldn't be Australia Day without some **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 humorous 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 2.2).

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 have lived on in film, notably in the character of Mick Dundee (played by Paul Hogan) in *Crocodile Dundee* (1986) (Curthoys, 2000, pp. 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 (Dixon, 1999, p. 18). The present chapter cannot provide a detailed treatment of this topic but will offer a brief discussion. Russel Ward wrote that "[m]ost writers seem to have felt strongly that the 'Australian spirit' is somehow intimately connected with the bush ..." (Ward, 1974 [1958], p. 1). In more contemporary times, the bush myth has been critiqued because leaves out women, Indigenous people, and non-British migrants (Nile, 2000), and does not reflect the lives of Australians who mostly live in cities (Davison, 2016). 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 quotation from Richard Nile, editor of *The Australian Legend and its Discontents*.

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, p. 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 it usually refers to a person who works hard to make a decent living in difficult circumstances” (Moore, 2010, p. 9). 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’ (*ibid.*, pp. 9–12). 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, & 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 stockman’s coat.

(Soutphommasane, 2009, pp. 64–65)

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 & Donoghue, 2010, p. 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”.⁵⁹

The piece sends up both the ‘effete’ city dwellers and the ‘hard men’ Bevan and Chopper. Most of the Australians who understand the humour of 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, or whether they find the skit funny or not) (see Goddard, 2006c; Wierzbicka, 1997, Chapter 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 bush*₂ (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”

59. <<http://www.youtube.com/watch?v=mh6pZQX22CQ>>, accessed 30 March 2017.

In component (b) the explication situates ‘the bush₂’ near the vegetated area of ‘the bush₁’. Components (c) and (d) 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 bush₂* 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.

7.5 *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 labelled *the bush₃*.⁶⁰ 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, pp. 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”.

60. In examining this sense, in part, I looked at sixty tokens of *the bush₃*. These examples were taken from a 250-word random sample of *bush* in the Oz News subcorpus of Collins Wordbanks.

- (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, pp. 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.⁶¹

The meaning of *the bush*₃ is more political than the social and cultural sense, *the bush*₂. Residents of 'the bush' have formed a political interest group in Australia (Maddox, 2005, pp. 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*₂ and *the bush*₃ meanings) in Australian culture (Stafford Smith, 2004, p. 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, p. 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*₃ 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, etc.) in 'the bush' is a major issue in Australia (Woodward, 2006, pp. 246–247). 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** ...

61. <<http://www.mynrma.com.au/travel/holidays/ideas/nsw/oxford-goes-bush-in-armidale.htm>>; accessed 30 March 2017.

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 & Dunn, 2010, p. 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, Brand, Noble, & Wilding, 2002, p. 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, pp. 211–212).

‘The bush₃’ 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 Section 6.2, H.B.].
(Grenville, 1999, p. 191)

There is, however, a geographic relationship between the two kinds of places. ‘The bush₃’ (where people live) is located near the landscape ‘the bush₁’, even though vegetation can be cleared to make way for human activity. Bush dwellers face the threat of fires in ‘the bush₁’ (‘bushfires’). People who move from ‘the city’ to ‘the bush’ for a change of lifestyle are labelled *treechangers*.

AND lists examples of *bush* from as early as 1825 under its meaning of ‘[t]he 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.⁶² *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

62. The word *country* meaning the area outside cities is more usual in Australia than in the United Kingdom. *Countryside* is more common in UK English.

been a significant influence on Australia's psyche and history. As the historian Geoffrey Blainey 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" (2001 [1966], p. ix). The Australian English lexicon makes even finer distinctions, as is seen in the use of the term *outback* for particularly remote parts of Australia (see 5.2). 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 present the meaning of *the bush*₃ in explication [D].

[D] *the bush*₃ (Australian English)

- a. a place of one kind
- b. this place is near the bush₁ [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*₂, the location of 'the bush₃' near 'the bush₁' 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, 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., going to orchestral concerts).

7.6 Concluding remarks

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, 1982a; Dunlap, 1999; Moore, 2008, 2010; Torney, 2004; Ward, 1974 [1958]; Watson, 2014, 2016). 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 earlier (Moore, 2008, p. 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). ‘The bush’ can be said to be a semantic domain of Australian English which contains vocabulary items such as *squatter*, *swag*, *cattle station*, and *drover* (Ramson, 2001, p. 193; see also Moore, 2010, pp. 35–38).

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 colonial settlers (Moore, 2008, pp. 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 native to the country 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 bush₂’ and ‘the bush’ as a kind of place where people live, ‘the bush₃’. 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 has 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*₃).

Other British settler countries can tell similar stories about the connections between non-Indigenous people and a new land. Environmental historian Thomas R. Dunlap 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” (1999, p. 46). 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, p. 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, p. 103). In South Africa, the hunting of game assumed importance in the national psyche (Beinart & Hughes, 2007, pp. 58–68).

One emphasis of this chapter is that cultural keywords can be based on country concepts (see also Goddard, 2017b; 2.2, 4.5, this volume). *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, pp. 156–197).

To recapitulate, in this chapter I have demonstrated that fine-grained semantic analysis of national landscape concepts reveals cultural conceptualizations.

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.

CHAPTER 8

Concluding remarks

8.1 Introduction

In this chapter I will present some conclusions and some directions for future research.

As has been shown in this book, the categorization of landscape can be language and culture specific. Furthermore, 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 landscape categorization as a whole.

Cross-cultural and cross-linguistic differences in landscape words and categories have been little examined. (The work of ethnophysiographers, ethnoecologists, and the MPI school are notable exceptions, as discussed in 1.5, e.g. Burenhult ed., 2008; Johnson & Hunn, 2010; Mark et al., 2011).

In this book, I have gone on a journey of discovery into different kinds of landscape categorization. I have uncovered the semantics of a selection of words Europeans apply to their native lands; examined the semantics of a selection of words Pitjantjatjara- and Yankunytjatjara-speaking Anangu use for kinds of places in their own country; and shed some light on the meanings of some of the words Australian English speakers use to describe the Australian landscape, one of an environment unlike that of Britain.

Notably, this book 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 Chapter 3).

This book has found that the senses of some English geographic words are very similar to some of those used in some other Standard Average European languages (e.g. *mountain* in English, *montaña* in Spanish, see Chapter 3). 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 places (see 2.2; 2.3). 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.

Furthermore, this book has drawn out the differences between an Aboriginal conceptualization of the Australian environment with the conception of the same landscape in European languages. For example, Pitjantjatjara/Yankunytjatjara draws many distinctions with regard to kinds of places in the arid environment of Anangu country (e.g. *puti*, *puli*, see 5.4, 5.5). English speakers, by contrast, often rely on the one word for a dry kind of place, *desert* (see 5.2).

Moreover, in Australia, 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*, *the beach*, *desert*, *the bush*, *paddock* and *dam* that are now applied to the places in the Australian landscape (see 2.2, 4.3, 5.2, 6.2, 6.5, 7.3). 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.

Throughout the book, 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 2.2).

As well as differences, there are clear categories of kinds of places in the landscape which cross languages and cultures. In this book, some kinds of long flowing-water places (Chapter 2); a number of kinds of elevated places, long places formed by many elevated places, and cliff places (Chapter 3); and some kinds of places based on 'the sea' (Chapter 4) have been explored. There are also categories of large areas of land, such as 'desert', 'the bush', and Pitjantjatjara/Yankunytjatjara ecozones (Chapter 5; Chapter 7); and agricultural kinds of places (Chapter 6).

In this study, I have employed a detailed reductive paraphrase approach to lexical semantic analysis with a view to reducing terminological and conceptual

ethnocentrism. This analysis was designed 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 differences and similarities in conceptual and linguistic categorization are shown, by taking the example of long flowing-water places. This category is, roughly speaking, long places (stated as “places of this kind are long [m] places” and “places of this kind have two sides”), filled with water (stated as “there is water [m] in places of this kind”) which moves (stated as “the water in places of this kind is moving”).

However, this category shows up in various languages in differing ways. My analysis stated 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 ‘fleuve’ concerns places whose water, most often, flows into the sea. This aspect of the semantics of *fleuve* 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 2.

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 & Bohnermeyer, 2008), material composition is a leitmotif of landscape categorization in Pitjantjatjara/Yankunytjatjara; notably, the substances ‘water’ (‘kapi’), ‘earth’ (‘manta’), ‘rock’ (‘puli’) (see 2.4; 3.2).

In the course of my semantic investigations, I have also proposed that some important semantic molecules, intermediate units of meaning, are 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 Chapter 4; Chapter 5). Some of these molecules, such as ‘kuka’ ‘game’ in Pitjantjatjara/Yankunytjatjara, are language specific. Exemplars have also been used in the explications of Pitjantjatjara eco-zone words (e.g. ‘kampuranpa’ ‘desert raisin’ is an exemplar of the ‘mai’ ‘plant food’ found in ‘puti’).

8.2 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, 2015; 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 & Quinn, 1997; Maffi, 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 book has shown how the senses of individual water-place words in Pitjantjatjara/Yankunytjatjara, such as *karu*, are connected to the water-gathering technologies of Anangu, a desert people (see 2.4).

Moreover, there are cultural and utilitarian elements of the meanings of some eco-zone words in Pitjantjatjara/Yankunytjatjara, such as *puti* and *puli*. The explanations of these words mention habitat-specific materials and food sources which people harvest and gather. The fact that these zones are rich resources for Anangu is part of the meanings of the terms (see 5.3 to 5.6). 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 5.2).

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 4.6).

To a degree, the book has engaged with a historical view of the development of landscape words, particularly in Australian English. In future research, it would be interesting to trace the specific stages of semantic change in regards to landscape words, and, also, the cultural motivations for these changes. A project of this nature could be carried out by looking at wider landscape discourses and with the use of historical corpora.

Furthermore, future work could look at the development of new landscape concepts and attendant vocabulary in contact language situations. One example is the emergence of a ‘beach’ concept in the Papuan language Koromu spoken inland through the introduction of the practice of using river banks for leisure (Carol Priestley, personal communication).

In the semantics of words for particularly fertile kinds of places ‘meadows’ and ‘nyaru’, a component relating to an affective response has been identified (“when people see places of this kind, they can feel something good because of this”). Even if how people feel does not necessarily appear in the meanings of many landscape words, a specifically linguistic approach could be taken to looking at the discourse of emotion and landscape (see also, Romero-Trillo, 2013). For example, Di Palma (2014) writes of the change in the English perception of mountainous places from one of disgust to seeing them as spectacular.

Another path opened up by the research in this study is looking at words for places of human settlement. Chapter 6 looked at words for places created by humans for agriculture, pasture, and water gathering. The semantics of words such as *city* and *village* could be examined. Preliminary work exists on the words *community* and *homeland* as they are used in Ernabella (Pukatja), APY Lands.

An additional direction of future research drawing on the material in this book could be the examination of how different cultures use various kinds of places. For example, one could write cultural scripts for land use. A cultural script 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 2006b: 5). The cultural scripts approach has been used to explore areas such as social interaction, speech routines, and cultural values (Goddard, 2006a; Goddard & Wierzbicka, 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. Another potential cultural script could concern how people regard the ecozone ‘puti’ in Pitjantjatjara/Yankunytjatjara.

8.3 Final remarks

This book 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, p. 16)

However, this book is novel in that it pins down these cross-cultural and cross-linguistic similarities and differences by using fine-grained semantic analysis.

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, p. 36)

Since Whorf wrote these words, hypothesized “common conceptions” and their “arrangements” have been studied extensively through NSM. As I have shown in this book, the use of a controlled metalanguage can give us a common measure for comparing “local variations” in thinking about the landscape. Precise reductive paraphrases allow us to unlock views embedded in different languages and help us to “translate” landscape categories without distorting their meaning.

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APPENDIX 1

Recordings information

Recording code	Speaker	Name	Date	Place	Transcriber
ADC. PA.EAC.240609	Amanyi (Dora Hagie)	puṭi A	24 June 2009	Ernabella Aged Care	Helen Bromhead
IW.NG.N.030609	Inpiti Winton	ngura	3 June 2009	Ngaratjara	Rosemary Armstrong
IW.NY.N.030609	Inpiti Winton	nyaru	3 June 2009	Ngaratjara	Narelda Adamson
IW.T.YW.100609	Inpiti Winton	tjukula	10 June 2009	Young's Well	Rosemary Armstrong
NE.PYW.020609	Nyinguta Edward	puṭi	2 June 2009	Young's Well	Noreena Heffernan/ Helen Bromhead
TS.PUR.110609	Tjariya Stanley	pila	11 June 2009	Umuwa region	Rosemary Armstrong

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The relationship between landscape and culture seen through language is an exciting and increasingly explored area. This ground-breaking book contributes to the linguistic examination of both cross-cultural variation and unifying elements in geographical categorization. The study focuses on the contrastive lexical semantics of certain landscape words in a number of languages. The aim is to show how geographical vocabulary sheds light on the culturally and historically shaped ways people see and think about the land around them.

Notably, the study presents landscape concepts as anchored in a human-centred perspective, based on our cognition, vision, and experience in places. The Natural Semantic Metalanguage (NSM) approach allows an analysis of meaning which is both fine-grained and transparent. The book is aimed, first of all, at scholars and students of linguistics. Yet it will also be of interest to researchers in geography, environmental studies, anthropology, cultural studies, Australian Studies, and Australian Aboriginal Studies because of the book's cultural take.

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