

## Book Review

Stibbe, Arran. (2015). *Ecolinguistics: Language, ecology, and the stories we live by*. Abingdon, United Kingdom: Routledge.

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Due to at least two developments, we language teachers and language students' inescapable role as global citizens has come to the fore. Firstly, we humans increasingly impact the environment and the nonhuman living beings in the environment in negative ways. Indeed, geologists are coming to label our current geologic era the Anthropocene (Steffen, 2011) owing to the major and largely negative effects humans (from the prefix *anthro*) are having on the natural environment and its inhabitants. Secondly, owing to the increasing unreliability of information in the media, teachers and students need to be increasing discerning consumers of information (Hunt, 2016). This review of *Ecolinguistics: Language, ecology, and the stories we live by* aims to enable us language teachers and students to more wisely enact our global citizenship in regard to the environment.

The book's author, Arran Stibbe, is a leading scholar in the emerging field of ecolinguistics, which can be defined as a field that "explores the role of language in the life-sustaining interaction of humans, other species and the physical environment" (Ecolinguistics Association, n.d.). He is the founder and leader of the Ecolinguistics Association (<http://ecolinguistics-association.org>) and the author of many publications, including *Animals Erased: Discourse, Ecology and Reconnecting with the Natural World*. I have had the pleasure of collaborating with Arran on several occasions, and I have found him to be generous and wise in his cooperation. [Please note that I have added some of my own ideas and experiences to the review.]

The book's ten chapters begin with Chapter 1, an introduction which defines key terms and lays out the organisation of the book. The book's next eight chapters each deal with one type of story, although the stories overlap: ideology, framing, metaphor, evaluation, identity, conviction, erasure and salience. As is obvious, these are not stories in the typical meaning of story. Instead, 'story' here has two main meanings: a cognitive meaning that represents the world in people's minds and a linguistic manifestation of how language is used to attempt to achieve representations of the cognitive meaning. The book's tenth and final chapter is a conclusion which provides an overview of the current state of ecolinguistics and offers suggestions for its future. After the conclusion is a very useful glossary of more than 100 of the terms used in the book, mostly terms from linguistics, but also terms from other areas, such as cognitive science and communications studies.

## Chapter 1 - Introduction

'Stories we live by' forms part of the book's title. Stibbe's hope is that ecolinguistics can go beyond looking at grammar and vocabulary (although these are crucial) to empower people to understand that our lives are very much shaped by stories that we, usually as communities, live by, and that understanding these stories forms a necessary prerequisite to changing them so that human behaviour can be more eco-friendly. What each of us considers to be eco-friendly depends on what Stibbe calls our 'ecosophy', "a normative set of principles and assumptions about relationships among humans, other forms of life and the physical environment" (p. 202). Throughout the book, Stibbe makes clear his own ecosophy, and the issues raised in the book will help language teachers and students grapple with their own ecosophy.

## Chapter 2 – Ideologies and Discourses

In addition to reading this book to share with others about ecolinguistics, I also read it in hopes of doing ecolinguistics research better. Thus, I was particularly interested in the advice the book gives on how to do such research. The initial goal in ecolinguistics investigations lies in unlocking *ideologies*, which are the stories "of how the world was, is, will be and should be which are shared by members of particular groups in society (p. 23). These ideologies are supported by *discourses*, which "are standardised ways that particular groups in society use language, images and other forms of representation" (p. 22).

Stibbe suggests as an initial step towards understanding ideologies and discourses that researchers, including teachers and students doing very small scale, ad-hoc studies, collect a number of texts that might be seen as typical of a particular type of story used for a particular purpose, such as advertisements for a particular product that people may actually not need. Of course, it is very difficult to prove that the collected texts are fully representative. Instead, some explanation should be given of how and why those particular texts were gathered together.

Next, linguistic analysis needs to be done to look for patterns among the texts. Stibbe (p. 34) lists the following among the linguistic features that can be investigated.

1. Vocabulary, including the connotations of words)
2. Relationships between words, including antonymy, hyponymy and synonymy
3. Grammatical structures, including active vs passive
4. Transitivity, including whether verbs can take direct objects and the degree with which the object might be affected
5. Relationships between clauses, including reason, consequence and purpose

## Chapter 3 – Frames and Framing

Stibbe (p. 47) defines a *frame* as "a story about an area of life that is brought to mind by particular trigger words", *framing* as "a story from one area of life (a frame) to structure how another area of life in conceptualised" and *reframing* as "the act of framing a concept in a way that is different from its typical framing in a culture". Many languages teachers may be more familiar with the terms *schemata* and *scripts* which are roughly similar to *frames*.

All those three terms describe the background knowledge that we have or can develop regarding the who, what and how of particular situations. For instance, the word 'buy' triggers images in our minds of buyers, sellers, items for sales, shops and how purchases take place, e.g., the procedure for buying in a brick and mortar store is different from the procedure with an online purchase.

Reframing plays a key role in change efforts. However, different people will advocate that different frames be adopted. Stibbe (pp. 47-48) recounts responses received by *The Guardian* newspaper about how society should respond to climate change. A UK Green Party MP wanted to reframe climate change as a security issue, whereas someone from the corporate sector wanted to reframe it as a supply chain issue. Stibbe also suggests that values need to be considered when attempting reframing (pp. 50-51). The ecosophy of many environmental campaigners stresses altruism and concern for nature. This ecosophy might cause a mismatch if extrinsic motivators, such as saving money, are used to reframe thoughts, e.g., using less electricity or water to save on utilities bills. Even if this reframing leads people to reduce resource consumption in some areas of their lives, if they have not moved past a consumerist ideology, their resource consumption may remain the same, as they use their savings to buy other products.

#### Chapter 4 – Metaphors

Early in Chapter 4, Stibbe recounts the role of metaphors – “a *metaphor*, to put it simply, is a story that describes something as if it were something else” (p. 63) – in the UK government’s response to an outbreak of Foot and Mouth Disease. By using a military metaphor, via words such as ‘battle’, ‘enemy’ and ‘combat’, the government conceived and justified a strategy involving the killing of thousands of animals. Stibbe proposes that had an alternative metaphor been used, describing the situation in medical terms, via words such as ‘cure’, ‘care for’, ‘hygiene’ and ‘recovery’, infected animals could have been treated and monitored, not killed and burned.

Climate change is an area rife with metaphors (pp. 65-67), as scientists seek to use concepts that are familiar to help people understand less familiar, perhaps more complicated concepts. Among the metaphors used to describe climate change, Stibbe mentions ‘roller coaster’, ‘greenhouse’ and ‘time bomb’. He uses the metaphor of climate change is a time bomb to highlight the potential incompleteness of metaphors, as while the time bomb metaphor communicates the urgency and destructive potential of climate change, the fact that once a bomb explodes, nothing can be done might lead people to feel that once a climate change milestone is past, e.g., CO<sub>2</sub> equivalents reach a particular level, further efforts to reduce CO<sub>2</sub> equivalents become useless.

Metaphors can be destructive or beneficial or perhaps a combination of both. Stibbe illustrates this with reference to metaphors pertaining to nature (pp. 68-73). Some mostly destructive metaphors include ‘nature is a competition’, which discourages humans from concern for nature because, “after all, they are all trying to kill each other anyway”, ‘nature is a storehouse’, which encourages people to see nature as something existing only to serve humans, not as beings who are on Earth for their own purposes, and ‘nature is a machine’,

which suggests that any harm done to the environment can readily be repaired by scientists and technicians, without any changes in human behaviour. More beneficial metaphors for nature include 'nature is an organism', 'nature is a person', 'nature is female', 'nature is a web' and 'nature is a community'.

## Chapter 5 – Evaluations and Appraisal Patterns

Chapter 5 opens with a quote from a 1990 talk by Michael Halliday (2001), one of the seminal figures in ecolinguistics. In it, Halliday states a theme repeated often by Stibbe: the ideology that growth is overwhelmingly for the good makes humans into instruments of massive environmental destruction. Please note the appraisal pattern that Halliday uses in the following evaluation of the 'growth is good' ideology.

Many is better than few, more is better than less, big is better than small, grow is better than shrink, up is better than down. Gross National Products must go up, standards of living must rise, productivity must increase. But we know that these things can't happen. We are using up ... the fresh water and the agricultural soils that we can't live without ... We are destroying many of the other species who form part of the planetary cycle ...

Stibbe (p. 84) defines *evaluations* as "stories in people's minds about whether an area of life is good or bad" and *appraisal patterns* as "clusters of linguistic features which come together to represent an area of life as good or bad". Appraisal items can be explicit, such as 'amazing' or 'horrible', or based more on positive or negative connotations, such as 'confident' and 'egotistical', respectively. Metaphors can also play a role in evaluations, e.g., consumerism can be likened positively to a benevolent angel or negatively to an illness. Clusters of positive linguistic features provide a positive evaluation, while people often support negative evaluations with clusters of negative linguistic features.

Evaluations can impact people's behaviours toward the environment. Two purposes that ecolinguistics can play in regard to evaluations are: (1) raising awareness of how language is used to manipulate people's evaluations and (2) encouraging the use of language to resist evaluations that do not fit our ecosophies (pp. 90-91). For instance, as to the evaluation that economic growth is good, ecolinguists, including teachers and students, can highlight how the 'up is good' metaphor is linked to the 'economic growth is good metaphor', e.g., 'growth upgrade', 'raised its prediction for 2Q growth' and 'growth to hit its highest rate'.

People who share a similar ecosophy and a similar view on a particular issue often form a community (pp. 85-86) who use similar appraisal items, e.g., the community of people who oppose genetically modified foods are likely to use terms such as 'Frankenstein foods', 'mutant crops' and 'unnatural' to give these foods a negative evaluation. Such a community helps to spread the appraisal items which fit their views, and as the community members often are the most frequent consumers of discourse by their community, their views become self-reinforcing.

Appraisals patterns which run counter to our ecosophies can be resisted in multiple ways. The usual way to resist the 'economic growth is good' view's use of 'more' as positive would be to seek to make 'less' a positive term, e.g., 'less pollution' and 'less species extinction'. However, another approach to achieving the same overall goal would be to highlight the 'more' that results from eco-friendly behaviours, e.g., 'more beautiful green spaces' and 'more biodiversity' (p. 88).

## Chapter 6 – Identities

This chapter is the most starkly affective rather than objective. Indeed, Chapter 6 begins by debunking the Information Deficit Model (p. 105), which states that people's inaction and harmful actions in regard to the environment can be blamed mostly on their lack of information about the environment. However, according to Stibbe, the root of people's behaviours lies not so much in any deficit in people's knowledge; the problem lies in the values that form these people's identities. Stibbe defines *identity* as "a story in people's minds about what it means to be a particular kind of person, including appearance, character, behaviour and values" and self-identity as "an evolving story people tell themselves and others about what kind of person they are" (p. 107). Unfortunately, the dominant identities in most societies are destructive of and uncaring towards the larger-than-human world. These self-centred, individualistic, consumerist identities are too often portrayed as the 'natural' choice for humans.

Fortunately, alternative identities do exist in such areas as traditional cultures and ethical consumerism. An example of the former is the concept of *ubuntu* which originated in southern African culture and is captured in the following, perhaps apocryphal, story (hstarr, 2012):

A visiting, novice Western anthropologist proposed a game to a group of Nguni Bantu children, and they agreed to play. The anthropologist placed a fruit basket under a tree about 100 metres from the children and told them that whoever reached the basket first would win all the fruit in it. However, instead of racing individually, the children held hands and walked together to the basket, where they shared the fruit. They explained their behaviour by stating, "How can one of us be happy if all the others are sad?"

Ethical consumerism (pp 110-111) offers another alternative identity by raising a range of issues to encourage people to take a more altruistic stance in their purchasing behaviours. Ethical consumers purchase such products as fair trade clothing, animal free foods, personal care products and clothing, reduced energy home appliances, organic products, renewable energy and renewable resources. Another way to reject consumerism or at least move towards a reduced version of it involves purchasing used goods at thrift shops and flea markets. Taking this a step further, the Really, Really Free Market movement (e.g., SRRFM, 2016) sets up temporary markets at which everything is given and taken freely; nothing is sold or bartered. Stibbe emphasises that in his book's ecosophy, an identity based on consumerism, even ethical consumerism, is not to be valorised. Instead,

identity should be based on “*being* more rather than *having* more” (p. 112, italics in original).

## Chapter 7 – Convictions and Facticity Patterns

This chapter, like Chapter 6 on identity, looks at people’s beliefs. Stibbe defines *convictions* as “stories in people’s minds about whether a particular description is true, certain, uncertain or false” and *facticity patterns* as “clusters of linguistic devices which come together to represent descriptions as certain or true, or to undermine description as uncertain or false” (p. 129). Many of the examples in this chapter come from the debate over whether global warming is real and, if so, whether human actions are principally responsible.

People are more likely to believe something with conviction if they feel that facts strongly support that potential belief. However, the sciences, including the social sciences operate under the view that reality is probabilistic, not certain (Busch, Heinonen, & Lahti, 2007; Stanovich, 2013). This makes it difficult to state with 100% certainty that any phenomenon, especially one as complex as global warming, is occurring due largely to anthropogenic factors. Indeed, in graduate school, my professors told me to use ‘suggests’, not ‘shows’ or ‘proves’, when discussing research results.

In other words, scientists may tend to avoid the highest level of facticity, e.g., ‘unequivocally’, ‘undoubtedly’, ‘clearly’ and ‘100% certain’, preferring ‘extremely likely’, ‘based on a preponderance of the evidence’ and ‘an overwhelming consensus among scientists’. Thus, modals play a key role in expressing and influencing people’s level of conviction. Modals such as ‘might’, ‘probably’ and ‘conceivably’ express a low level of conviction on the part of writers / speakers, and are less likely to lead to a high level of conviction in the minds of readers / listeners. Furthermore, the highest level of certainty is often unmodalised (p. 141), e.g., “The sun is driving climate change. CO2 is irrelevant”.

Other linguistic devices used in the global warming debate to attempt to influence the public’s convictions are reminiscent of purr (positive) and snarl (negative) words (Hayakawa & Hayakawa, 1990). Stibbe (p. 132) cites such purr words as ‘common sense’, ‘innovative’ and ‘scientific’ versus snarl words, such as ‘ecoterrorist’. Another linguistic device used to influence people’s conviction is metaphor (p. 132), e.g., when climate change deniers liken their opponents to members of a religious cult, using terms such as ‘Global Warming religion’, ‘mind-bending cults of absolute certitude’, ‘infallible spirituality’ and ‘faith-based’, and all of those examples were taken from a single sentence!

## Chapter 8 –Erasure

An *erasure* story involves the “suppression, backgrounding, exclusion, abstraction, and in general any means by which texts draw attention away from certain participants or areas of life” (p. 146). Of course, no text can include all potentially relevant information and images, e.g., a book about a country necessarily presents only a minute fraction of the information and images available on that country. The issue becomes what was chosen and not chosen for inclusion. Why were some areas deemed less worthy?

This issue raises its head in many forms. For instance, in history texts, the powerful, the victors often receive many pages of attention, while the less powerful, the vanquished, such as indigenous people, receive little if any attention. In ecolinguistics, a key area of erasure is nature generally, as humans seem to be further and further separating their lives from those of other animals. Indeed, as mentioned earlier, Stibbe has written a book on this erasure: *Animals Erased*. Not just living beings can be erased, but also problems, such as the suffering of farmed animals, and causes, such as the causes of global warming, can also be erased. One study inspired by the concept of erasure looked at the presence of animals in textbooks for second language learners of English (Jacobs, Teh, & Joyce, 2016).

Ecolinguistic analysis for erasure depends on the analysts' understanding of reality and of what the analysts value as important. Is something missing which is there in reality? Is this absence a pattern? Erasure is not always total and can take at least three forms:

- (a) Complete exclusion
- (b) Distortion, e.g., speaking dairy cows (pp. 152-153) created to put a happy face on the horrors of mothers and children separated soon after birth, forced impregnation and greatly shortened lifespans that is the dairy industry
- (c) Only a trace remains, e.g., using co-hyponyms (pp. 156-157) to equate non-human animals with inanimate objects, thus depriving the animals of their mental lives, as in linking fishes with water and placing both under the superordinate term 'resources'. Another trace erasure technique described on p. 157 involves referring to other living beings as 'our', thus depriving them of the right to have their own purposes in life.

Erasure can be combatted via what Stibbe calls *re-minding* (p. 152). This re-minding can take many forms. People can be made aware of the erasures that have occurred and of how the erasure were achieved, in the hope that others will make a conscious effort to avoid future erasures. A dramatic example of a reminding effort is the film 'Cowspiracy' (Anderson & Kuhn, 2014). The producers had noticed that the role of animal agriculture in environmental destruction had been erased from the outreach efforts of many environmental organisations. Their film attempted to both understand why this erasure had taken place and to explain why it was important that the role of animal agriculture be included in any discussion of environmental protection.

## Chapter 9 – Saliency

Linked closely to erasure is the theme of ninth chapter of *Ecolinguistics*, saliency. The chapter's opening quote from famed ecology writer, Aldo Leopold (1979), highlights the importance of saliency, "We can be ethical only in relation to something we can see, feel, understand, love, or otherwise have faith in" (p. 214). This is similar to the quote attributed to Baba Dioum (cited in Wilderness Workshop, 2016), "*In the end we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught.*" Thus, saliency matters mightily. *Saliency*, writes Stibbe, constitutes "a story in people's minds that an area of life is important or worthy of attention" (p. 162).

Too often, the more-than-human world does not receive the salience it deserves. For instance, Stibbe recounts that a film about the environmental destruction caused by leather production in Bangladesh highlights the pollution caused and the harm done to the health of workers in the production facility and villagers living nearby. The vivid footage and the strong language of the narration (words such as ‘stagnant’, ‘stench’ and ‘overwhelming’) combine to create images likely to be salient in viewers’ minds, images that may well have, for many wearers of leather, never appeared in their minds in connection with leather.

Ecolinguists look for patterns of salience in both texts and visuals. Many factors tend to impact salience. Concrete language, e.g., ‘antler’ or ‘oak tree’, is more likely to call forth images and, thus, tends to be more salient than abstract language, e.g., ‘species’ or, more abstract still, ‘organism’ or ‘ecosystem’. Another useful distinction that impacts salience exists between the individual and the homogenised. Individuals’ unique characteristics may make them more salient, while homogeneous groups may be less salient due to their general characteristics.

Salience also matters with visuals. For instance, animals shown in a group from a distance looking away from the camera and not seeming to be doing anything are less salient than animals, or particularly, an individual shown in a tight close-up, looking at the camera and doing something. An example of the latter is a billboard produced by Edgar’s Mission (2016), a farmed animal sanctuary. The billboard shows a pig who occupies the majority of the space in the billboard. She is looking at the viewers and ‘saying’, “Call me Penelope Sue, not dinner”, thus, she is actively resisting the future some humans had planned for her.

Being active represents another means of constructing salience. It contrasts with passivation and can be promoted by grammatical devices. When beings are shown as doing, they become more salient than when they are shown as receivers of the action of others. Stibbe gives two examples (pp. 168-169), both from texts by PETA, an animal rights organisation. The first shows passivation, “In the United States, more than 7 billion chickens *are killed* for their flesh each year, and 452 million hens *are used* for their eggs.” In the second text, chickens are the doers: “They *are* very social and *like* to *spend* their days together, *scratching* for food, *taking* dust baths, *roosting* in trees and *lying* in the sun” (italics added). Stibbe notes that both texts, even the one in which chickens are less salient, potentially play a role in changing people’s actions regarding chickens.

One final point to note from this chapter (p. 174) is that the salience of the more-than-human world can be reinforced in our minds not just through language and visuals but also via our own real life contact. Biophilia, loving of nature (Wilson, 1984), needs to be experienced not just second hand via texts, but also first hand via our own interaction with nature. When we seek out nature experiences, we resist the commercially produced momentum seeking to herd us into shopping malls. Furthermore, we may boost our own physical and mental health, thus allowing ourselves to do ecolinguistics with more energy and creativity.

## Chapter 10 – Conclusion

Stibbe concludes the book by returning to the context in which it was written: we live in times that call for changes far beyond technical fixes, such as electric cars, times that call for *fundamental* changes, in humans' relationship with the larger-than-human world and with each other. To effect such changes, we need new stories to live by. Perhaps, ecolinguistics, in collaboration with many emerging fields, e.g., ecopsychology and ecohistory, can help us develop and promote these stories. Thus, ecolinguistics focuses less principally on changing language, e.g., changing 'aquarium animal' to 'aquaprison inmate' (Dunayer, 2001), and more on using our knowledge of language to change the stories that we and others live by.

Also addressed in the book's conclusion are criticisms of ecolinguistics. Yes, analysts in ecolinguistics do have political stances, and these are made explicit. Furthermore, yes, ecolinguists need, to the extent their resources permit to use large amounts of data and a variety of theories to analyse those data. However, as with the debate over quantitative, qualitative and mixed methods research, value exists in a range of methods and theories, as long as what was done is reported honestly and clearly. As Stibbe (pp. 191-192) notes, "[E]colinguistic studies will need to combine [compassion and rigour] to be both academically valid and true to the ethical spirit of the inquiry".

In conclusion, this book has much to recommend it as a tool for understanding why we should and how we can combine our knowledge about language with our compassion in order to play our roles as teachers and learners who are global citizens. Also, I was impressed by the level at which the information is presented. I remember feeling lost after the first five minutes of a talk on Systemic Functional Linguistics, but I could follow most of what was in this book.

The field of education certainly can have a major impact going forward on humans and the larger-than-human world. We teachers and students should remember the words of Dewey (1934, cited in Archambault, 1964, p. 11), who states, "The acquisition of skills is not an end in itself. They are things to be put to use, and that use is their contribution to a common and shared life."

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