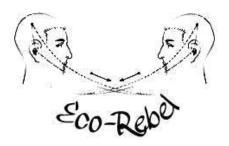
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TOWARDS AN ECOLOGICALLY INFORMED METHODOLOGY FOR THE STUDY OF LANGUAGE

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Abstract: Discussions of an ecological approach to language in the academic literature are largely conceptual: they are concerned with developing an overarching theoretical framework. Little attention has been given as yet to the implications of an ecological perspective on linguistic methodology. That is the focus of this paper, which broadly outlines the characteristics of an ecologically informed methodology (EIM), with the aim of stimulating systematic work in the field. An appropriate analytical method is essential if linguistics is to become a genuinely ecological scientific discipline.

The methodology will need a radical recontextualisation of traditional linguistic methods. Since Saussure's seminal work, the discipline has largely proceeded by narrowly defining the object of study as an independent entity, removing all 'confounding' non-linguistic factors. Language is divided into its smallest constituent parts and the rules for combining them are described. This methodological approach is not inherently faulty, but the analyses and findings drawn from are typically so conceptually restricted as to be fundamentally misleading.

By contrast, an EIM will approach language as a complex whole, inextricable from its use in communication and the context in which it occurs. Within an ecological framework, language is a part of the complex of human sociality: it is a dynamic communicative process, indivisible from the wider physical, personal and cultural environment in which it is being used. Speaking and listening, writing and reading, are not the activities of sovereign individuals, but mutually defining processes.

This approach is fundamental to various forms of discourse analysis—conversation, narrative, and pragmatic analysis to name a few—that have developed in recent decades. These approaches to analysis have a great deal to contribute to the development of an EIM. Whatever systematic form

it eventually takes, ecologically informed analysis will include selecting some of the vast amount of information relevant to every instance of language-in-use, explaining the reasons for this specific selection, and indicating the major elements that have omitted from the analysis.

The paper does not seek to present the details of an EIM, but to assist in setting a context within which they can in future be firmly established.

Keywords: Linguistic methodology; Language ecology; Language analysis.

Resumo: Discussões sobre uma abordagem ecológica da linguagem na literatura acadêmica são amplamente conceituais: elas estão preocupadas com o desenvolvimento de uma estrutura teórica abrangente. Pouca atenção tem sido dada até agora às implicações de uma perspectiva ecológica na metodologia linguística. Esse é o foco deste artigo, que delineia amplamente as características de uma metodologia de base ecológica (MBE), com o objetivo de estimular o trabalho sistemático de campo. Um método analítico apropriado é essencial para que a linguística se torne uma disciplina científica genuinamente ecológica. A metodologia necessitará recontextualização radical dos métodos linguísticos tradicionais. Desde o trabalho seminal de Saussure, a disciplina procedeu em grande parte definindo estritamente o objeto de estudo como uma entidade independente, removendo todos os fatores não linguísticos "estranhos". A linguagem é dividida em suas menores partes constituintes e as regras para combiná-las são descritas. Essa abordagem metodológica não é inerentemente falha, mas as análises e descobertas extraídas são tipicamente tão restritas conceitualmente que são fundamentalmente enganosas. Por outro lado, uma MBE abordará a linguagem como um todo complexo, indissociável de seu uso na comunicação e do contexto em que ocorre. Dentro de uma estrutura ecológica, a linguagem faz parte do complexo da socialidade humana: é um processo comunicativo dinâmico, indivisível do ambiente físico, pessoal e cultural mais amplo em que está sendo usada. Falar e ouvir, escrever e ler não são atividades de indivíduos isolados, mas processos que se definem mutuamente. Essa abordagem é fundamental para várias formas de análise do discurso – conversação, narrativa e análise pragmática, para citar algumas - que se desenvolveram nas últimas décadas. Essas abordagens de análise têm muito a contribuir para o desenvolvimento de uma MBE. Qualquer que seja a forma sistemática que eventualmente assuma, a análise de base ecológica incluirá a seleção de algumas das vastas informações relevantes para cada instância da linguagem em uso, explicando as razões para essa seleção específica e indicando os principais elementos que foram omitidos da análise. O artigo não procura apresentar os detalhes de uma MBE, mas ajudar a estabelecer um contexto dentro do qual eles possam ser firmemente estabelecidos no futuro.

Palavras-chave: Metodologia linguística. Ecologia linguística. Análise linguística.

Introduction

In recent decades, ecology has expanded well beyond its origins in biology and been adopted as an intellectual paradigm by researchers and theorists within disciplines as diverse as theology and economics, psychology and chemistry (Hayward, 1995). A proposal to apply ecology as a

metaphorical framework for the study of language was first put forward by Haugen (1972), whose focus was on multilingual communities. His suggestion was not widely taken up for some time, largely because he described ecology as a 'metaphor' (although he applied it more as an analogy), and he failed to realise that there was a contradiction inherent in his formulation of that metaphor (Garner, 2005). Nonetheless, several researchers saw potential in an ecological view of language (e.g., Mackey, 1980; Haarmann, 1986; Nelde, 1989; Fill & Mühlhäusler, 2002; Garner, 2004) as a highly productive paradigm shift. Despite this interest, however, ecological thought has remained somewhat marginal in language studies, partly at least because it is a serious challenge to long and deeply held beliefs about the nature of language itself, and hence relativises a great deal of the established modes of scholarship and research within the field.

The term 'ecolinguistics', and variants such as 'language ecology' and 'ecology of language', is applied to a variety of approaches to understanding language, and there is no general agreement about the focus and boundaries of the field. The various terms are still primarily applied to the study of societal multilingualism, and the more general theoretical and methodological implications of an ecological view of language have remained underexplored. This is unfortunate, as there are intriguing possibilities for it to contribute to a profound understanding of the role of language in human sociality. If scholars with an ecological orientation can clarify the key concepts to be studied, and develop new theoretical models to incorporate them, there are exciting prospects for ecological thinking to become the norm in theoretical and applied linguistics in future.

To date, discussions of language ecology in the academic literature have been conducted largely at a conceptual level. My focus in this paper is not on the theoretical framework for ecolinguistics (language ecology, etc.). Rather, it is methodological: to explore some implications of an ecological perspective for the way in which language data are collected, described, and analysed. The enormous potential of ecological thinking to transform our understanding of language will remain just that—potential—until there is a substantial body of empirical research to inform, and against which to test, the various theoretical models. This will require a clear and robust ecologically informed methodology (abbreviated as EIM in what follows) to guide such research. There is a lot of conceptual and practical work required to arrive at an EIM, and the aim of this paper is simply to help this process to begin. The discussion consists mainly of tentative proposals and it is hoped they will raise a number of methodological questions that those with an interest in an ecology of language will be inspired to answer rigorously and extensively. A well-conceived and systematic methodology essential if linguistics is to become, as some of us believe it must, a genuinely ecological scientific discipline.

We are not starting with an empty canvas. It is important to acknowledge that within the many sub-disciplines of applied linguistics, sociolinguistics, and discourse analysis a lot of research incorporates some methodological elements that are derived from an ecological perspective. They are often, however, not explicitly related to ecological theory. Researchers in these disciplines have tended to work in relative isolation from one another, with little recognition of the fact that any given study is one part of the extraordinarily complex whole of language analysis.

How can methodology be ecologically informed?

When he proposed the concept of ecology in 1866, Haeckel argued that biology must abandon the approach of Enlightenment science, which viewed the world as atomistic and mechanistic.

The proper study of nature involves the totality of relations of organisms with the external world ... the mutual relations of all the organisms which live in a single location' (HAECKEL, cited in HAYWARD, 1995, p. 26).

In this ontology, the constituent elements are fluid, with changing characteristics arising from the dynamism of the system of which they are a part.

Ecological thinking is therefore concerned with complex systems. It is based on the premiss that only through understanding complexity, diversity, and interrelationships, rather than fixed entities in isolation, can we properly understand our world (HAYWARD, 1995). Language is a pre-eminent example of a complex system. It is a fundamental and indispensable element of human sociality, without which we could never develop into full human beings. This is evidenced by the few sad examples known of children denied human contact, such as the Wild Boy of Aveyron (LANE, 1976). Sociality depends on and gives rise to intersubjectivity, which is created and manifested through interpersonal communication, itself deeply embedded in community and culture. Without the interplay of these elements, human life as we know it would be impossible. Whatever specific form an EIM may eventually take, it must be shaped by the fact that communication, community, and culture are inextricably intertwined. It is, of course, impracticable to analyse them in depth all together; but it is legitimate to treat them as human sociality viewed from three different angles. Any analysis will therefore be partial, and will need to include explicitly a statement about those elements of the wider context that have been omitted from the analysis.

This represents a radical theoretical and methodological departure from traditional linguistics. The basic presumption in linguistics was, and in many ways still is, that language is a self-standing entity with a form that, seen at any given moment, is stable, although it gradually changes over time. The presumption is that this entity comprises basic building-blocks (morphemes, lexemes, etc.) which are combined according to specifiable rules into an almost limitless variety of structures. It is not clear from Haugen's original suggestion to use ecology as a metaphor that he was aware of quite how fundamental a shift it implied for the discipline. He was, in essence, proposing that language is not an independent set of structures which speakers may use as to construct any and every communicative event. Rather, it is the outcome of all communicative events, each of which is profoundly situated. By focussing on this interaction, he said, we can understand what factors determine which of two (or more) languages will be used in any given context, which he saw as much more informative than a formalised abstract description. This ontology of linguistics-as-ecology has, as noted above, been investigated by a number of scholars; The following sections discuss its epistemology and propose some possible principles for its methodology.

¹ For an explanation of this term, see Garner, 2007.

Traditional linguistic methods and EIM

What will constitute a usable and valid EIM for the analysis of language in general, and specific languages in particular? To begin to answer that question, let us first briefly consider some ways in which the principles on which such an analysis is based will need to differ from those of mainstream linguistic analysis.

It is just over one hundred years since the publication of *Course in General Linguistics* by Ferdinand de Saussure, who is generally regarded as the founder of modern linguistics. Saussure's guiding principle was that the study of language was to be based on the principles of Enlightenment science. The methodological consequences of following this principle have been that linguistic analysis has since then proceeded by narrowly defining what is to be studied and removing from it 'confounding' factors that lie outside this definition; reifying language; dividing this 'object' into its smallest constituent parts; and analysing these parts more or less in isolation from one another. From an ecological perspective, this methodology is highly questionable, not because it is wrong, but because it is partial. This was pointed out as long ago as the middle of the last century by the Spanish philosopher, Ortega y Gasset:

For quite a number of years now I have been asking for a linguistics that should have the courage to study language in its integral reality, as it is when it is actual living discourse, and not as a mere fragment amputated from its complete configuration. [...] But it is obvious that linguistics has not [...] come to know language except as a first approximation, because what it calls 'language' really has no existence, it is a utopian and artificial image constructed by linguistics itself (ORTEGA Y GASSET, 1963: 241-2).

The problem Ortega y Gasset alludes to arises from Saussure's insistence that the object of study in a truly scientific linguistics is the underlying abstract system of rules (*la langue*) and not language-in-use (*la parole*). These rules clearly determine what is, and what is not, included in the form, or grammar, of any particular language. All grammars described in traditional linguistics, although they may vary in the way they are structured and presented, are similar in that they describe the building-blocks of the language and the proper manner of fitting them together.

There are several, largely unacknowledged, inconsistencies in the methodology of linguistics that arise from this fundamental orientation to grammar. Let us consider three of them briefly. One is that language is unique among all the phenomena of human cognition and behaviour: grammatical rules apply only to the language, and are irrelevant to any other human phenomena. The assumption is that language is a system governed by rules known by (and, as Chomsky would later claim, innate in) every individual. Therefore, language must be analysed independently of all other behaviours, including the interactions we know as communication, all of which are, so it is argued, extraneous to the system itself. An EIM will be based on the opposite principle, seeing language as inextricable from context. Language must be analysed along with as many other relevant behaviours as is practicable for the researcher; it must always be treated as a manifestation of sociality.

The second methodological inconsistency is an unresolved contradiction. Traditional, 'scientific' linguists have always maintained that their aim is to devise a *descriptive* grammar of a

language, simply laying out the system of rules for selecting and combining its basic elements. By contrast, a *prescriptive* grammar includes value judgements about what is 'correct, 'proper', etc., for its users to speak or write. Linguists reject prescriptivism, and rightly point out that many prescriptive rules found in, for example, school grammar-books are regularly broken even by highly educated native speakers. The problem is, however, that the distinction between description and prescription in grammar is not absolute. The very concept of 'rules' includes a value judgement. A great deal of what users of a language actually say or write while communicating is excluded from 'scientific', 'descriptive' grammars because it is 'ungrammatical'; that is to say, it does not conform to what the analyst has decided are the rules of the language. It is a reasonable assumption that the converse is also true: that a large proportion of 'grammatical' utterances or sentences are never used.

Some linguists attempt to avoid this dilemma by distinguishing between 'grammaticality' and 'acceptability'. Something which is not 'acceptable' will not be said or written, even though it may conform to the grammar. There is a fundamental difficulty, however, in defining what 'acceptable' means. Huddleston (1993, p.8), for example, describes

the saucer laughed with delight

as 'grammatical' but 'unacceptable', presumably on the grounds that it is nonsensical. From an ecological standpoint, however, this is untenable. If this construction is truly unacceptable, English speakers will never use it. But one can imagine a number of contexts in which it could be used as a meaningful, communicative utterance (or sentence). It could be appropriate in a virtual reality movie, or a children's book, for example; or it could be used in a conversation for humorous effect. The same is true of any 'unacceptable' string of words, because unacceptability is completely dependent upon the communicative context. This is a highly complex and dynamic phenomenon, comprising: who the participants are; their history of interacting with one another; their reasons for communicating here and now; the physical setting; cultural values; and much more. A linguistics that employs an EIM must acknowledge and analyse context as fully as is practicable and informative for the immediate purpose.

Some principles of an EIM

Language is a vast and highly complex ecological phenomenon, and it will take a lot of time and scholarly effort to develop a detailed and systematic methodology for studying it. I argued above that approaching language as a rule-governed system provides too constricting a frame to within which to describe its variability and complexity as an ecological phenomenon. That phenomenon is more powerfully and accurately described as learned patterns of communicative behaviour. These patterns are created, shared, and passed on to children by the whole speech-community. They are of necessity constantly repeated and hence are highly predictable, as is demonstrated by the emergence in recent years of sophisticated predictive text facilities for computers and mobile phones. But this repetition serves to facilitate communication, and is not determined solely, or even mainly, by any linguistic 'rules'.

If one knows enough about the situation within which a communicative act takes place; the character of the speakers; their immediate communicative intent; what has preceded the act

(including what has been said before by the participants); and so on, it is possible to predict with a high degree of certainty the language forms that will be used. At the same time, however, there exists the constant possibility that a speaker or writer will depart from the expected pattern: this is what enables new meanings to be created. As with all patterns, those of language may be departed from in a given instance (see below); they also gradually change over time.

The overarching aim of an EIM is to describe, analyse, and/or explain the patterns that occur in any particular instance of language-in-use. In practice this requires a wide range of kinds of data, some innovative analytical methods, and a flexible analytical focus. This is not to imply that the methods of traditional linguistics are inherently faulty in themselves, only that the analyses and findings drawn from them are framed within an inappropriately constrained understanding of the nature of language. In developing an EIM, we must recognise that many, perhaps most, of the well-established analytical approaches are valid but restricted, and the conclusions drawn from them are typically so conceptually limited as to be entirely misleading.

One challenging aspect of an EIM is that there is so much information to include. It is virtually impossible to analyse every relevant aspect of even a brief interaction. Mention was made above of the need for a flexible analytical focus: the researcher must select, on whatever basis, a few specific elements to be subjected to analysis. The reasons for the selection should be made explicit, along with an indication of major elements that were omitted. Broadly speaking, there are four salient characteristics of language as an ecological phenomenon which may serve as methodological parameters for selecting data for analysis.

In the first place, language-and-environment constitute an intricate and indivisible whole. It is methodologically inappropriate to treat a string of language, such as an utterance, and the context in which it occurs as discrete elements. Language and environment are an identity in that they are a single communicative process, viewed from two different perspectives. The environment (or context) comprises many elements, for example: the participants' perceptions of the physical setting and of one another; the linguistic means other than words (intonation, voice quality, etc.); any other means of communication that may be available, such as gestures; the perceived intention of the communication; and many more.

In order to analyse a verbal interaction, therefore, the researcher cannot simply describe the 'propositional' content of the words and then consider any elements of the setting of the interaction that may have modified the inherent meanings. In actuality, the meanings are created by the participants as the interaction proceeds: they continually determine which aspects of the environment (in its most comprehensive sense) are relevant to the on-going exchange (BAUMANN; BRIGGS, 1990 p.61), and modify or confirm each other's understanding of what is being said.

This brings us to the second characteristic of language: it is dynamic. There is a 'common sense' assumption that when a speaker wishes to express a meaning, he or she selects the appropriate items and combines them into an utterance that conveys the meaning to the hearer. The 'words-and-grammar' view of language, together with the 'conveying meaning' conception of communicating, give an imprecise and utterly misleading picture of what happens in any interaction. In fact, the form of the utterance is created by the speaker, who may simply adopt a standard pattern and repeat once more what is usually said in this kind of situation, or may vary that pattern in any way that seems appropriate.

Thus, the old aphorism, 'everything that is said has been said before' is not strictly accurate. Every situation is inherently dynamic, and despite the highly patterned, formulaic nature of most instances of language in use, there is always the possibility of unpredictability in every new interaction. A speaker may choose at any time, and for any reason, to deviate from the normal patterning. This potential is a fundamental characteristic of language. Humans do not talk like parrots: every utterance, no matter how closely it follows what the listener predicted, is not simply a meaningless repetition. The possibility that it could have been different makes it communicative: the speaker's choice of an entirely predictable pattern is in itself meaningful. This means that we must treat each utterance as in a real sense unique.

Departing from accepted patterns takes many forms. All speakers select from a vast repertoire of words and longer strings in order to impress, surprise, shock, amuse (etc.) the listener. They may also deliberately 'misuse' words, invent new words, break familiar syntactic patterns. Furthermore, whether or not the speaker is conscious of it, the expression of every utterance includes nonverbal means of communication. These at least influence, and at times crucially determine, the hearer's interpretation. The salience of each factor varies from one interaction to another, and often within a single interaction. Following an EIM, linguistic analysis should include a description of the degree of (un)predictability in a given string of language, along with possible reasons for adhering to or departing from the basic pattern available to the speaker.

Thirdly, language is interactive: it is inherently a social activity. Speaking and listening, writing and reading, are not the activities of sovereign individuals, but mutually defining processes. To speak or write with meaning requires a (real or imagined) hearer or reader, and *vice versa*:

... speaking and listening ... are participatory actions, like the parts of a duet, and the language they use is a joint action, like the duet itself (CLARK, 1996 p.20).

The meanings of an oral or written exchange, and the utterances or sentences it comprises, are shared. Each participant constructs and carries away from the exchange his or her version of the meaning, but the work of making that meaning was a joint action, attributed to the language by the participants in the light of the full context of their interaction. This is fundamental to various forms of discourse analysis (such as conversation and narrative analysis, some forms of sociolinguistics, and pragmatics) that have developed in recent decades, and which have a great deal to contribute to the development of an EIM. This is because they are all primarily focussed on the construction of meanings in specific situations. Analysing processes, rather than discrete items, can reveal a lot about how meanings are negotiated within interactions. When it is appropriate to analyse in detail the constituent parts of an utterance (for example), the analysis is undertaken within the context of the whole communicative event in which the utterance occurs.

Finally and most importantly, language is fundamentally situated—which is to say much more than that everything takes place somewhere. The setting includes, but extends well beyond, the physical location of a communicative interchange. Situatedness is not merely a backdrop to the language, but its very essence. The view of language as an abstract system that exists independently of its setting misses the point entirely. The long tradition of treating language as a set of grammatical rules and structures shows that it is possible to treat language as, for example,

a disembodied syntax and lexicon. But it has not much to tell us about language as we actually experience it, as we speak it, write it, read and listen to it—always in a particular time and place and in relation to certain other people.

To separate languaging from the particularity of its context is to obscure its being. (BECKER, 1991, p.232)

In the light of the above, it would be utterly unrealistic to aim for a completely comprehensive description of even one brief communicative exchange. There are so many factors at work, and so many imponderables that cannot be resolved by empirical observation; however we conduct our analysis, we can only ever reveal a part of such a complex, dynamic system.

This means that the theory of language ecology is used to provide an overarching conceptual framework for various kinds of localised analyses. A researcher working with an EIM must adopt a temporary selective focus: aiming to identify what is of specific interest in any given instance of language-in-use, and focusing on researching that part of the whole.

Throughout, however, it is essential to recognise that what is being analysed is only part of the whole, and not to allow atomistic assumptions to determine the analysis. Within this framework, a range of analytical approaches—including those of traditional linguistics—can be followed, depending on the linguist's particular interests. Once the analysis is complete, the specific object of the study must then, as it were, be put back into the full ecological context. The findings will be reported within this context, and many other possible influencing factors not included in the analysis will be listed and acknowledged. Many research publications and theses end with (an often perfunctory) section on 'limitations of the research', which typically mentions some aspects of its field of investigation that were not covered. An EIM makes such limitations central to the conclusions drawn from the research.

Language rules within an EIM

Although, as was said above, it is inappropriate to treat language as rule-governed, this is not to say that rules do not exist, or should not be studied. Rules are part of the ecology of any language that can be written, and possibly of some non-literate languages as well. This is historically because they have been imposed upon the patterns, in which the language is manifested, to achieve particular aims. They are virtually essential, for example, for teaching and learning a foreign language in a class. They are crucial in the establishment of national languages (GARNER, 2014). But within an EIM these constructed rules should be described and analysed as an important part of the cultural context in which language is used; they do not constitute the language itself.

In addition, conventional, rule-oriented linguistics, which has resulted in highly detailed descriptions of so many languages, must itself be re-evaluated as a socio-cultural phenomenon. There is a strong social incentive to create rules. Rules and protocols are constructed by those who have authority in order to control various aspects of human behaviour. Examples include criminal and civil law and the rules for parliamentary debates and pupils' behaviour in school. By delegating to certain bodies the authority to decide what is 'right' and 'wrong', acceptable and unacceptable, in its language, a community helps to safeguard the essential predictability of its language and give a sense of continuity and solidity to the highly fluid communicative patterns of 'everyday coping'

(Stewart 1996 p. 33). There is also a strong desire by national communities to standardise and thus legitimise their official language, in particular through its formal written version. The role of creating the rules for the standard language has historically been played by grammarians, lexicographers, and less formally by highly respected writers and orators. Some national communities gather the rule-makers into official institution for this purpose; perhaps the best known is the Académie Française.

The third problem with placing grammar at the centre in scientific linguistics lies in the nature of data, which are essential to any empirical science. The data on which grammars are based are typically derived in one of two ways. Very often, they are simply provided by the analyst, who as a highly competent user of the language assumes he or she knows what is '(un)grammatical'. This was explicitly described as an important and valid methodological process in Transformational Grammar, but it is very common, although unacknowledged, in a large majority of grammar-oriented publications. (A detailed discussion of intuition as linguistic data can be found in Schindler et al. [eds.], 2020.)

The alternative is to derive the data from actual instances of language-in-use. From an ecological standpoint, this is the only valid source of data for analysis, since the data arose in the course of genuine communication. Analyses within traditional linguistics, however, often fall short of the EIM ideal by failing to incorporate all or most of the non-linguistic phenomena that make up the communicative context as described above. The analyst can then identify the constituent parts of those language data (phonemes, morphemes, lexemes, etc.) and the rules that govern how they are combined. This ignores the entire ecological process by which communication works: uncontextualised data are what might be called 'virtual' language, which, in the full sense of the word, has no meaning. These data mirror or model some patterns of the language, but they are only a part of it.

This section has discussed some of the conceptual limitations of basing the methodology of linguistic analysis on the concept of language as a rule-governed system. In an ecological view, language occurs when it is used by particular persons in a real situation, for specific purposes, and so on, and must not be substituted for it. The individual language elements and the rules governing their combination are of no significance in themselves, but only insofar as they are manifestations of the whole communicative process (STEWART, 1996 p. 21; HALLIDAY, 1994). In fact, language rules are an important aspect of the ecology of most languages with a long history of literacy, language standardisation, and foreign-language teaching, but they are only a part of the ecology (GARNER, 2014). They are not what constitutes the language—not inherent in it—but have been imposed upon it throughout that history, and become part of a cultural and educational tradition that itself influences many people's actual usage.

An EIM must enable the analyst to focus on understanding the nature and workings of a language by studying meaningful human interactions, which are characterised by diversity, variation, and complex wholes (Garner, 2005, p.96). It is of course, however, entirely impracticable to include everything relevant within any ecological description and analysis. Even if the researcher had the time and ability to do so, the results would almost certainly be so intricate and involved that no-one would be able to make sense of them.

Conclusion

Given that ecologically-specific methods of analysis are still in the process of formulation, we have to rely on applying well-established analytical approaches used in descriptive and applied linguistics. These, particularly when related to one or another form of discourse analysis, are valid and can be informative provided they are set within the all-encompassing framework of ecology. Bearing this in mind, the task of the language analyst is, first, to describe the basic pattern of an instance of language in use. Secondly, variations in the pattern must be identified, along with the reasons for, and the communicative consequences of, these variations from the basic pattern. The development of systematic linguistic studies of communicative interactions, as opposed to the uncontextualised strings discussed above, is particularly promising in this regard. The latter may have their place as reference points, but only within the context of all of the communicative processes—as, for example, in systemic grammar, which goes some way towards a more ecological description of language in use (Halliday 1985; Garner 2003).

This paper is a very preliminary attempt to examine some of the problems involved in developing a methodology that can be used to investigate language as an ecological phenomenon. I have put forward some tentative suggestions concerning basic principles and some applications to analysis of an EIM. A great deal of thought and evaluation through practice are still required before linguistics can claim its place among a number of disciplines that have been transformed by the application of insights derived from ecology. I hope that this modest paper will encourage other scholars to take on the exciting and rewarding challenge of formulating an EIM.

Note

*A Portuguese translation of this article is available in *Boletim do GEPLE* n. 11, 2022.

http://www.ecoling.unb.br/boletim-do-geple

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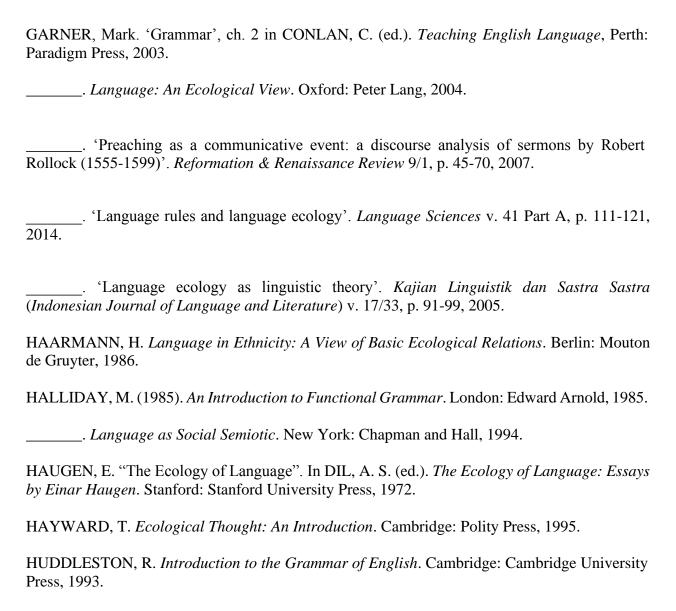
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