

The background of the cover is a misty, foggy forest scene. In the foreground, a large, leafy tree is partially visible on the right side, its branches extending across the top. In the background, several other trees are visible, their forms softened by the fog. The overall color palette is muted greens and greys, creating a serene and atmospheric setting.

# Ecolinguistics

Language, ecology and the stories we live by

**Arran Stibbe**

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# 1

## INTRODUCTION

Stories are the secret reservoir of values: change the stories that individuals or nations live by and you change the individuals and nations themselves.

(Ben Okri 1996: 21)

Stories bear tremendous creative power. Through them we coordinate human activity, focus attention and intention, define roles, identify what is important and even what is real.

(Charles Eisenstein 2011: 2)

When first encountered, ecolinguistics is sometimes met with bafflement. It is about ecology, and it is about language, but these two initially appear to be entirely separate areas of life. A cursory explanation is that language influences how we think about the world. The language of advertising can encourage us to desire unnecessary and environmentally damaging products, while nature writing can inspire respect for the natural world. How we think has an influence on how we act, so language can inspire us to destroy or protect the ecosystems that life depends on. Ecolinguistics, then, is about critiquing forms of language that contribute to ecological destruction, and aiding in the search for new forms of language that inspire people to protect the natural world. This is a superficial explanation but at least starts to create connections in people's minds between two areas of life – language and ecology – that are not so separate after all.

Ecolinguistics is very much more than this though. First, there are a number of different approaches with very different aims, goals and methodologies. Second, the analysis goes far deeper than commenting on individual texts such as advertisements or nature books. Ecolinguistics can explore the more general patterns of language that influence how people both think about, and treat, the world. It can investigate the *stories we live by* – mental models that influence behaviour and lie at the heart of

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the ecological challenges we are facing. There are certain key stories about economic growth, about technological progress, about nature as an object to be used or conquered, about profit and success, that have profound implications for how we treat the systems that life depends on. As Thomas Berry (1988: 123) puts it:

We are in trouble just now because we don't have a good story. We are between stories. The old story, the account of how the world came to be and how we fit into it, is no longer effective. Yet we have not learned the new story.

We have still not learned a new story, even though the conditions of the world make it even more important to do so than at the time Berry wrote this.

The link between *ecology* and *language* is that how humans treat each other and the natural world is influenced by our thoughts, concepts, ideas, ideologies and worldviews, and these in turn are shaped through language. It is through language that economic systems are built, and when those systems are seen to lead to immense suffering and ecological destruction, it is through language that they are resisted and new forms of economy brought into being. It is through language that consumerist identities are built and lives orientated towards accumulation, and it is through language that consumerism is resisted and people are inspired to 'be more rather than have more'. It is through language that the natural world is mentally reduced to objects or resources to be conquered, and it is through language that people can be encouraged to respect and care for the systems that support life. In critiquing the damaging social and ecological effects of financial structures, Berardi (2012: 157) states that:

Only an act of language can give us the ability to see and to create a new human condition, where we now only see barbarianism and violence. Only an act of language escaping the technical automatism of financial capitalism will make possible the emergence of a new life form.

Linguistics provides tools for analysing the texts that surround us in everyday life and shape the kind of society we belong to. These tools can help reveal the hidden stories that exist between the lines of the texts. Once revealed, the stories can be questioned from an ecological perspective: do they encourage people to destroy or protect the ecosystems that life depends on? If they are destructive then they need to be resisted, and if beneficial they need to be promoted.

The role of this book is to bring together a range of theories from linguistics and cognitive science into a linguistic framework to reveal the stories we live by; to develop an ecological framework for judging those stories against; and to put the linguistic and ecological frameworks into action in analysing a wide range of texts from different areas of life.

This book is based on one key premise: that ecolinguistics can play a valuable role in exposing and questioning the stories we live by, and contribute to the search for new ones. This is only possible if a large number of people, from a wide variety of backgrounds, undertake ecolinguistic inquiry, from major academic research

projects to personal exploration. This book, then, is for linguists, geographers, biologists and academic researchers from diverse subject areas. It is for students at all levels, educators, sustainability officers in companies, those working in environmental organisations, and those involved in a more personal inquiry into their own place and role within an unsustainable society. It is for everyone who is engaged in an inquiry into the industrial society around them, everyone who is questioning why that society is unsustainable and how it can be changed.

## The stories we live by

As evidence of the scale of the ecological issues we are facing in the twenty-first century emerges, and the scale of the response required becomes clearer, there are increasing calls to go beyond attempts to address isolated symptoms with technical solutions and instead consider the deeper social and cultural causes of the problems we face. Growing inequality, climate change, biodiversity loss, alienation from nature and loss of community are bringing into question the fundamental stories that industrial societies are based on.

David Korten (2006: 248) describes four stories at the heart of western imperial civilisation which he claims have profound ecological implications. There is the ‘prosperity story’ which promotes worship of material acquisition and money, the ‘biblical story’ which focuses on the afterlife rather than the world around us, the ‘security story’ which builds up the military and police to protect relationships of domination, and the ‘secular meaning story’ which reduces life to matter and mechanism. These stories, he maintains, perpetuate injustice and lead to both alienation from life and environmental destruction. Chet Bowers (2014: 27) describes how the root metaphors of ‘individualism, progress, economism, and anthropocentrism have merged into a powerful process of conceptual and moral legitimisation’. Stories such as these, he claims, carry forward ‘the deep assumptions of an ecologically unsustainable culture’. For Paul Kingsnorth and Dougald Hine (2009) the most dangerous story that we live by is ‘the story of human centrality, of a species destined to be lord of all it surveys, unconfined by the limits that apply to other, lesser creatures’.

These are not, however, stories in the usual sense of narratives. They are not told in novels, read to children at bedtime, shared around a fire, or conveyed through anecdotes in formal speeches. Instead they exist behind and between the lines of the texts that surround us – the news reports that describe the ‘bad news’ about a drop in Christmas sales, or the ‘good news’ that airline profits are up, or the advertisements promising us that we will be better people if we purchase the unnecessary goods they are promoting. Underneath common ways of writing and speaking in industrial societies are stories about unlimited economic growth as being not just possible but the goal of society, of the accumulation of unnecessary goods as a path towards self-improvement, of progress and success defined narrowly in terms of technological innovation and profit, and of nature as something separate from humans, a mere stock of resources to be exploited.

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To give an example of how a story can be told ‘between-the-lines’, consider the 2013 BBC documentary ‘What makes us human?’, summarised on the BBC website as:

- Professor Alice Roberts investigates exactly what makes us different from the animal kingdom. What is it that truly makes us human? (ML12 – see Appendix for reference).

Behind this phrasing are two stories. The first is that humans live outside the animal kingdom, i.e. that humans are not animals. The second is that what makes us human is to be discovered in our differences from other animals rather than our commonalities. In the documentary, Professor Roberts herself does not use the first story, but she does use the second:

- What is it about our bodies, our genes and our brains that sets us apart? What is it that truly makes us human?
- Michael has devised an experiment that he believes reveals a specific piece of behaviour that separates us from chimps, that defines us as a species, and truly makes us human (ML13 – transcribed extracts from ‘What makes us human?’).

Neither of these extracts directly states that ‘it is in our differences from other animals that we can discover what makes us human’; instead it is just assumed as the background story necessary to semantically link the two questions in the first extract, and the three coordinated statements in the second. The story is a pervasive one, told between the lines by many people, in many contexts. Noam Chomsky (2006: 88), for instance, wrote:

When we study human language, we are approaching what some might call the ‘human essence’, the distinctive qualities of mind that are, so far as we know, unique to man.

This uses *apposition* (the equating of two concepts by placing them immediately after each other) to represent the essence of being human as identical to human uniqueness. The definite article *the* in *the ‘human essence’* leaves no space for qualities we share with other animals to also be considered part of our essence.

The idea that our humanity lies in our uniqueness from other animals is just a story, however, and other stories are possible. The danger in focusing on difference is that the story can obscure some of the important things that humans and other animals have in common: having emotions, being embodied, bonding socially with others, and most importantly, being dependent on other species and the environment for our continued survival. Plumwood (2007) strongly criticises this story:

Arguably, the distinguishing feature of western culture, and perhaps also the chief mark of its ecological failure, is the idea that humankind is radically

different and apart from the rest of nature and from other animals. This idea, sometimes called Human Exceptionalism, has allowed us to exploit nature and people more ruthlessly (some would say more efficiently) than other cultures, and our high-powered, destructive forms of life dominate the planet.

In seeking solutions to the ecological challenges we face, we may have to explore and reconsider some of the fundamental stories that underlie our culture, including stories about who we are as humans.

The focus in this book on stories we live by is a way of bringing together a diversity of approaches to ecolinguistic analysis into a single framework. When ecolinguists examine ideologies, metaphors, frames and a variety of other cognitive and linguistic phenomena, what they are doing is revealing and uncovering the stories that shape people's lives and shape the society in which we live.

In its traditional sense, the word 'story' refers to a narrative which has a clear beginning, middle and end, and takes place over time. When engaging with a story in this traditional sense, readers can recognise it as a story by its structure and context, and hence treat it as just one possible perspective or interpretation of the world around us.

The stories we live by are different, however. We are exposed to them without consciously selecting them or necessarily being aware that they are just stories. They appear between the lines of the texts which surround us in everyday life: in news reports, advertisements, conversations with friends, the weather forecast, instruction manuals or textbooks. They appear in educational, political, professional, medical, legal and other institutional contexts without announcing themselves as stories.

In commenting on the 'story of human centrality', Kingsnorth and Hine (2009) state that 'What makes this story so dangerous is that, for the most part, we have forgotten that it is a story'. Similarly, David Loy (2010: 5) describes how 'unaware that our stories are stories, we experience them as the world'. Macy and Johnstone (2012: 15) describe the 'business-as-usual' story that sees economic growth and technological development as the way forward for society, and comment that 'When you're living in the middle of this story, it's easy to think of it as just the way things are'. The stories we live by are embedded deeply in the minds of individuals across a society and appear only indirectly between the lines of the texts that circulate in that society. They are therefore not immediately recognisable as stories, and need to be exposed, subjected to critical analysis, and resisted if they are implicated in injustice and environmental destruction.

Midgley (2011: 1) calls stories in this sense the 'myths we live by'. By *myths* she means 'imaginative patterns, networks of powerful symbols that suggest particular ways of interpreting the world'. Indeed, Kingsnorth and Hine (2009) use the terms *myth* and *story* interchangeably: 'We intend to challenge the stories which underpin our civilisation: the myth of progress, the myth of human centrality, and the myth of our separation from "nature".' Robertson (2014: 54) uses the term 'paradigm' in a similar sense to refer to 'a fundamental framework for understanding the world, a coherent set of assumptions and concepts that defines a way of viewing reality'. Of particular concern for Robertson is the paradigm of 'economic growth'. She

describes how ‘Growth as the core economic paradigm has been developing for several hundred years and has become solidly entrenched since the last century’. Berardi (2012: 131) emphasises the rhythmic nature of patterns using the term *refrain*, to mean the repetitions of gestures and signs that pervade and discipline society such as ‘the refrain of factory work, the refrain of salary, the refrain of the assembly line’. He states that ‘Now we need refrains that disentangle singular existence from the social game of competition and productivity’ (2012: 146). Martusewicz *et al.* (2011: 66) write of *root metaphors*, which ‘structure and maintain a “that’s just the way it is” perception of the world ... a deeply ingrained set of ideas that structures how one sees, relates to and behaves in the world’.

From this point, the term *stories-we-live-by*, hyphenated to show that it is a technical term, will be used to convey a similar concept to what these authors refer to as myths, paradigms, refrains and root metaphors. Specifically, the terms *story* and *stories-we-live-by* are defined as follows for the purposes of this book:

*Stories* are cognitive structures in the minds of individuals which influence how they perceive the world.

*Stories-we-live-by* are stories in the minds of multiple individuals across a culture.

Cognitive structures are mental models that exist in the minds of individuals – for example, a model of the world where humans are separate from and superior to other animals, or a model where humans are surrounded by an environment. Of key interest are mental models that are shared widely within a culture because these models are likely to have a strong influence on how the culture treats the ecosystems that support life. Since the models are in the mind they cannot be examined directly, but we can receive clues to their existence and structure through the language that people use. For simplicity, the definition above uses the word ‘talk’ but the stories-we-live-by manifest themselves not just in particular ways of talking but also writing, singing, drawing, taking photographs, filming, dressing and many other ways that we express ourselves. All are of interest and importance, although this book focuses primarily on language.

Importantly the stories-we-live-by influence how we *act* in the world – if nature is seen as a resource then we may be more likely to exploit it, or if economic growth is seen as the primary goal of politics then people’s wellbeing and the ecosystems which support life may be overlooked. The role of the form of ecolinguistics described in this book is to analyse texts to expose the underlying stories, and then consider carefully how they encourage us to act. If they encourage respect and care for the ecosystems that support life then they need to be promoted, and if they encourage ecological destruction then they need to be resisted.

## The ‘eco’ of ecolinguistics

The story of human distinctiveness has been central to humanities subjects in the past. These areas of scholarly inquiry have traditionally studied and celebrated

rationality, language, a sense of history, religion, culture and literature as aspects which distinguish us from, and, implicitly, make us better than, animals. Orr (1992: 145) goes so far as to claim that 'For the past five hundred years, our sciences, social sciences and humanities alike have been committed to extending and celebrating the human domination of nature'. However, as awareness of the ecological embedding of humans and human societies has risen to the level of urgent and immediate concern there has been an 'ecological turn' in humanities and social science subjects. No longer is the object of study – whether the mind, the human, society, culture or religion – seen in isolation, but as an inextricable and integral part of a larger physical and living world. This has helped these subjects become more accurate in their inquiry, since undoubtedly human minds, cultures and society are shaped by the natural world that they arose from and are part of. But more practically, it has helped give a role to humanities and social science in addressing some of the overarching ecological challenges that humanity is facing in the twenty-first century: biodiversity loss, food security, climate change, water depletion, energy security, chemical contamination, alienation from nature and the social justice questions that both contribute to and arise from these issues.

The ecological turn has seen the rise of ecocriticism (Garrard 2014), eco-poetics (Knickerbocker 2012), ecofeminism (Adams and Gruen 2014), ecopsychology (Fisher 2013), ecosociology (Stevens 2012), political ecology (Robbins 2012) and environmental communication (Cox 2012). Environmental communication has a particular focus which unites researchers, and which Milstein *et al.* (2009: 344) summarise as follows:

Research and theory within the field are united by the topical focus on communication and human relations with the environment. Scholars who study environmental communication are particularly concerned with the ways people communicate about the natural world because they believe such communication has far-reaching effects at a time of largely human-caused crises.

For ecocriticism, Glotfelty (2014) describes how, despite a broad scope of inquiry:

all ecological criticism shares the fundamental premise that human culture is connected to the physical world, affecting it and affected by it. Ecocriticism takes as its subject the interconnections between nature and culture, specifically the cultural artifacts language and literature ... Most ecocritical work shares a common motivation: the troubling awareness that we have reached the age of environmental limits, a time when the consequences of human actions are damaging the planet's basic life support systems.

But what of 'ecolinguistics'? Certainly the term 'ecolinguistics' has been used since at least the 1990s (Fill and Mühlhäusler 2001: 1), and the word 'ecology' has been incorporated in linguistic accounts since (at least) Einar Haugen's work in the 1970s (e.g. Haugen 1972). However, the term 'ecolinguistics' has been applied to a

wide range of approaches and interests, some more relevant than others to the larger 'ecological turn' in humanities and social science.

The term 'ecolinguistics' has been used to describe studies of language interaction and diversity; studies of texts such as signposts which are outdoors; analysis of texts which happen to be about the environment; studies of how words in a language relate to objects in the local environment; studies of the mix of languages surrounding pupils in multicultural schools; studies of dialects in particular geographical locations, and many other diverse areas. The multiplicity of approaches arises from different understandings of the concept of 'ecology', from a very broad concept of 'the interaction of some things with other things' to narrow concepts such as 'related to environmentalism'.

Steffensen and Fill (2014: 7) identify four different interpretations of ecology that lie behind the different approaches. The first approach sees language as existing in a *symbolic* ecology, where different languages interact with each other in a given location. The second approach sees language as part of a *sociocultural* ecology where it shapes societies and cultures. The third approach is concerned with *cognitive* ecology and how the cognitive capacity of organisms affects how they adapt to their environment. Finally, there is a *natural* ecology which is concerned with the relationship of language to its biological and physical environment. It is within this final form of ecology that Steffensen and Fill (2014: 9) ask the key question at the heart of this book: 'Do linguistic patterns, literally, affect the survival and wellbeing of the human species as well as other species on Earth?'

Ecology in this book, then, is very much the ecological science concept of *the interaction of organisms with each other and their physical environment*. The focus on 'organisms' does not mean that the human is forgotten, as is sometimes the case in ecological science where the focus is on animals and plants in pristine environments remote from the influence of humans. Humans are, after all, the object of study for humanities and are organisms too. It is therefore *human ecology* (Gare 2002) that is of interest, which can be defined as *the interaction of humans with other humans, other organisms and the physical environment*. Language, culture, human cognition, stories and texts play a role in human ecology to the extent that they influence human behaviour, and hence the ways that humans interact with each other and the larger natural world.

This view of ecology alleviates the need to split ecology up into a 'natural ecology', as if humans were not part of the natural world, or a 'symbolic ecology', as if symbols interacted with each other in the same way that organisms do. Sociocultural forces and cognition are, of course, of central importance, but do not need to be viewed as a separate 'sociocultural ecology' or 'cognitive ecology'. Instead they can be viewed as factors influencing human behaviour and therefore having an impact on the ecology of interacting organisms. For example, rather than considering a piece of environmental legislation as existing within a 'symbolic ecology' it can be seen as influencing actual physical ecology through its very real consequences for how people treat life-supporting ecosystems.

There are many forms of interaction between organisms that could be studied, but ecology is concerned specifically with the literally *vital* ones, i.e. ones which are

necessary for the continuation of life. It is because of the connection between ecology and the continuing survival of life that the term is often used with a normative (moral) orientation towards protection of the ecological systems that life depends on. Although some forms of ecology disguise their normative dimension, Robbins (2012: 19) argues that ‘apolitical ecologies, regardless of claims to even handed objectivity, are implicitly political’. Robbins’s own form of political ecology ‘is simply more *explicit* in its normative goals and more outspoken about the assumptions from which its research is conducted’. Ecolinguistic studies also have normative goals, whether or not they are expressed explicitly, in the same way that medical science has an orientation towards the goal of health, or conservation biology has a goal of saving species from extinction. The normative goals that this book are based on will be discussed in the later section ‘The ecosophy of this book’, but for now we can say that the ‘eco’ of the form of ecolinguistics described in this book refers to: *the life-sustaining relationships of humans with other humans, other organisms and the physical environment, with a normative orientation towards protecting the systems that humans and other forms of life depend on for their wellbeing and survival.*

### The ‘linguistics’ of ecolinguistics

In this book, the ‘linguistics’ of ecolinguistics is simply the use of techniques of linguistic analysis to reveal the stories–we–live–by, opening them up to question and challenge from an ecological perspective. Theories that interrogate language to reveal the foundations of cultures and societies have been gaining in prominence. There has been important work in *Critical Discourse Analysis* which exposes the role of language in promoting racism, sexism and oppressive power relations (e.g. van Dijk 2008; Fairclough 2014), and in cognitive linguistics, which examines both the general ‘metaphors we live by’ (Lakoff and Johnson 1980) and the cognitive frames that play such an important role in political life (Lakoff 2004). While these theories and frameworks tended in the past to focus exclusively on human relations with other humans, they can also be adapted and applied to wider ecological issues, as more recent studies have increasingly started to demonstrate (e.g. Alexander 2009; Nerlich 2010; Larson 2011; Milstein and Dickinson 2012).

The relationship between language and the underlying stories that societies, cultures and people’s lives are built on is a highly complex one, and subject to a great deal of debate within the literature on linguistics and philosophy. The approach of this book is to build a simplified framework for analysing the stories–we–live–by through drawing together a number of linguistic theories. These include Critical Discourse Analysis (Fairclough 2003); frame theory (Lakoff and Wehling 2012); metaphor theory (Müller 2008); appraisal theory (Martin and White 2005); identity theory (Benwell and Stokoe 2006); fact construction (Potter 1996) and theories of erasure and salience (drawing on van Leeuwen 2008). All of these theories can be seen as analysing language to reveal underlying stories, although they use a range of different terms to describe what they do.

In the linguistic framework of this book, the most basic level is the ‘story’ – a mental model within the mind of an individual person. A story of ‘progress’ for example, may consider the past negatively as a brute struggle for survival, the present as a great improvement due to technological innovation, the future as even more promising, and further industrialisation and technological innovation as what we should aim for. Each person will have their own collection of stories in their minds, but some stories, like that of progress, are shared by large numbers of people. They do not just exist in individual people’s minds, but across the larger culture in what van Dijk (2009: 19) refers to as *social cognition*.

The stories–we–live–by are, therefore, cognitive structures which influence how multiple people think, talk and act. The story of progress has a fairly simple structure – a direction (forwards or backwards), an evaluative orientation (forwards is good and backwards is bad), certain elements which are mapped onto ‘forwards’ (e.g. technological innovation or industrialisation), certain elements which are mapped onto backwards (e.g. living closer to nature), and a sense that progress is inevitable and unstoppable. This structure could influence people’s thinking, e.g. their reasoning process in deciding whether or not to support industrialisation of a green area. It could influence how they talk, e.g. in using expressions like ‘you can’t stop progress’. And most importantly, it could influence how they act, for example in purchasing the latest technology or agreeing to development of a green area. In this way the story has an impact on people’s lives and how they treat the ecosystems that support life.

Since the stories are mental models they cannot be analysed directly, but we can get clues to them through analysing common ways that people use language. For example, by examining what people represent as ‘moving forwards’ and what they represent as ‘going backwards’ it is possible to get clues to the underlying story of progress that exists in people’s minds, and then question whether ‘progress’ is a beneficial story or not in terms of the actions it encourages.

Although other modes such as visual images also provide clues to the stories–we–live–by, language is particularly revealing. It is important also because it is a key mechanism by which stories are transmitted across generations and across cultures and therefore a potential point of intervention. As the quote which opened this chapter describes, ‘change the stories that individuals or nations live by and you change the individuals and nations themselves’ (Okri 1996: 21). The ‘linguistics’ of the form of ecolinguistics described in this book uses a variety of linguistic theories to analyse patterns in language in an attempt to reveal the underlying stories–we–live–by, as a step towards changing them.

## Ecosophy

The purpose of revealing, exposing or shedding light on the stories–we–live–by is to open them up to question and challenge – are these stories working in the current conditions of the world or do we need to search for new stories? Whether or not the stories are considered to be ‘working’ depends on the ethical vision of

the analyst, i.e. on whether the stories are building the kind of world that the analyst wants to see.

Clearly, all critical language analysts have an ethical framework that they use for evaluating the language they are analysing, whether or not it is made explicit. An analysis of racist language, for instance, is likely to be conducted within a framework which sees racism as something negative that needs to be worked against rather than just an object for disinterested analysis of the technicalities of language. Only sometimes is the ethical framework made explicit, however. Gavriely-Nuri (2012: 83) makes her framework explicit when she calls for a Cultural Critical Discourse Analysis based on '*values, attitudes and behaviours based on the principles of freedom, justice and democracy, all human rights, tolerance and solidarity*'. This form of analysis is explicitly directed at exposing mainstream discourses which work against these values, and searching for 'discursive tools that practically promote the "culture of peace"'. Like many philosophical frameworks used in linguistics, however, the framework does not specifically mention ecological issues. Democracy, justice and solidarity do not automatically lead to sustainable levels of consumption, and peace in a society that exceeds environmental limits will be short lived. Indeed, contamination and over-exploitation of natural resources is one of the key drivers behind war, as Hiscock (2012) shows.

The ecolinguist Jørgen Bang uses a philosophical framework similar to that of Gavriely-Nuri, but does include ecological consideration. For Bang (personal communication, July 2014), ecolinguistics is based on:

contributing to a local and global culture in which (i) co-operation, (ii) sharing, (iii) democratic dialogue, (iv) peace and non-violence, (v) equality in every sphere of daily life, and (vi) ecological sustainability are the fundamental features and primary values.

If this framework were employed, then stories would be judged on the degree to which they encourage cooperation or competition, sharing or greed, peace or violence, and ecological sustainability or destruction. Larson (2011: 10), in his ecolinguistic analysis of metaphor, uses a philosophical framework of 'socio-ecological sustainability' and considers 'whether the metaphors we have chosen will help us on the path of sustainability or lead us further astray'. He describes his ethical vision of sustainability through statements such as the following:

... we seek not just ecological sustainability, but a more encompassing socioecological sustainability. We want a sustainable relationship between humans and the natural world rather than a sustained ecological system without humans which, to many of us, would be a sign of failure ... are the metaphors we choose fertile, or effective, for socioecological sustainability?

*(Larson 2011: 17)*

Each ecolinguist will have their own set of philosophical principles they use to judge stories against, reflecting their own values and priorities, but all will have in common a consideration of the interrelationships of humans with other organisms

and the physical environment. Naess (1995) uses the term *ecosophy* (a shortening of ‘ecological philosophy’) to describe a set of philosophical principles which include ecological consideration. He expresses it like this:

By an ecosophy I mean a philosophy of ecological harmony ... openly normative it contains norms, rules, postulates, value priority announcements *and* hypotheses concerning the state of affairs ... The details of an ecosophy will show many variations due to significant differences concerning not only the ‘facts’ of pollution, resources, population, etc. but also value priorities.

(Naess 1995: 8)

Since the ecosophy includes ‘norms’ and ‘value priority announcements’ there is not one ‘correct’ ecosophy that ecolinguistics *should* be based on. Ecosophies can, however, be judged by whether evidence confirms or contradicts the assumptions about the state of the world that they are based on, or whether there are any internal inconsistencies.

There are many possible schools of thought that can be drawn on in forming an ecosophy, and they tend to run along three spectra. The first spectrum is from anthropocentric (human centred) to ecocentric (centred on all life including humans). The second spectrum is from neoliberal at one end to either socialist, localist or anarchist at the other. The third spectrum is from optimistic to pessimistic. Interestingly, the three spectra broadly align with each other, so conservative neoliberal frameworks tend to be optimistic and anthropocentric, while politically radical approaches tend towards pessimism and ecocentrism.

It is useful to give a brief outline of some philosophical perspectives, to illustrate how the frameworks align along the spectra. At the most politically conservative end is ‘cornucopianism’. This philosophy considers that human ingenuity and ever advancing technology will overcome environmental and resource issues. Humans should therefore continue with and accelerate industrial progress for the sake of human (and only human) benefit (e.g. Lomborg 2001; Ridley 2010). Then there is a cluster of perspectives under the umbrella of ‘sustainable development’, which attempt to combine economic growth with environmental protection and social equity (e.g. Baker 2006). These vary from more conservative positions, where economic growth is the priority, to approaches which more fully consider social and ecological factors. Social ecology (e.g. Bookchin 1994, 2005) is a more politically radical perspective which sees the roots of ecological destruction as existing in oppressive social hierarchies. In this perspective, humans will continue dominating nature and treating it as a resource until they stop dominating each other and treating each other as resources. Ecofeminism (e.g. Adams and Gruen 2014) also locates the cause of ecological crisis in domination, but focuses on the parallels between the oppression of animals and the environment and men’s domination of women. One of the aims of ecofeminism is to change society so that the ecological sensitivity gained by women through their practical role in subsistence and community building is valued and used in rebuilding more ecological societies.

Deep ecology (e.g. Drengson and Inoue 1995) recognises the intrinsic worth of humans, plants, animals, forests and rivers, that is, their value beyond direct, short-term use for humans. Recognising worth in nature, it is argued, is likely to encourage people to protect and preserve the conditions that support all life, including human life. The Transition Movement (Hopkins 2008) is based on a philosophy of ‘resilience’ as a key goal, as both climate change and the depletion of oil lead to an inevitable decline in the ability of the earth to support human life. Transition is localist in encouraging communities to regain the bonds and skills to look after each other and fulfil their own needs outside of a turbulent and unreliable international economy. The Dark Mountain Project (Kingsnorth and Hine 2009) sees even the hope of resilience as overly optimistic, and aims at generating new stories for survivors to live by after the inevitable collapse of industrial civilisation. The aim of the Dark Mountain Project is to discover stories which do not repeat the same errors of the past and consider humans as part of the natural world rather than conquerors of it. Deep Green Resistance (McBay *et al.* 2011) sees industrial civilisation as evil due to the damage and suffering it causes both humans and other species. Rather than waiting for industrial civilisation to destroy itself, Deep Green Resistance aims to hasten its destruction through carefully planned sabotage. At the far other end of the spectrum there is the semi-serious Voluntary Human Extinction Movement (VHEMT 2014), with a utilitarian philosophy that it would be better for one species (*homo sapiens*) to become extinct (voluntarily through a global decision not to have children) rather than the millions of species that humans are driving to extinction. This is radically ecocentric, and pessimistic since it views any continuation of human life as a threat to the ecosystems that support life.

An individual ecologist will survey the wide range of possible ecosophies described in the literature, consider them carefully in light of available evidence and their own experience of human communities and the natural world, and build their own ecosophy through combining them, extending them or creating something entirely new. Gary Snyder, ecocritic, poet and philosopher, for instance, has built a personal ecosophy which combines and extends social and deep ecology (Messersmith-Glavin 2012).

The ecosophy has to be scientifically possible – for example an extreme version of sustainable development that promoted economic growth everywhere, even in the richest of countries, could be argued to be impossible given environmental limits. It has to be plausible, which the Voluntary Human Extinction Movement is clearly not since it relies on everyone in the world agreeing not to have children. And it has to be aligned with the available evidence: Transition, for example, is dependent on evidence that oil production is due to peak and decline, that climate change is occurring, and that both will have a serious impact on human society.

## The ecosophy of this book

This section briefly summarises the ecosophy that this book is based on. Ecosophies are complex and sophisticated, changing and evolving as the analyst is exposed to

new ideas, discovers new evidence and has new experiences. The summary of an ecosophy is therefore necessarily partial and incomplete, but this section gives at least an indication of the framework used. The summary follows Naess (1995) in starting with one word that sums up the ecosophy and then adding explanatory detail as concisely as possible.

**Ecosophy in one word:** *Living!*

Explanation

**Valuing living:** The exclamation mark in *Living!* is normative, indicating ‘to be valued/celebrated/respected/affirmed’, and it applies to all species that are living. This is a value announcement but is based on the observation that beings value their lives and do whatever they can to continue living. The ‘valuing’ takes place in different ways: consciously, instinctively and almost (but not quite) mechanically, from a pedestrian watching carefully for cars, to a sparrow taking flight at the sound of a fox, or a snow buttercup following the arc of the sun to soak up life giving rays.

**Wellbeing:** *Living!* is not the same as ‘being alive’ since there are conditions which reduce the ability to value living, such as extreme exploitation, enclosure in factory farms or illness due to chemical contamination. The goal is not just living in the sense of survival but living well, with high wellbeing. Although wellbeing applies to all species, high wellbeing for humans is a *sine qua non*, since no measure to address ecological issues that harms human interests is likely to be adopted.

**Now and the future:** The temporal scope of *Living!* is not limited to the present, so includes the ability to live with high wellbeing in the present, in the future, and the ability of future generations to live and live well.

**Care:** While respect for the lives of all species is central, continued ‘living’ inevitably involves an exchange of life. There will therefore be those who we stop from living, and those whose lives we damage in order to continue our own lives and wellbeing. The ethical aspect of the ecosophy deals with this through empathy, regret and gratitude (i.e. care), rather than an attempt to preserve moral consistency by considering those we harm as inferior, worthless or just resources. Empathy implies awareness of impacts on others, regret implies minimising harm, and gratitude implies a duty to ‘give back’ something to the systems that support us.

**Environmental limits:** If human consumption exceeds the ability of natural resources to replenish themselves then this damages the ability of ecological systems to support life (and living) into the future. Equally, if consumption leads to more waste than can be absorbed by ecosystems, the excess waste will prevent beings from living or living with high wellbeing. To keep within environmental limits an immediate and large-scale reduction of total global consumption is necessary.

**Social justice:** Currently, large numbers of people do not have the resources to live, or to live with high wellbeing. As global consumption levels drop

(either voluntarily or through resource exhaustion) resources will need to be redistributed from rich to poor if all are to live with high wellbeing.

**Resilience:** Significant ecological destruction is already occurring and more is inevitable given the trajectory of industrialised societies. It is therefore necessary to adapt to environmental change, increase resilience to further changes, and find new forms of society as current forms unravel. This is necessary in order to allow the continuation of living with high wellbeing (as far as possible) even as the earth becomes less hospitable for life.

The ecosophy draws (a) from deep ecology in being ecocentric (giving consideration to other species as well as humans), although there is a pragmatic emphasis on human wellbeing; (b) from social ecology in being orientated towards social justice; (c) from sustainable development in considering future generations; and (d) from Transition and the Dark Mountain Project in recognising and responding to inevitable environmental change. The ethic of care is derived from feminist ethics (Peterson 2001: 133), and ‘respectful use’ of animals, plants and nature draws on Plumwood’s (2012: 81) ‘ecological animalism’. Respectful use acknowledges that while other beings and natural systems are a means for continuing human survival, they are also ends in themselves.

Although ecosophies are fundamentally a statement of values and assumptions, they also need to be based on evidence, and adapted as further evidence emerges. There is a significant amount of scientific evidence of environmental limits, the ecological damage already done which needs adapting to, and the scale of reduction in consumption necessary to minimise further damage (e.g. Alcamo and Bennett 2003; UNEP 2012; Stocker 2014).

There is also evidence about the kind of attitudes and values which encourage people to behave in particular ways. The ecosophy above, for example, is strongly based on *intrinsic* or ‘larger-than-self’ values, i.e. care for other people and other species. Crompton (2010: 84) reviews extensive evidence that intrinsic values are correlated with pro-environmental attitudes and behaviour, whereas *extrinsic values* (such as a focus on personal enrichment, profit or status) are associated with environmentally destructive behaviours. The ecosophy is also based on redistribution of resources as a path towards wellbeing for all, and this is backed up by evidence from Wilkinson and Pickett (2010: 29) in their book *The spirit level*. They found that whatever the total income of a country is:

The evidence shows that reducing inequality is the best way of improving the quality of the social environment, and so the real quality of life, for all of us ... this includes the better-off.

Importantly, this is just one ecosophy, and each ecolinguist will have their own ecosophy that they use for analysing language. No claim is made that this particular ecosophy is the right, correct or most suitable one for ecolinguistics as a whole to be based on. Instead, this book shows how texts and stories can be analysed linguistically with *an* ecosophy.

After linguistic analysis reveals stories, they are judged according to the ecosophy. For this book, stories which value and celebrate the lives and wellbeing of all species, promote human wellbeing, call for reduction of consumption, and promote redistribution of resources are appraised positively. On the other hand, stories which treat people or the natural world as resources to be exploited, promote inequitable distribution of resources, or promote extrinsic values such as profit-maximisation or status enhancement through accumulation of material possessions are challenged. The aim is to contribute to efforts to raise awareness of – and resist – ecologically destructive stories, and promote uses of language which tell different stories that encourage people to protect the systems that life depends on.

### Organisation of this book

The organisation of this book may at first bear a resemblance to the ‘Celestial Emporium of Benevolent Knowledge’ (Borges 1999: 231). In Borges’s imagined tome, animals are divided up into various types including ‘those that belong to the emperor’, ‘embalmed ones’, ‘those that are trained’, ‘suckling pigs’, ‘mermaids’, ‘stray dogs’, and ‘those that tremble as if they were mad’. This is not a book about animals, but about stories. It divides these stories up into different types: there are stories shared by members of a group, stories which use one area of life to describe another, stories about what it means to be a particular kind of person, and stories about whether something is good or bad, true or false, worthy or unworthy of consideration. There are eight types of story in total, which this book labels as *ideologies*, *framings*, *metaphors*, *evaluations*, *identities*, *convictions*, *erasure* and *salience*. These are summarised in Table 1.1.

The reason for focusing on these particular kinds of story is a pragmatic one: because there are useful linguistic and cognitive theories available for analysing them. There is Critical Discourse Analysis for analysing ideologies, cognitive science for framings and metaphors, and theories of facticity, appraisal, identity and salience for the other kinds of story. All of these theories can be used to examine the language that surrounds us in everyday life, notice patterns in that language, and discover clues to underlying stories. The stories are important because they influence how individuals think, and if they are spread widely across a culture then they can become stories-we-live-by and influence prevailing modes of thought in the whole society.

The division into types of story should not be thought of as definitive – there are other ways that cognitive structures could have been classified, and there are other types of story that could have been included (e.g. scripts, image schemas, conceptual blends or narratives). The division serves the purposes of this book, however, and is presented as a base to adapt and extend in the future.

Each chapter takes one of these forms of story in turn and begins by describing the theory behind it and providing some practical definitions. It then draws from the ecolinguistics literature to discuss ways that previous studies have analysed this type of story in the past. A key part of each chapter consists of practical analyses of

**TABLE 1.1** Eight forms that stories take, and their linguistic manifestations

<i>Chapter</i>	<i>Form of story (cognitive, i.e. in people's minds)</i>	<i>Manifestation (in language)</i>	
2	ideology	a story of how the world is and should be which is shared by members of a group	discourses, i.e. clusters of linguistic features characteristically used by the group
3	framing	a story that uses a frame (a packet of knowledge about an area of life) to structure another area of life	trigger words which bring a frame to mind
4	metaphor (a type of framing)	a story that uses a frame to structure a distinct and clearly different area of life	trigger words which bring a specific and distinct frame to mind
5	evaluation	a story about whether an area of life is good or bad	appraisal patterns, i.e. patterns of language which represent an area of life positively or negatively
6	identity	a story about what it means to be a particular kind of person	forms of language which define the characteristics of certain kinds of people
7	conviction	a story about whether a particular description of the world is true, uncertain or false	facticity patterns, i.e. patterns of linguistic features which represent descriptions of the world as true, uncertain or false
8	erasure	a story that an area of life is unimportant or unworthy of consideration	patterns of language which fail to represent a particular area of life at all, or which background or distort it
9	salience	a story that an area of life is important and worthy of consideration	patterns of language which give prominence to an area of life

a range of texts to illustrate the theory in action. The example texts are drawn from neoclassical economics textbooks, agribusiness manuals, ecology reports, newspapers, environmental campaigns, nature writing, Japanese poetry, documentary films, political reports, advertisements and lifestyle magazines. The specific texts were chosen first because they were considered representative of larger patterns of language in society, and second because they were considered important, either in forging and perpetuating the ecologically destructive stories-we-live-by, or in challenging those stories and providing new stories that we *could* live by.

Although a wide variety of methods are used, the goals of analysis remain the same in each chapter: analysing language patterns in the texts to reveal the underlying stories-we-live-by. Once revealed, these stories are judged according to the ecosophy of this book. If they are considered to be contributing to ecological destruction they are resisted, and if they are considered beneficial in encouraging behaviour that protects the systems that life depends on then they are promoted.

There are a number of steps in the analysis – going from the raw data to revealing the patterns in it, identifying how the patterns correspond to underlying cognitive structures (the stories), and then judging these stories according to the ecosophy.

Overall, the premise of this book is that ecolinguistic analysis can be useful in exposing the stories-we-live-by, questioning them from an ecological perspective, challenging them, and searching for the new stories that are necessary to thrive in the conditions of the world we face. The book itself aims to encourage linguists to consider ecological issues, and equally importantly to encourage a diverse range of people who are concerned with ecological issues to consider the role of language in both causing and responding to those issues. It aims to be a springboard towards future research by providing an ecological framework, a linguistic framework, a description of previous studies and practical examples of analysis, but without any claims that this is *the* definitive ecosophy or the only possible linguistic framework. Finally, it is important to repeat that the approach to ecolinguistics in this book is just one approach among many other valid and useful approaches to ecolinguistics that have a diversity of aims and goals.

### A note about references to data and glossary

This book uses example data from a variety of sources, from economics textbooks to haiku poems. The data is catalogued using a tag consisting of two letters and two numbers, e.g. (ET5:7). The two letters refer to a type of data, e.g. ET = economics textbooks. The two numbers give further information such as a specific book or issue of a magazine, and the page number. The list below shows the labels and the kind of data they correspond to. The Appendix has full details about the sources of the data.

AG:	Agribusiness documents
EA:	Ecosystem assessment reports
EC:	Ethical consumer magazine
EN:	Environmental articles, reports, films and websites
ET:	Economics textbooks
HK:	Haiku anthologies
MH:	<i>Men's Health</i> magazine
ML:	Miscellaneous
NE:	New economics books and reports
NP:	News articles related to economic growth
NW:	New Nature Writing
PD:	Political documents

Extracts from the data appear with bullet points to distinguish them from extracts from academic sources.

There is a glossary at the end of the book which contains brief descriptions of most of the linguistic terms used. In general, linguistic terms which appear in italics on first use can be found in the glossary.