


## Significance of Ecolinguistics: A Brief Study

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**Abstract:** *Haugen (1972) says, "the study of the interactions between any given language and its environment" is the ecology of language. Ecolinguistics is a subfield of linguistics to study how discourse and language impact the natural world and ecology. Linguistics is the systematic study of language. Ecology is the scientific study of the relationships that govern how organisms are distributed throughout the environment. Ecological linguistics emerged as a fresh paradigm for linguistic study, expanding sociolinguistics.*

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### Introduction

The Norwegian-American linguist Einar Haugen is largely credited with introducing the ecology metaphor to language in 1972, which gave rise to the new field of linguistics known as 'Ecolinguistics'. In his words (Haugen 1972: 325), "the study of the interactions between any given language and its environment" is the ecology of language. According to Haugen, the environment of language is the society in which language is used, as well as its social and psychological contexts, but not its physical setting. He contrasts the ecology of language, however, with the ecology between plants and animals in their natural habitat.

Ecolinguistics, a subfield of linguistics, examines how discourse and language impact the natural world and ecology. Climate change and biodiversity raise awareness of environmental concerns. Additionally, there is a pressing need for theoretical study and development that considers humans as a component of society and the larger ecosystems on which life depends (Stanlaw James, 2020; International Ecolinguistics Association).

### Review of Literature

In order to understand what Ecolinguistics is, one has to acquire the knowledge of what the following terms or terminology meant for:

**Linguistics:** Linguistics is the systematic study of language. Along with an analysis of the cultural, social, historical, and political factors that influence language, it also studies language structure, importance, and language in context. Traditionally, linguists study human language by observing the relationship between sound and meaning. Linguistics, according to Stern (1983), is "the science of language" or "the systematic study of language." Linguistics, as the study of language, considers the sounds, words, grammar rules, and rules of a language, which include phonology, the sound system, morphology, structure of words, syntax and the arranging of words into sentences.(Rao, C S., 2021)

**Language:** According to Aristotle, a language is a systematic method of human communication. Languages are made up either written elements in written languages or uttered sounds in spoken languages. To express ideas, emotions, thoughts, wants and feelings, humans make spoken sounds known as language. According to Chomsky, "Language is a system of conventional or written symbols by which human beings as members of social groups and participants in its culture communicate". And then another definition for language as, "Language is a system of conventional or written symbols by means of which human beings as members of social groups and participants in its culture, communicate", (Encyclopedia Britannica).

**Diversity of Languages:** The term "diversity of languages" refers to a range of characteristics that include a person's language, grammar, and vocabulary. There are billions of individuals in the world who speak countless languages. Only one nation alone has more than a thousand different languages. Similar to this, tribal peoples or those who live in more remote areas are more likely to speak a different language.

Measurement of the concentration or density of a certain language in several locations is made easier by linguistic diversity. The establishment of a language family occurs when the linguistic characteristics of specific groups or communities are shared among one another. Similar to a biological family, a language family consists of the languages that make up its basic components. One of the key elements of diversity that makes up a significant portion is linguistic diversity.

The ecology of multilingualism or language contact in diverse parts of the world has been the primary subject of research in the Haugenian tradition. In its broadest sense, the ecology of language contact considers the variety of languages, how this variety has developed, the growth of minority and majority languages and their interactions, contact languages, mixed languages, language continuity, language shift, disappearance and revitalization and language preparation.

**Ecology and Environment:** According to the Encyclopædia-Britannica, “Ecology, also called bio-ecology, bionomics, or environmental biology, study of the relationships between organisms and their environment”, whereas, “environment, the complex of physical, chemical, and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival” (Britannica).

Ecology is the scientific study of the relationships that govern how organisms are distributed throughout the environment. This further demonstrates how closely ecology and the environment are related. Ecologists ask questions about the environment at the ecosystem, community, population, and organismal levels of four biological organizational structures. The word "environment" describes the surrounds we have in the wild. It refers to all environmental factors that have an impact on Earth's living things.

Throughout its history, the study of ecology has undergone progressive evolution. The writings of Greek thinkers as well as those of Aristotle contain references to this idea. The term "ecology" was initially used in 1866 by German biologist Ernest Hackel. Ecology is, therefore, the study of domesticated organisms. This field focuses mostly on the relationships found in biological nature. It also entails the investigation of biological, environmental, and other processes.

On Earth, living things are surrounded by a physical environment. It also encompasses the substances that these living things interact with. However, there are other types of factors in the environment as well, so it is not just the physical environment that affects it. These are biological and chemical characteristics. Ecosystem, community, population, and organismal levels are the four bio-organizational levels on which ecology depends. The term "environment" refers to our natural surrounds.

**Biodiversity:** Biological diversity has been condensed into the term biodiversity in modern usage. Diversity is the range of variety, variability, or distinctions within a set of characteristics; biological diversity is therefore the range of variation within the living world or between living creatures. Lovejoy (1980) coined the phrase "biodiversity" for the first time, and since then, it has most frequently been used to refer to the number of species. Others expanded the definition by taking into account the diversity and variability of living beings after realizing that traditional ways of classifying and dividing species were insufficient.

Britannica defines, “Biodiversity, also called biological diversity, is the variety of life found in a place on Earth or, often, the total variety of life on Earth. A common measure of this variety, called species richness, is the count of species in an area. Biodiversity also encompasses the genetic variety within each species and the variety of ecosystems that species create” (Britannica).

DeLong (1996) says, “Biodiversity is an attribute of an area and specifically refers to the variety within and among living organisms, assemblages of living organisms, biotic communities, and biotic processes, whether naturally occurring or modified by humans. Biodiversity can be measured in terms of genetic diversity and the identity and number of different types of species, assemblages of species, biotic communities, and biotic processes, and the amount (e.g., abundance, biomass, cover, rate) and structure of each. It can be observed and measured at any spatial scale ranging from microsites and habitat patches to the entire biosphere” (DeLong, 1996).

According to the United Nations Environment Program, "Biodiversity also incorporates human cultural diversity, which can be affected by the same drivers as biodiversity, and which has impacts on the diversity of genes, other species, and ecosystems. (UNEP 2007)"

## Emergence of Ecolinguistics

In the 1990s, Ecolinguistics, also known as ecological linguistics, emerged as a fresh paradigm for linguistic study, expanding sociolinguistics to consider not only the social context in which language is embedded but also the larger ecological context; it includes the physical environment and other species.

The 1990 Speech- *New ways of Meaning: the challenge to applied linguistics* by Michael Halliday is frequently cited as the work that inspired linguists to think about the ecological context and effects of language. Halliday's challenge included, among other things, making linguistics pertinent to broad contemporary problems, including the pervasive devastation of ecosystems. Halliday used "economic growth" as his major illustration, noting how many texts repeated everyday all throughout the world express a basic message: growth is good. More people believe that "many is better than few, more is better than less, big is better than small, grow is better than shrink," which has negative effects on the environment.

Moreover, the emergence of Ecolinguistics at this moment in history is somewhat due to developments in human ecology, in which the relationships and interdependencies among all types of systems (including economic systems, social systems, religious systems, cultural systems, linguistic systems, and ecosystems) are being recognized and investigated as opposed to being ignored for disciplinary convenience (Stibbe, Arran, 2012).

### The Connection between Biodiversity and Linguistic Diversity

Language endangerment, language loss, and language extinction are just a portion of the human challenges that have been driven further to the edges in the context of globalization and open markets. Furthermore, among linguists, just a few voiced their worries and expressed concern about language extinction and the decline of linguistic diversity.

L. J. Gorenflo et al. (2012) said:

“As the world grows less biologically diverse, it is becoming less linguistically and culturally diverse as well. Biologists estimate annual loss of species at 1,000 times or more greater than historic rates, and linguists predict that 50–90% of the world’s languages will disappear by the end of this century”.

Previous research shows biological and linguistic varieties are distributed similarly geographically, although the conclusions have sometimes been hampered by the use of information with imprecise spatial resolution. The co-occurrence of linguistic and biological diversity in areas hosting a large number of the planet's surviving species—biodiversity hotspots and high biodiversity wilderness areas—is investigated using much enhanced datasets. The findings show that these areas frequently have a high degree of linguistic diversity, covering 70% of all languages spoken on Earth. The co-occurrence of languages in areas with high biodiversity and a number of conservation priorities—here referred to as areas of conservation and endangered species—marks specific locations crucial to the preservation of both types of variety (L. J. Gorenflo et al., 2012).

Researchers speculate that the preservation of wildlife and ecosystems is made feasible by indigenous cultures and languages, yet they are unsure of the exact reason why endangered cultures and languages coexist with endangered species. In an effort to create strategies for protecting both, the researchers plan to carry out more investigation into the connection between linguistic-cultural variety and biodiversity.

It is fortunate that the study's identification of the coexistence of biological and linguistic variety serves as a foundation for bringing together researchers and organizations that are interested in biodiversity conservation with those who are focused on linguistic and cultural conservation in specific areas. A common framework for combining biological and linguistic conservation objectives will make it easier to monitor species and language status while also advancing our knowledge of how people interact with ecosystems.

### Ecological Approach to Language

The ecological approach defines language departments and programs as complex dynamic systems, while understanding that the department is made up of smaller, nested complex dynamic systems, like language classrooms, and of course the individuals within them. The department is also part of a larger complex dynamic system, namely language education. Complex dynamic systems theory is one theoretical framework that assists in explaining this perspective on language and language development. Since the paradigm is essentially about comprehending and explaining *change*, and language acquisition is all about *change*—

primarily and especially for the learner—it is equally helpful for analyzing the language program and department (Swanson, B and Levine, G S., 2020).

It is observed that language learning is a ceaseless moving target, with periods of stability but never stasis, and describable via probabilistic predictions but never via deterministic laws, (Douglas Fir Group, 2016, p. 29).

It is important to notice that an ecological approach to language is taken when Haugen in 1970 defined “language ecology” as “the study of interactions between any given language and its environment” (as cited by Steffensen, S V. and Fill, A., 2014; Haugen, 1972: 225; 2001: 57; cf. Eliasson and Jahr, 1997).

On the other hand, while Haugen led linguistics in a new ecological direction, he also exposed a conceptual issue that has troubled the field's practitioners for decades: although it is comparatively simple to define the ecology of a single biological being—that is, the roughly defined habitat that it inhabits during its lifetime—what the environment of a language could contain is completely unclear.

Since Haugen, a wide range of approaches to language ecology have been developed as a result of this uncertainty. Four historical strands of Ecolinguistics can be distinguished based on how differently they have interpreted what the environment of (a) language is:

- Language exists in a symbolic ecology: this approach investigates the co-existence of languages or ‘symbol systems’ within a given area.
- Language exists in a natural ecology: this approach investigates how language relates to the biological and ecosystemic surroundings (topography, climate, fauna, flora, etc.).
- Language exists in a sociocultural ecology: this approach investigates how language relates to the social and cultural forces that shape the conditions of speakers and speech communities.
- Language exists in a cognitive ecology: this approach investigates how language is enabled by the dynamics between biological organisms and their environment, focusing on those cognitive capacities that give rise to organisms’ flexible, adaptive behaviour. (Steffensen, S V. and Fill, A., 2014)

It is to notice that the environment of a language, like that of other languages, can be characterized by a symbolic ecology, which is a facet of ecosystemic interactions among symbolic entities. This approach is actively involved in the discipline's early development, looking into the relationship between language and its biological and ecological environment.

Furthermore, it pertains to the social and cultural dynamics that influence the circumstances of speakers and speech communities, with a particular emphasis on the cognitive capacities made possible by the interactions between biological beings and their surroundings.

## Conclusion

Haugen claims that language's environment is not its physical surroundings but rather the culture in which it is employed, along with its social and psychological contexts. However, he draws a comparison between the ecology of language and the ecology of plants and animals in their natural environments.

Ecolinguistics is a subfield of linguistics which examines how discourse and language impact the natural world and ecology. Climate change and biodiversity raise awareness of environmental concerns. Therefore it is a need for theoretical study and development that considers humans as a component of society as the life depends on the larger ecosystems. The ecology of language contact in diverse parts of the world has been the primary subject of research in the Haugenian tradition, considering the variety of languages, how this variety has developed, the growth of minority and majority languages and their interactions. Ecological linguistics emerged as a fresh paradigm for linguistic study, expanding sociolinguistics.

Researchers speculate that the preservation of wildlife and ecosystems is made feasible by indigenous cultures and languages; and there is no the exact reason why endangered cultures and languages coexist with endangered species. In an effort to create strategies for protecting both, the researchers plan to carry out more investigation into the connection between linguistic-cultural variety and biodiversity.

Thus, it is an urgent need and responsibility on researchers in order to investigate the reasons behind the endangered cultures and languages as well as to discover the new strategies to make the language ecology survive accordingly.

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