ECOLOGY, LANGUAGE, AND PRAGMATICS[1]

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Abstract: Much of the current discourse on the ecology of language has centered around the problem of how to ensure that languages thrive, are kept 'alive'. One of the dangers of a purely object-oriented ecology is that is can be misused and turned against the very users it is meant to promote and protect. A proper view on linguistic ecology takes the language users into the equation: no language can survive without survivors. However, many linguists have often been mere interested recording and documenting the languages they studied than bothering about the social a material conditions that have to e in place for a language and its users to thrive. A useful plan for a discussion on linguistic ecology should rest on Alwin Fill's 'four pillars' for successful and ecologically acceptable language use: interaction, diversity, a holistic approach, and dialectics.

Keywords: linguistic ecology, endangered languages, dialect maintenance, linguistic pragmatics, Alwin Fill.

1. INTRODUCTION

The concept of ecology as a science goes back to Ernst Häckel, the famous German zoologist, who defined it in 1866 as "the comprehensive science of the relationship of the organism to the environment." The idea caught on, and in 1915, the American Ecological

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Society was founded with the aim of promoting ecology, both as a science and as a practice (the Society still exists, with over 10,000 members, and has split off numerous other, similar endeavors, such as the one represented by The Nature Conservancy of Washington, D.C., of which I happen to be a member)[3].

The term 'linguistic ecology' was used as early as 1943 by the Italian linguist E. Peruzzi, in an article entitled 'Per una ecologia linguistica' (published in the Romanian journal *Revue des études indoeuropéennes* 33: 42-50, as mentioned by Pisani 1953: 25, and translated by Zvegincev 1956: 103). Peruzzi forwarded the original hypothesis that climate and geographical configurations can have influence on language. More important for today's ecological linguists is his assertion that it was "unavoidable to socially research the connection between language and the geographical conditions"; in other words, Peruzzi is calling for a pragmatic approach to linguistics, in what he calls "social research" (*social'noe izučenie*; Zvegincev 1956: 105; my translations)[4].

To my knowledge, Peruzzi's 'geographical/social' approach to ecological research on language has not been pursued further; as far as I am aware, among the only (rather scurrilous) attributions to geographical conditions and their influence on language development and use (by e.g. invoking the high mountains of Norway as a determining factor in the use of word tones–an unavoidable consequence of the need to communicate from mountain top to mountain top, as the late Danish linguist Hans-Jørgen ('John') Uldall facetiously remarked to the present author back in 1956; see also Nielsen 1943)[5].

Even so, Peruzzi's remark on the need for a 'social research' into the factors that determine the use and development of language is as actual now as when it was first proffered in 1943 – as evinced also in the works of contemporary social researchers, such as the ecolinguists in Alwin Fill's (2002, 2006) Grazer group, or the researchers at the Center for Human Interactivity, University of Southern Denmark (Steffensen and Fill 2014).

2. THE SOCIAL AND THE ECOLOGICAL

All talk of ecology has to start with the world, conceived of as the planet-wide eco-system it factually represents. While this of course includes the objective geographical, geological, and climatic conditions, in addition to those originating in the human presence, it is natural to pay closer attention to the latter, inasmuch as the object of ecolinguistics, human language in its various ecological conditions, is closely connected to the way humans use language, fail to use language, or even misuse or abuse language. Some early attention was paid to language ecology by the Norwegian linguist Einar Haugen in a series of articles and books from the sixties and later (see Haugen 1972); his approach circled

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[3] Incidentally, a Danish plant biologist by the name of Eugen Warming (1841–1924), was the first to introduce ecology into the academic curriculum at Copenhagen University. He was also the first to write a textbook, *Oecology of plants: an introduction to the study of plant-communities* (Oxford: Clarendon Press, 1909) (Source: Wikipedia).

[4] Despite strenuous efforts of googling and otherwise searching, I was unable to locate or consult Peruzzi's original article; hence, the references to secondary sources like Pisani and Zvegincev.

[5] John Uldall is otherwise best known as Louis Hjelmslev's co-author of *Outline of Glossematics* (Part I, General Theory; Hjelmslev and Uldall 1957).

around the question of his own language's survival and maintenance: how did the Norwegians living in the Midwestern regions of the United States manage to maintain their regional speech, the dialects that they had brought from the old homeland, Norway? (Similar questions were raised for the other Scandinavian immigrants to the U.S.)

Instances of dialect maintenance/conservation are documented for other parts of the Americas as well: in Central Texas, the Czech community of Schulenburg was until the mid-sixties of the last century the center of a Czech-speaking community, where only the fourth generation of immigrants started to lose touch with their forebears' language. Similarly, in the Southernmost states of Brazil, especially Santa Catarina and Rio Grande do Sul, virtually monolingual German communities continued to exist way into the 20th century; the influence of German is still visible everywhere in those places, despite more recent 'roll-back' efforts, Brazilian Portuguese being promoted as the 'official' language of the states in question[6].

The fate of the immigrants' languages and dialects is crucially dependent on ecological factors. For one thing, there is the geographical continuity and closeness in which several communities unite to celebrate and maintain their common inheritance; remainders of this tradition are found in the yearly 'Wurstfests', or October celebrations, that are held across the entire American immigrant territory, and are thought of as annually returning harvest thanksgivings, in likeness with the official U.S. Thanksgiving Day, held in late November (The Blumenauer *Oktoberfest* is said to be "one of the most popular parties in Brazil, with over 1,000,000 visitants", according to Google).

Another important uniting role was played by the churches (mostly Protestant in the North and Catholic in the South). The minister or priest was the agent of linguistic ecological continuity, so to speak: as long as the communities were able to recruit and maintain a cleric speaking the original tongue, the continuity of the language would be more or less safeguarded, especially since the priests or ministers usually worked hard to prevent so-called 'mixed' marriages (i.e. between immigrants and other, earlier settled residents, or with immigrants having other ethnic or religious backgrounds).

While in these cases, the churches protected the endangered minority languages, in other contexts the religious use of the earliest immigrants' majority language tended to sideline the local native idioms (as it happened in other large portions of North and South America). Currently, in many of these locations, an (officially encouraged) language planning endeavor advocates to 'homogenize' the language situation by promulgating the language of the original immigrants (English, Portuguese, Spanish) as the 'official' language of the realm, and proscribing efforts aimed at stimulating and encouraging the use of the native American tongues as 'uneducated', 'un-American', or even 'subversive'. Such efforts have greatly contributed to many of these idioms today appearing to be endangered, or even on their way to extinction.

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[6] Some years ago, when making a stop-over in the airport of the city of Blumenau, originally a German settlement in the state of Santa Catarina, I discovered that the name of the airport didn't match that of the city: the airport was called *Navegadores*, to honor the Portuguese immigrants of the 16th century, the 'seafarers' as they are called in Brazilian history. By contrast, Blumenau, S.C. itself, "a German city in Brazil", as Google has it, was founded as late as 1850 and named for its founder, the German Dr. Hermann Otto Blumenau.

3. ENDANGERED LANGUAGES AND LINGUISTIC ECOLOGY

Across the globe, three thousand or more languages are deemed to be in immediate danger of extinction (the most pessimistic prognoses claim that there is a language dying every week, or even every day). Regardless of whether such prognoses are realistic, they somehow seem to miss the main point: that languages are not objects or mere products (*érga*, in Wilhelm von Humboldt's terms; Humboldt 1836: 57), but activities exercised by humans (Humboldt's *enérgeiai*). And this is where ecology comes in as a useful corrective to exclusively linguistic considerations, according to which 'exotic' native languages deserve to be kept alive because they may contain keys to linguistic mysteries that we otherwise couldn't solve; alternatively, they may expand our linguistic insights and enrich our terminology by drawing our attention to hitherto unseen, or unheard of, or even 'impossible' constructions. Linguists have an inbred tendency to pronounce themselves on what can, and what cannot be said in a language, or even on what is permitted 'universally', cross-language wise, but they are always happy to be contradicted by the facts of life and language, when confronted with native speakers (who supposedly 'are always right'). Thus, the celebrated American linguist John Robert ('Haj') Ross (p.c.) once could suggest that the linguistic community adopt, as its professional anthem, a 'hymn' stating with the words be 'Oh see can you say' (parodying the first line of the U.S. national anthem: 'Oh say can you see').

Less jokingly, one could begin by saying that, in principle, all languages are to some degree endangered: that is, they are doomed to extinction in the same way that every human being is destined to die.[7] A quick look at the history of languages will convince us that even the most powerful forms of human speech have disappeared from the face of the Earth, or are only vestigially represented today in inscriptions and old manuscripts. Alternatively, they subsist in struggling pockets of isolates, like the mighty band of Di-Ne languages, today spoken by a dwindling, albeit still sizeable minority living on the 'Big Res', the Navajo territory covering roughly 27,000 square miles of Native-owned land in Arizona, New Mexico, and Utah (an area bigger than Denmark).

Consider also how Gothic, en East Germanic language once spoken over large stretches of Asia and Europe, and codified by the heretic bishop Wulfila in the 4th century A.D.[8], once was a major player in the cultural field of Central Europe, as attested by one of the prize exhibits of linguistic history, the Gothic translation of (parts of) the Bible, enshrined in the famous Codex Argenteus of Uppsala; the langue itself, however, has disappeared, ever since its last remnants were noted down on the Crimea in the 16th century by the Chevalier de Busbecq, a Flemish-born Imperial diplomat. Both historically and statistically, there is no reason to assume that English, as we know it today, will survive towards, say, the fifth millennium (see Mey, 1995 for a discussion of the late British author Russell Hoban's ingenious literary projection of his native language into that distant future; Hoban, 1980).

If we take what I suggest to call an 'ecological' approach to today's endangered languages (the way we do with other endangered species (such as the Siberian tiger or the

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[7] And even the entire human race, in purely genetic terms. According to Harvard entomologist Edward O. Wilson, "species, on the average, live for roughly a million years before they go extinct" (*National Parks Magazine*, Summer 2008, p. 20). Which would mean that we, as a species, have only half a million years or so to sort things out, ecologically…

[8] Wulfila converted his tribe to the 'Arian' variety of Christianity.

Vietnamese near-extinct primate, the grey-shanked douc), we will try to put measures in effect that will extend the life span of these dying creatures–or even better, restore them to reproductive health. As to languages, there are various ways of achieving these aims: we could support native language teachers and native language courses; we could encourage the use of a threatened language in multiple environments, not just the home; we could place specific language requirements on public service employment or admission to teaching positions (a long-standing, not always successful) practice in language communities such as the Irish or the Norwegian.

In all such cases, the language to be protected and promoted is considered as part of the nation's heritage; it is an object of devotion, sometimes even passion (and ultimately, compassion). Overall, language is believed to be an 'acquisition for eternity', a *ktêma es aeí*, rather than a 'showpiece for immediate consumption [by an audience]' (*agónisma es tò parachrêma akoúein* – to borrow a famous expression from Thucydides' *Historiai*, Bk. I, ch. 16). But, as also evident from the very expression used by the Greek author, 'acquisition' is always *by* somebody: the *ktêma*; hence, the acquisition (from Classical Greek *ktáomai* 'I acquire'), connotes an 'acquirer', and also (as we all know), 'eternity' should be taken with a healthy portion of salt. In other words, if we use ecology as a metaphorical way of discussing endangered species or languages, and supposing the metaphor, applied to language, is valid at all (see the next section), we are then obliged to 'deconstruct' the metaphor, and (re-)introduce the ecological user.

4. CRITIQUING THE ECOLOGICAL METAPHOR

The Aberdeen-based Australian-Scottish linguist Mark Garner has, in a number of works, propounded the idea that ecology should not be considered primarily as a matter of metaphor, as it is done in much current discourse on endangered languages, and was also the conceptual basis of Einar Haugen's original forays into the field, mentioned earlier. In opposition to this view, Garner (2004) maintains that linguistic ecology, used as a metaphor, remains no more than a suggestive analogy. What we need is not a 'metaphor for language' (a conceptual process that takes us from a source domain, nature, to a target domain, language), but what he calls a "different philosophical orientation" toward both language and nature. We must stop thinking about endangered languages as *objects* to be salvaged; in a valid ecological perspective, we should focus on the interaction between the *users* of those languages and the forces in the *world* that create and determine both the uses and the users of those languages.

One of the dangers of a purely object-oriented ecology is that is can be misused and turned against the very users it is meant to promote and protect. The same arguments that are being used to conserve and 'heal' an ailing minority language or dialect, may be used to promote and establish a majority idiom as the only 'pure', healthy form of the language, with all the prestige inherent in such a classification. Consider, for instance, the social value inherent in having a plummy RP, 'Received Pronunciation', of English: it includes the advantage of being able to express oneself in some variety of the 'high' language (the *acrolect*) if and when needed (for instance when applying for a job; here, one may think of the old joke about applying for a position in the City of London: 'If you are from Liverpool or Birmingham, consider taking a course in sign language').

Some other, even more oppressive aspects of the ecology metaphor also come to mind: for instance, if we need a 'healthy language' like we need a healthy forest, both should ideally be free from 'invasive species' (read: intrusions from neighboring, dominant idioms). Consequently, we need to safeguard and conserve the 'homeland' language by making it the official language of the realm, as it in fact has been done for English in a number of U.S. states – an action proposed in other countries as well (think of French in Quebec). Language requirements in the form of 'tests' are on the books, or have already been put into practice, in countries such as Latvia, or even Denmark, in order to check and evaluate the 'alien' immigrants' status with regard to a stay or work permit. Generally, the oppressed minorities are at the receiving end of the ecological stick, and are beaten into submission by people using the exactly same, noble arguments for protecting endangered idioms that we discussed earlier.

5. THE ECOLOGY OF LANGUAGE AS LINGUISTIC PRAGMATICS

What I am arguing here is the need for a renewed consciousness of the *human* element in language ecology. Languages are for use; the users of language deserve to be the prime center of attention when we talk ecology. But the humans do not exist in some abstract conservation environment, where one can control their movements and monitor their speech, ensuring that they 'do the right thing': speaking 'correctly'. The respect we pay to people should include our respect for their living conditions and our acceptance of their choices. Here are some examples (the first due to Marilda Cavalcanti, the second to Peter Ladefoged).

Two decades or so ago, some linguists and students from the State University of Campinas, São Paulo, Brazil went on a fact-finding mission to local Guaraní-speaking settlements in the interior of the state, as part of an alphabetization program that their university was sponsoring. When the group (led by the Campinas professor of linguistics Marilda Cavalcanti) discovered that their efforts at promoting literacy in the local language did not have the expected effects (people didn't turn up for meetings and classes, even though they initially had manifested great interest in the program), the linguists decided to find out why. So they sat down with the villagers and asked them some questions about their participation in the program (something the linguists perhaps should have done from the beginning). It turned out that this particular village of 200 people had as its main common goal an improved quality of life for its residents; to realize that aim, they deemed literacy an incontrovertible condition – but literacy in Portuguese, not Guaraní! The linguists who thought they were engaged in an ecological effort of saving a dying language found that they actually were required to lend assistance to quite another effort, namely 'alphabetization' in Portuguese – an effort that could qualify for the predicate 'ecological' in quite a different sense than did the original program, which was devised by the linguists without the natives' collaboration. (For details, see Cavalcanti 2001.)

The other case is that of the Toda father who actively opposed any efforts by visiting linguists to enroll his boys in a language revitalization program. The Toda are a small isolated Indian tribe of around 1,000 people, living in the Nilgiri Mountains of the Southern part of the subcontinent; their language (though belonging to the Dravidian family) is not closely related, or intelligible to any of the major Dravidian tongues spoken in the region.

When asked to give a motivation of his refusal, the father told the visiting researcher, the late UCLA phonologist Peter Ladefoged, that his children were entitled to a better life than that of a Toda-speaking villager; for that, mastery of one of the main languages of the area and in addition, preferably of English, was a necessary precondition. Learning to speak Toda would only take precious time and resources away from the study of those more important idioms. In other words, this native speaker of an endangered language did not see the imminent demise of his language as a 'danger'; in effect, he would welcome it as a much-needed step on the way to greater prosperity. And, as Ladefoged remarks, "who are we as linguists to oppose this parent's view, and tell him that he's all wrong?" (1992:811).

A pragmatic view of such situations must first of all inquire about the conditions in which the language is, and can be, used. It is safe to say that without a living community of speakers, all languages are sooner or later going to be extinct. This may sound like a no-brainer, but the consequences of having this initial insight are weighty. In practice, it means that using a particular language must be seen in connection with the practice of the people speaking it; this, by the way, is why 'trade talk' (a language used in the context of a particular professional, or any other organized group activity) has greater chances of survival and growth than languages such as 'pasar Malay' or *russenorsk* ('Russian Norwegian') that are merely *linguae francae*, basically used for buying and selling (i.e. 'trade' languages in a slightly different sense of the term).

Thus, the persistence of Classical Sanskrit (and earlier, Vedic) down through the ages can only be explained by the fact that it was actively practiced for a couple of thousand years by a community of priests and scholars; the same can be said of Latin during the Middle Ages, through much of the Renaissance, and even the beginnings of the Enlightenment. If one asks what these respective communities' activities were all about, the answer is: they represented a practice that was instrumental in establishing a community of users interacting through language. The priests of the Vedic rituals did not teach their apprentices sacred sentences, even less did they train them, madrasa-like, in just the 'right words' or holy texts: the formulas used were inculcated through, and in the use of, sacrificial activities or ritual implementations, such as the use of the sacrificial bench mentioned in the first Vedic hymn to the god of fire, Agni (*Agnim ile purohitam* …; *Rg-Veda* I, 1, 1).

Fast forward: three millennia later, the Brazilian pedagogue Paulo Freire taught us that in order to be successful, language instruction and promotion of literacy, the process he named *alfabetização*, must include, as it crucially depends on, 'raising the consciousness' of the participants in the instruction (a process called *conscientização* by Freire, 2000). This interaction-in-language is the hallmark of pragmatics, and it is safe to say that any ecology of language in the last resort must be based on a pragmatic view of linguistic interaction.

6. ECOLOGY AND AFFORDANCE

To what has been said so far, there is an interesting parallel from the domain of vision. The famous U.S. psychologist James Jerome Gibson (1904–1979), nicknamed 'the seer from Ithaca'[9], has, in a number of works from the sixties and seventies argued for what

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[9] Gibson's groundbreaking work was in the psychology of vision, while his professional affiliation was to Cornell University in the city of Ithaca, N.Y.

he called an 'ecological view of human perception' (see, e.g., Gibson 1979). The basic idea is that our perceptual abilities are 'distributed' among our brain and the environment: neither the brain alone creates its impressions, based on input from the outside, nor does the environment act as an independent stimulus, creating a 'picture' in the brain (in a Cartesian view of perception). The environment is pre-disposed in ways that the brain picks up on; when acted upon, it reacts in ways that are 'pre-destined', and incorporated in the object itself. As the American novelist Siri Hustvedt expressed it poetically, "we're all blind and dependent on preordained representations". And: "we don't experience the world. We experience our expectations of the world. That expecting is really, really complicated" (Hustvedt 2008: 130–131) – and so are the complications arising from the world's role as the predestined, "preordained" co-agent of our experiences.

An analogy from physics may illustrate this. Experiments with deep-frozen physical objects show that there exist certain preferred patterns in the object, which become activated through external physical action: when struck with a hammer, the object 'knows how to break'. But this 'knowledge' is not dependent on the individual smallest particles that constitute the object; it is bound to the representation the object has of itself as either a spherical object, or a stick-like object, or a rhomboid, and so on. Thus, when struck at very low temperatures (like –300 F), a sphere shatters in pre-destined, different ways than does, say, a stick or a rhomboid; and this breaking pattern happens irrespective of the quality of the object's other, strictly physical properties. Sticks break in the same fashion whether composed of gypsum or of soap; similarly for spherical objects, rhomboids, and so on.

This internal organization of objects (their "self-organized criticality" (as Lene Oddershede and her co-researchers at the University of Southern Denmark have called it; Oddershede *et al.*, 1993), can only be understood on the "functional" level, to use a Gibsonian term: objects are not just material collections of atoms, they have a built-in functionality that makes them adaptable to our perception. Conversely, our perceptional activities constitute the functions that characterize the object; the person looking at a gun perceives the weapon as a lethal instrument precisely because the function of 'killing' is, so to speak, *inherent* in the gun. (Which is why the U.S. National Rifle Association (NRA)'s slogan 'Guns don't kill people; people do' is basically mistaken and misleading; see further Mey and Gorayska, 1995.)

Applying this line of thought to our 'object', language and its ecology, we need to think of language as a *tool*, which adapts itself to the user in ways that the user not only perceives, but actively creates. In order to actively use our language, we have to create the conditions for language use that language itself demands in order to be used properly. We often refer to these conditions by a common denominator, such as 'the situation of use', the 'context' (in its wider sense), and so on. To take an example from the theory of speech acts: so-called 'indirect speech acts' are used in ways that cannot be predicted, based on their internal verbal composition (like, what the words mean, how they are put together, or what the speech act in question 'canonically' expresses); quite the opposite is the case: given a concrete situation, almost anything can function as an indirect speech act. As I have argued elsewhere, the act in question should not be called a simple, albeit indirect, 'speech act', but rather a 'pragmatic act'; Mey 2001: ch. 8).

It is in the *situation* that the pragmatic act of speaking is 'pre-formed', in the same way that the Gibsonian notion of 'affordance' captures the fact that functional properties are just as, or even more important than, material ones. These functional properties are co-shared between the user of language and the situation in which the words are used;   an

indirect speech act of 'ordering' functions precisely because the element of 'order' or 'command' is integrated into the world in which commands are given (e.g. the situation of the battlefield or the regimental firearms drill). And since ecology is all about the user in his or her world and about how he or she relates to the world that 'speaks' to him or her, from a linguistic point of view it is safe to say, varying Gibson, that "ecological linguistics is just as important as abstract linguistics"[10].

7. CONCLUSION

Mark Garner, in his 2004 work cited earlier, mentions four 'elements' that are characteristic of ecological thinking:

- holism
- dynamism
- interaction
- situatedness

These four characteristics align nicely with what another contemporary ecologist, Alwin Fill, has argued for in his many contributions to ecolinguistics. In one of these, he mentions the four 'pillars' on which ecolinguistics construes its "tensional arches" (Fill 2002: 16):

- interaction
- diversity
- a holistic approach
- dialectics

Two of Fill's 'pillars' are identical to the 'elements' that Garner mentions: 'holism' and 'interaction'. But even if we align Fill's 'dialectics' with Garner's 'dynamism', interpreting it as the "tensions" between interactants (humans and nature, or humans and language), we still have to account for the 'diversity' and 'situatedness' of the interaction. As already Heraclitus told us, being 'situated' naturally implies being 'diverse': nobody can even dive into the same river twice without the diver (and the river) being altered.

But diversity goes deeper than a simple plunge: it has precisely to do with the situatedness that humans find themselves subjected to. In this sense, diversity is a premier notion in all ecolinguistic thinking: it encapsulates the 'greening' of linguistics by which the science of *language* becomes a science of *humans* who speak in various tongues and in various environments. Where linguists merely *describe* the situation, ecolinguists *do* something about it; to vary a Wittgensteinian dictum, uttering an ecolinguistically true sentence may change the world. But the linguistic tool should not incapacitate or "kill its user" (Marx, *Capital* Bk. I, ch. 13; Marx and Engels 1968: 455); moreover, the user of the

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[10] In the original, Gibson was of course talking about physics (1971, in an unpublished memoir; see Reed 1988: 231).

tool should be aware of the variety inherent in his or her toolbox, and extend the notion of linguistic diversity to what I initially considered under the caption 'endangered languages'. If all languages are to some degree endangered, the ecolinguist has a major task in our present world: that of safeguarding and promoting diversity in language, while at the same time promoting communication among the diverse kinds of language users, in the spirit of a pragmatics-inspired linguistic ecology.

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