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Defining "Ecolinguistics?": Challenging emic issues in an evolving environmental discipline

Todd LeVasseur

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Abstract Ecolinguistics is an emerging field of study within the social sciences, with implications for all domains of knowledge production. From its initial emergence within the field of linguistics in the early 1990s, it has meant different things to different scholars, so to date lacks a coherent self definition. Some scholars interpret ecolinguistics to mean the iterative interaction between human discourses and the natural world; others view it as the study of the ecology of language; while others suggest it deals with declining linguistic diversity, broadly. Dr. Arran Stibbe, the convener of the Language and Ecology Forum, generated an informal, 10-year retrospective survey in December 2012 and January 2013, with the goal of the survey to help generate emic conceptions of what ecolinguistics means to various scholars engaged in ecolinguistics. This article summarizes the findings of this survey, while also giving a brief overview of the history of ecolinguistics. It is argued by the author that ecolinguistics represents an emergent, leading edge of the "Ecological Turn" for the past 40 years in academia, and that the insights and methods of ecolinguistics are an underappreciated and underutilized approach to studying human-nature interactions. It is also argued that it would be helpful to both non-specialists and ecolinguists, if in the coming years the field converges around a consensus of ideas that help to provide it with theoretical stability and methodological clarity so ecolinguistics can be better utilized by those working in the AESS.

Keywords Ecolinguistics · Language and ecology forum · Linguistics · Ecology · Language · Interdisciplinarity · Critical discourse analysis

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Introduction

Situating the language and ecology forum survey

This research note serves as a vehicle to first situate, and then share, the findings of the Ecolinguistics Survey sent to the members of the Language and Ecology Research Forum from December 2012 to January 2013. It is the hope of the author and of the Forum board that this note will help to provoke further reflection upon the current state of ecolinguistics; provide occasion to revisit and analyze some of its continued and developing "fault lines;" and especially offer possible areas of future research that remain promising in the ability to help the field continue to grow and produce sophisticated, robust research. Lastly, and perhaps most importantly, it is hoped that our colleagues and peers working at the interface of the environmental studies, sciences, and humanities will all benefit from incorporating insights, both theoretical and methodological, from ecolinguistics into their own respective work.

Why is now a good time to help further delineate the past, present, and future of ecolinguistics? Why the need to labor to generate a consensus working definition of the term itself? It has been 10 years since Arran Stibbe began The Language and Ecology Research Forum, so this paper serves as an occasion to measure the growth of the field in that time. Given the survey results shared below, it also problematizes the characterization of ecolinguistics being a "field," with a unified methodology and approach to analyzing language and environment interactions. Some

¹ The author expresses his sincere thanks to Arran Stibbe for Stibbe's insights and overall help with this article and to critical comments from peer reviewers and editorial support from Tony Rosenbaum.



scholars in the forum are critical of such synergies, while a majority are comfortable with them. Regardless, if ecolinguistics is to develop in its robustness, and be shaped in certain trajectories, included hoped for (by some, but not all, ecolinguistics—see below) dialogue with other fields about human-nature interactions, then it is helpful to have a clearer idea of what exactly ecolinguistics might be, and how it fits into academia and various research regimes since the Ecological Turn of the last few decades.²

A brief history/summary of ecolinguistics

As other ecolinguists provide cogent summaries of the development of the field, this section will only provide a quick recap of their work, highlighting key insights and points that provide a working "snapshot" of the history of ecolinguistics. Alwin Fill shares that Edward Sapir and Wilhelm von Humboldt were early progenitors of ecolinguistics, while the field proper begins with a 1970 talk by Eniar Haugen (1972), an American linguist, on "The Ecology of Language," opening the door to questioning the interactions between any language and its environment (and which subsequently became the title of his classic 1972 book). This talk begins the "Haugenian tradition" of ecolinguistics, where it is recognized that language is part of a larger environment. This environment includes ecological systems, but also other languages spoken in a society, as well as languages interacting within the mind of the speaker, such that language is part of a larger ecology of individual-society-social forces-natural environment, all of which mutually interact with and shape one another at multiple scales.

The second major strain of ecolinguistics is built upon the work of Michael Halliday, who first linked biological ecology, ecological, and environmental problems, and language in a paper he read at the World Conference of Applied Linguistics held at Thessaloniki in 1990. According to Alwin Fill, "Halliday thus pioneered the study of the connexion [sic] between language and environmental problems, and, going beyond this, between language, conflict and peace" (ibid: 2). Halliday's early work also feeds into ecocriticism, "in which both the language system and its manifestation in various strands of discourse are criticized as unecological and thus carrying some of the responsibility for environmental degradation in all of its forms" (ibid: 2). The work of ecolinguists who build upon Halliday's insights form the "Hallidayan tradition," whose

² See Fill (http://www.eolss.net) for a brief history of the rise of ecolinguistics and the larger Ecological Turn. See also Stibbe (2012b).



goals are "to create an awareness of linguistic anthropocentrism" (ibid: 4).³

The third strain of ecolinguistics is built upon Nettle and Romaine's pioneering work into the extinction of languages (Nettle and Romaine 2002), although this strain is not as vulnerable to self-reflective criticism and manifests less tension as compared to the above two strains of ecolinguistics (see analysis of the first survey question below). In their book, they highlight the correlation between language loss and the loss of biodiversity. Such correlation led Nettle and Romaine to coin the term "biolinguistic diversity" (ibid: 13), which is meant to capture the interaction of humans and their cultures, including especially their languages, discourses, and coded conceptions of the more-than-human world, and how these both shape and are shaped by the more-than-human world. Significantly, they share how the rise of the agricultural revolution, then the revolution in industrial technologies, and finally the globalization of market forces and capital, as well as of hegemonic languages and fashions, have helped generate the extinction of both language/cultural diversity, but also, significantly, biological diversity. These insights are mirrored in the work of David Abram (1996) and suggest that as far as ecolinguistics hopes to offer any sort of corrective to human abuses of the natural world and to abuses committed against minority and indigenous cultures and their languages, then such work faces many obstacles.4

The above three strains of ecolinguistics present the key tributaries of the field as currently imagined (Anderson 1991).⁵ Meanwhile, other key events in the formation of ecolinguistics include the French linguist Claude Hagège coining the term "ecolinguistique" in 1985, while the term's meaning that is most associated with the work of many Forum members (and that presages by a span of months the Hallidayan tradition) was used for the first time with a group led by Frans Verhagen at the 1990 International Association of Applied Linguistics (AILA) conference.

³ Despite the promise of ecolinguistics, at minimum as a required element of any inter- and transdisciplinary research regime or academic department, it is important to recognize that the following insight from Peter Mühlhäusler still holds: "The environmental ideology existing in most Western societies is that it is responsible individual choices that will save the Earth. While local improvements can indeed result from individual choices, it remains unclear what global impact those choices can have in view of power politics, large scale environmental crime and continued widespread ignorance and indifference. It is for this reason that I do remain sceptical [sic] about the benefits of environmentally correct language. I am concerned about the trend to blame individual consumer's moral responsibility for policies and social processes which are beyond the control of individuals" (2003: 201).

⁴ See also Stibbe for his elucidation on the "three waves" of "ecolinguistically significant globalization" (Stibbe 2012b, p. 408).

⁵ Steffensen and Fill group the historical development of ecolinguistics into four strands: language exists in a symbolic ecology ("how multiple languages co-exist in a geographical areas or social institution," creolization, and language extinction); in a natural ecology; in a sociocultural ecology; and in a cognitive ecology (Steffensen and Fill 2013, p. 2).

The above strains of ecolinguistics contribute to not only the breadth of topics possible to be researched, but also provide points of tension in the field being able to clearly define its methods and key theoretical domains (see below survey results). In regards to some of the questions and topics so far entertained by the above various strains of ecolinguistics, key ones include investigating the political and environmental ramifications, both of language rights and human rights; studying how local languages name and thus performatively interact with local geological features of landscapes; and undertaking a largely "eco-critical approach" based on the work of Mühlhäusler, where ecolinguists study how "the symbolic and the natural ecology of language are intimately connected" (Steffensen and Fill 2013, p. 5). This ecocritical approach is based on views that there is an iterative interaction between language, on the one hand, and human use and treatment of the natural world, on the other. In this last research project based on the Hallidayan lineage, there is an interest in better understanding how language often is linked to environmental destruction within industrial societies, and it is probably the variety of ecolinguistics that is most relevant to those working in the environmental studies and sciences.

Methods

The Language and Ecology Research Forum was founded in 2004 by Arran Stibbe and as of the end of 2013 the forum had 258 members. Membership is open to anyone interested in ecolinguistics, however, they define the term, and the majority of members are academics and research students from around the world. The Forum is coordinated by convener Arran Stibbe with the assistance of a book review editor and bibliography editor. The survey was designed by the convener in conjunction with the members of the Forum—an open call went out asking the members if there were questions that they wanted in the survey, and the questions received were edited and incorporated in the survey along with ones created by the convener. According to the convener, the main purpose of the survey was "to explore tensions between different uses of the term 'ecolinguistics,' and the interests and ideologies behind those uses." This was in order to "discover if Ecolinguistics could proceed as a confident new movement with a united purpose, or a more disparate collection of approaches united more or less by a common viewpoint, or perhaps a set of entirely different approaches which confusingly have the same name" (both quotes from Stibbe, via personal communication). The survey consisted of a mix of open questions and ones which provoked a response to a strongly worded statement, with the statements representing various positions. The survey was sent by email to all the members of the forum to complete either in MS Word or

online on a page in the forum, so that the survey was generated and administered by a UK scholar whose institution does not require IRB approval, while the survey results were kept anonymous.

A total of 26 responses were received, representing approximately 10 % of the members. This cannot be considered a representative sample of the opinion of all ecolinguists, and clearly there are more ecolinguists than members of the Forum.⁶ However, the survey does give a clear indication of some of the approaches and attitudes to ecolinguistics that currently exist. Although the survey questions contain statements from a range of members of the Forum, there is always the possibility that it is biased in ways which serve the point of view of the person designing it. For that reason, the convener called for the members of the Forum to provide an independent analysis of the survey results, and the current author came forward to do that. It should also be noted that the results obtained are not representative of the entirety of views held by various Forum members; rather, this was an informal, preliminary survey that was intended to demonstrate a diversity of perspectives on ecolinguistics after 10 years of the Forum's existence, rather than provide a representative sample. Given the nature of the survey and response rate, readers should note that I am offering only broad generalizations based on insightful and compelling data that the survey generated, but that is the limit of what can safely be deduced from the data.

Results

Given space constraints, the entirety of results for all the survey questions will not be shared. Rather, I have strategically chosen responses from key, pivotal questions that relate to the overall point of this research note: that ecolinguistics is an important discipline, but it still must become clearer in its methods and objectives.

⁷ Readers are invited to email me if they desire to see charts and short write ups I created that contain the responses for each answer, which became the basis for this section.



⁶ Given the anonymous nature of the survey, with most respondents using the online survey engine, it is impossible to track specific demographics of respondents. Certain respondents emailed the convener their answers, and of this list, there were academic linguists working at universities in the USA, Brazil, China, the UK, Denmark, and Australia. The entire forum membership who were invited by group email to participate in the survey include non-specialists/those with lay interest in ecolinguistics; and then linguists working at universities and colleges in Brazil, Australia, Japan, Denmark, the USA, Germany, the UK, Finland, Canada, and Austria. This international membership helps make the Forum an important project, and this diversity is in part represented in the survey responses.

How would you define ecolinguistics?

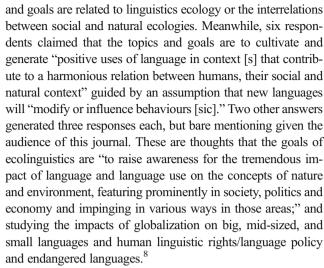
The most popular answer from the Forum members to this first question of the survey was the "Study of the interdependence of language and the perception/interpretation of the natural world we live in," which generated nine similar responses. Compared to this were six members who defined it as the "scientific study of the relationship between language and the environment [or ecology]." Four other definitions were generated, but these did not have the consensus of the above two. Therefore, one immediate finding emerges from this first question of the survey, which is the very real tension that exists between the definitions of ecolinguistics contained in response one as compared to that contained in response two, where the latter seems more topical and surface oriented and "relation" is open-ended. This flavor was hinted at by one respondent, who shared that ecolinguistics is more of a "field than an approach."

In contrast, response number one seems a bit more nuanced and suggests (recognizes?) there is dialectic at play, and understanding this dialectic is the central driving question of the field. The dialectic that is recognized is that between language, on one hand, and perceptions of and interactions with the natural world, on the other. Others responses from this group include insights that ecolinguistics entails, "Looking at how certain discourses shapes people's views on the environment and the physical world around them and for what reason those discourses are written;" and that ecolinguistics is "study of language in a broadest context—cosmological, microbiological, and social (as basic). Ecolinguistics is related with ([has a] core of) ecosemiotics."

One response from question two of the survey (see next question, below) helps to highlight this very real tension seen in the above two answers: "Environmental discourse analysis serves to understand the linguistics of environmentalism and environmental discussions within linguistics. Linguistics ecology is the study of interrelationships between social and natural ecologies." This answer suggests that some ecolinguists see their work as bridging and being informed by the two key meanings of ecolinguistics that have developed from the 1990s onward.

What key topics are covered in ecolinguistics, and what key goals does ecolinguistics serve?

Tension is also seen between the dominant answers for this second of the survey questions, where this tension has been present in the field since the 1990s. For the eight Forum members, the key topics and goals are environmental discourse analysis, which include discourses of environmentalism; and how environmental issues are framed and presented linguistically and across cultures, and in education, politics, and various media. Another eight respondents claimed that the key topics



Another subtheme emerged with the answers to this question which is, similar to responses to question one, above, quite a few Forum members are comfortable with activist goals. This is seen in a comprehensive answer where one Forum member shared that "The key goals of ecolinguistics is to contribute to a local and global culture in which (i) cooperation, (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." Another response stated that the goal of ecolinguistics is "to interrogate and potentially expose the anthropocentric structures and usages of languages-structures and usages which may be contributing to ideology fundamentally detrimental to ecological well-being." Two Forum members shared this view, and this matches concern with many ecophilosophers and others who study humannature interactions where the concern is human anthropocentrism (Bender 2003; Katz 2000). By default of its unique approach to studying the interaction of language and the environment, ecolinguistics offers a needed perspective not only to help to better understand language and anthropocentrism, but also provides the ability to possibly join in the work of David Abram in moving beyond anthropocentric language by generating alternative discourses (Stibbe 2012a).

What theories, methodologies, and empirical approaches are useful for ecolinguistics?

Most readers will not be familiar with key ecolinguistic methods, so this is a helpful question to cover. The overwhelming response, with nine mentions, was critical discourse analysis, followed by three responses each for corpus analysis, conceptual



⁸ The first might appeal to AESS members working on policy issues, where ecolinguistics may help with an analysis; and the second, to AESS members working on issues of Traditional Ecological Knowledge, for the same reasons.

metaphor theory, and then a variety of mixed approaches. Other methods mentioned include sociolinguistics, framing, semiotics, the science of ecology, functional linguistics, pragmatics, appraisal analysis, the ethnography of communication, and others.

Overall, this question generated an extremely diverse response set (with 27 varied responses⁹), suggesting that, as with answers to questions one and two from the survey, and as seen in the nascent development of ecolinguistics as a field of study, there is much fluidity and various understandings of approaches for the field. In many ways, this provides richness, as scholars of ecolinguistics are not siloed and straight-jacketed by hegemonic methods and theories; yet, it also suggests that scholars in the field, or its various subfields, need to have sustained discussions at meetings and in journals about clear answers to this question. Such answers will also help the next generation of scholars, and scholars from other disciplines who wish to learn more from ecolinguistics or join interdisciplinary research teams that include an ecolinguistic perspective have a firmer foundation upon which to build. It also suggests that there are key readings and methods that should be mastered before someone can call themselves an ecolinguist. Yet, one respondent suggests the opposite: "As far as I can see, there's no 'ecolinguistic methodology.' I am personally trying to work one out. It is by nature holistic, inter-, trans-, and multidisciplinary. In this case, we could say that ecolinguistics methodology is given by the object of study."

Despite the lack of consensus as a whole, there is one theoretical approach which seems to be required for a successful project in ecolinguistics, which is critical discourse analysis. However, this comes with an added nuance offered by a respondent: one without "the anthropocentric emphasis on race, class, and gender issues."

What criticisms are there of ecolinguistics?

Related to the above, responses to this question were also varied, with quite a variety receiving just one or two responses, and no clear consensus emerging from Forum members outside of the field being "too vast-ranging"!¹⁰

Just as there is no one approach to ecolinguistics, outside of the importance of critical discourse analysis, many see this lack of a solid corpus of theories and methods as a problem with ecolinguistics. This may be a result of the field being so young and possibly due to many longerpracticing linguists being unable to see how language and ecology interact (in any of the three meanings found in the field—see above). This is hinted at by one forum member who responded, "At the beginning of my doctoral studies, I was very criticized by my professors, who research on other areas of linguistics, that ecolinguistics was not an approach, it was only a new label, or a mix of different previous approaches/theories, and because of that does not contribute to linguistics or to science in general." Yet, another recognizes that as currently conceived and historically developed and practiced, ecolinguistics is "too esoteric [with] no practical application," and another opined that ecolinguistics is possibly not a "'real' subgenre of linguistics" because it is "too biased,' i.e. full of treehugging types." However, these singular responses were countered by the two Forum members who said there are "nearly none," and further, "The reason is that most ecolinguists don't communicate with the standard schools in linguistics [that] have a weak, unimportant notion of ecolinguistics that does not battle with those schools and their mistakes. If one defines the subject by thematic issues, one must not be puzzled about this."

If we recognize that, just like Environmental Studies and Sciences is an emerging field, still looking for foundational epistemologies and theories (Proctor et al. 2013), yet that is full of vibrant life and cross-fertilizing of ideas, the same can be seen in ecolinguistics. The Forum leaders recognize this, which is one reason the survey was administered and this article generated, to help the field of ecolinguistics understand the need to dialogue about developing a more robust self-understanding. Yet, this survey provides a platform which allows scholars of all types to recognize that it is a very unique subdiscipline in linguistics, with much to offer to helping better understand language, humans, and the environment.

Any language can be used for destructive/beneficial goals, so should the focus be "language use"?

Despite a few voices to the contrary ("That's a widespread error;" "there should be a strong boundary between 'language use' and 'language' in any linguistic approach"), 12 respondents agree that a focus on "language use" should be an operative method for ecolinguistics. This focus on language use triggers a broad challenge for scholars studying the interface of human-nature interactions, such as those who read this journal. If language is instrumental to how we conceive of and thus interact with the environment, at



The most varied individual response was this "V. Vernadsky's ideas of noosphere; R. Barthes-logosphere, and T. Sebeok's semiosphere; Debates biology or culture—B. Malinowski, M. Bakhtin, and C. Lévi-Strauss; Comparisons between the language of animals and humans—E. Benveniste and C. Hockett; Anthropological and sociological theories on everyday mind [including] J. Searle, theory of mental simulation of R. Gordon and A. Goldman; Critical discourse analysis—N. Fairclough, R. Wodak, G. Kress and T. Van Dijk; Language rights—T. Skutnabb-Kangas, and R. Phillipson; Macrosociolinguistics—J. Fishm, E. Haugen, C. Ferguson, W. Labov, D. Hymes."

¹⁰ Some of the answers to this question may be internal criticisms, or criticisms scholars have heard from colleagues working in other subdisciplines of linguistics, as well, as the survey did not ask respondents to offer clarity on this.

the level of an individual or family or community or society, then understanding the role of language in environmental issues seems to be a very key category to weave into research projects. To date, ecolinguistics is the only discipline (with a nod to ecocriticism) specifically cultivating such needed skills and thus the ability to understand the role of language/discourse and human interactions with the environment.

How can ecolinguistics be used practically to make a difference in the world, e.g. by contributing to environmental sustainability?

This is an important question to ask, and one that faces all scholars in every discipline, given our steady passage into the Anthropocene. This is recognized by those in the natural sciences, where some recognize that at least in regards to climate change, it is important to package emerging consensus science in ways that non-specialists can understand, so that these non-specialists can realize the severity of the climate crisis. It is also a question that motivates some subsets of those working at the interface of religion and nature (Taylor 2005), and increasingly in environmental philosophy (LeVasseur 2014), as well as other fields.

While overall not as many Forum members responded to this question, and to these questions later in the survey, broadly, possibly because of "survey burn-out," a majority of those who did nonetheless expressed the position that ecolinguistics should in some way contribute to sustainability. Those who held this view point out that how this can be done is a tough issue, although specific strategies emerged, with quite a few of these gaining two responses. One Forum participant pointed out that "This is the challenge: To change common-sense thought patterns and cultural practices." Such a realization permeates many disciplines working on studying humannature interactions where the goal is sustainability. For sure, language plays a role in this larger quest, as recognized by another respondent, who wrote that ecolinguistics can help "By explaining how language shapes our perception of the natural world." This view was seconded by another respondent, who wrote that ecolinguistics can show "that the way we talk about the world tends to determine the way we deal with it." Another felt that ecolinguistics can help change the curriculum in the educational system, thus exposing students to insights about the interaction between language and the natural world, and others felt that providing citizens with the ability to think critically about advertising, politics, and "greenwashing" are all vital sustainability skills that ecolinguistics can help to cultivate. A note of caution, however: one respondent who was placed in the "no" category did actually feel that ecolinguistics can make a change, but "the gains would, I fear, be slow."

Are too many unrelated areas of research using the term "ecolinguistics"? Does the concept need to be better focused?

This last question solicited an array of spirited responses, with respondents split almost evenly in regards to their view about the "broad tent" of ecolinguistics (see analysis of questions one and two, above). For those eight who responded with a "yes," reasons ranged from criticizing the focus on discourses related to vegetarianism and animal rights, which have made ecolinguistics too broad, to the conflation of language ecology with ecology of language (two respondents shared this criticism); while another was worried about greenwashing and hijacking by those "with alternative motives;" and a final respondent offered that the broad theoretical focus of the field is an inevitable process.

In comparison, the seven who are not leery of a narrow definition hold this position for a variety of reasons. One is that, "this is only a valid criticism if one subscribes to the efficacy of disciplinary thought." Another respondent shared that the field "needs to be broad and inclusive or runs the risk of being irrelevant." A similar view was shared in the following statement: "Containing the term 'ecolinguistics' will do exactly that—contain it."

Given the multiple meanings of the term ecolinguistics shared in section two of this paper, and the international make-up of scholars who consider themselves to be ecolinguists, or at least working on research projects that utilize theories and methods used by ecolinguists, it seems inevitable that there is such a clear division in response to this answer. It will be interesting to see the Forum undertake a similar survey in another 10 years, to see if any of the above questions solicit different answers, whereby scholars will be able to reflect on the growth of the field.

Summary and conclusions

This research note is intended not only to analyze the results of the survey sent to the members of the Language and Ecology Research Forum from December 2012 to January 2013, but also to open a dialogue between ecolinguistics and other scholars working in an interdisciplinary fashion on environmental research. It is hoped that this research note presents an easy entry into the history and literature that in large part defines ecolinguistics, thereby exposing this discipline to readers of AESS who may not be familiar with ecolinguistics as a field. Many readers will agree that cross-fertilization of ideas, methods, and theories is the hallmark of effective work in environmental studies and science, and ecolinguistics offers a compelling and important perspective to any research project.



We see in the informal survey results that ecolinguistics is still an evolving field, searching for clarity in methods and self-understanding. The sooner such clarity can be reached if it can be reached at all—the sooner it can join in robust interdisciplinary projects and dialogues, for the insights generated by ecolinguistics to date are valuable to environmental studies, and resolving disciplinary focus can only help bring ecolinguistics into the mainstream of environmental studies and sciences. Ecolinguistics may help to generate interesting approaches that can be helpful for interdisciplinary grants; its focus on critical discourse analysis can be helpful for other fields; and it can help add sophistication and nuance to research regimes ranging from ecotoxicology to environmental engineering to soil science, as these and most other environmental science subfields often neglect the power and role language plays in shaping human-nature interactions. For example, Croney and Reynnells, an animal scientist and a USDA Extension Service member, respectively, used ecolinguistics to better help to understand how the farm animal industry talks about farm animal production, especially in relation to power dynamics that are codified into industry discourses and language use (Croney and Reynnells 2008). They concluded that in discourses ranging from public advertising to internal documents, that the selected use of various types of grammar and vocabulary "obfuscate certain aspects of animal production," especially those aspects that are damaging to the animals themselves and the natural environment (ibid: 389). Of note, these animal scientists recognize that, "Deconstructing language and related practices is...essential to understanding and changing our relationships both with animals and members of the public" (ibid: 390).

Indeed, I would like to use the remaining part of this research note to hint at possible areas of future research that ecolinguists may wish to undertake in order to continue growing the field, and that may change our relationships with how we do research, and communicate that to the public and peers, both. It is also hoped that answers to these questions will be pursued by interdisciplinary teams that include AESS members. Many of these research questions still need more studies, data, and theorizing before they can be claimed to have conclusive answers. One key question is raised by Arran Stibbe, who offers that, "The question for ecolinguistics is: What, specifically, is it about the abstraction of language and the realities it creates that is implicated in ecological destruction?" (Stibbe 2012b, p. 410). This should become a leading question guiding the next 10 years of ecolinguistics, and it is hoped that many ecolinguists pursue needed answers to this query.

Another possible avenue of future research comes from Harré et al., who suggest that work on "language planning" at the lexical level must occur in order to generate greater referential adequacy. However, this proposal is rejected by most others in the field as Orwellian and wishful thinking (Stibbe 2012b). Another possible study, given corporate influence on national governments and the abuse of the natural world created by generating corporate consumer goods, is the investigation of "environmental crime and the linguistic practice of green washing that accompanies it" (Mühlhäusler 2003, p. 201).¹¹

A series of questions similarly emerge out of Richard Alexander's article "Resisting Imposed Metaphors of Value" (Alexander 2003), all of which require further clarification and research. These include how effective are counter-concepts? How are they disseminated? How can scholars use concordance and meta-textual analysis like he does with the work of Vandana Shiva, but on work of other Global South leaders? How can scholars apply Andersons' method to opeds in economic dailies picked 1 day from around world by different scholars—such a project would lead to a fascinating special topics issue of a leading journal (including this one).

Areas of fruitful interdisciplinary research may also emerge by ecolinguists generating surveys/undertaking discourse analysis with ecophilosophers, the latter who have a long tradition of investigating anthropocentrism and its perceived ills. Another fascinating interdisciplinary project can emerge with research undertaken with religionists, especially those who work on ecohermeneutics and those who study the contemporary "greening" of religion. A similar project that may be of use is investigating Confucian ideals and norms, similar to Stibbe's work with Haiku (Stibbe 2012a), given China's growing ecofootprint; indeed, some work is already being done in this regard and this can provide a useful starting point (Barrett 2010).

Other rich areas of future research include fusing insights from ecolinguistics with those from Traditional Ecological Knowledge, which may help us better understand how humans use language in the management of nature (Ingold 2000). Similar research can be undertaken with those working on Systems Thinking, especially under the auspices of the Resilience Alliance, with a clear focus on researching the role of language in managing systems and dealing with "wicked problems." Lastly, researching ecoapocalypticism/the language of despair/the language of acceptance of near term extinction is, sadly, another area that would benefit from a sustained analysis from ecolinguists.

Even if AESS scholars do not actively wade into the theories and methods that have so far defined ecolinguistics, a key reminder should be apparent from the implications raised by ecolinguistics, broadly. This is that every discipline uses narratives to construct their imaginaries. This does not mean that data, especially of the natural world, are constructs; rather, the narratives we tell ourselves as scholars shape our

¹¹ We should recognize the implications here, too, of corporate-funded grants to various types of University research, especially if these lead to products and technologies that are environmentally damaging.



research regimes and understanding of the natural and social worlds, respectively. Ecolinguistics helps us reflect on the biases embedded within our own professional narratives, as well as the narratives used in our global politics and in our industries (Sanford 2011; Apffel-Marglin 2011; Levins and Lewontin 1985). Such reminders are always timely and helpful in forcing us to consistently endeavor to be more robust scholars, especially in this time of planetary change.

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