Language Ecology or Ecolinguistics: Conceptual and Theoretical Discussions

علم البيئة اللغوي او علم اللغة البيئي: المناقشات المفاهيمية والنظرية

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Abstract

Language ecology is the interactions between the environment and language. Such a discipline, 'language ecology' or 'ecolinguistics has been founded by Einar Haugen'. Accordingly, the study aims at qualitatively reviewing the theoretical and conceptual issues surrounding the subject of language ecology by tracing the roots of language ecology. It further highlights the fundamental inconsistencies between how the concept of ecology is perceived in sociology and biology, and is applied to language, particularly, transposing the main central concepts of bio-ecology, such as relationship/interaction, environment, and organism to human language and theory of ecological-linguistic. The theory wavers among placing the focus on the organism, interrelation and the interaction. It mainly considers language ecology as a metaphor, but infrequently treats language ecology as a science field. Since the theory does not clearly delimit its object, its relationships with the neighboring scientific fields have been undecided. Moreover, the grand scope of the theories includes severe challenges in the empirical research that are limited to available resources and time. The principle, holistic, dynamic and multi-faceted perception of ecolinguistics forms a valuable correction to linguistic approaches, focusing only on language as a synchronically, static, and autonomous, quasi-invariable system.

Keywords: ecolinguistics, Einar Haugen, English language, environment, language ecology, linguistics

المستخلص

علم البيئة اللغوي هو العلم الذي يدرس التفاعلات بين البيئة واللغة. وتم تأسيس هذا الحقل الذي يدعى علم بيئة اللغة" أو "علم اللغة البيئي" من قبل آينار هاوجين. يهدف البحث الحالي الذي هو- بحث نوعي بطبيعته- الى تناول القضايا النظرية والمفاهيمية الخاصة بالنظرية البيئية عن طريق تتبع جذور علم البيئة اللغوي. كما أنه يسلط الضوء على التناقضات الأساسية بين كيفية إدراك مفهوم البيئة في علم الاجتماع وعلم الأحياء، وكيفية تطبيق ذلك في اللغة. كما ويركز البحث الحالي على وجه الخصوص على نقل المفاهيم المركزية الرئيسة لعلم البيئة الحيوي، نحو : العلاقة/ التفاعل، والبيئة، والكائن الحي إلى اللغة البشرية ونظرية اللغويات البيئية. كما وتتأرجح النظرية بين التركيز على الكائن الحي من جهة والعلاقة المتبادلة والتفاعل من جهة أخرى . وتعد النظرية بشكل أساسي علم البيئة اللغوي بمثابة استعارة، لكنها نادراً ما تتعامل مع بيئة اللغة بوصفها مجالا علميا. و بما أن النظرية لا تحدد موضوعها بوضوح، فإن علاقاتها مع المجالات العلمية المجاورة لم يتم تحديدها بعد. علاوة على ذلك، يشمل النطاق الكبير للنظريات تحديات خطيرة في البحث التجريبي الذي غالبا ما يكون محدودا في موارده ووقته. ويعد مبدأ الإدراك الديناميكي الشامل والمتعدد الأوجه لعلم اللغة البيئي تصحيح قيم للمناهج اللغوية التي تركز على اللغة بوصفها نظاما متزامنا وثابتا وشبه ثابت ومستقل.

الكلمات المفتاحية: اينار هوجين، البيئة، علم اللغة، علم البيئة اللغوي، علم اللغة البيئي، اللغة الإنجليزية

1.Introduction

Harris (2005, as cited in Kravchenko, 2015, p. 1) argued that language predates science in relation to history, culture, and development. Further, science is a language assemble due to the fact that scientists impose their language on what they identify by means of that language). The importance of language in human existence is undeniable; but, unlike biology, physics, chemistry, and computer science, the age long study of language has had no discernible impact on human praxis as opposed to '*poiesis*' and '*teoria*' (in the Aristotelian sense). This reflects a severe methodological dilemma in linguistics, whose epistemological underpinning prevents us from comprehending the nature of language itself (Kravchenko 2015, p. 1).

Although it is a common thread to notice that the big is best observed from afar, the removal of the holism philosophy from scientific endeavors, as well as the persisting obsessiveness with analysis, have resulted in an extreme balkanization of our understanding of the universe, and language as an explicit mode of human reality. Traditional linguistics misunderstands its subject of study by ignoring the reality that human beings are a biological creature with distinct characteristics that must be described through the lens of biology as "the "mother of all diversity" (Givón 2009, as cited in (Kravchenko, 2015, p. 1).

Within the Cartesian framework, the question of the purpose and nature of language, as well as its relationship to the mind, is not resolvable (Kravchenko, 2008). The misconceptions of linguistics continue to enslave us (Harris, 2001; Linell, 2005), and common-sense language reasoning, undertaken in the same language, is frequently mistaken for scientific clarification.

Morris (1938, as cited in Kravchenko 2015, p.1) maintained that:

> The response to things through the intermediacy of signs is biologically a continuation of the same process in which the distance senses have taken precedence over the contact senses in the control of conduct in higher animal forms in the control of conduct in languaging human beings. (p. 32)

Concerning the biological function of language as one of "control of conduct", Morris explained that when the "process of taking account of a constantly more remote environment is simply continued in the complex processes of semiosis made possible by language, the object taken account of no longer needs to be perceptually present" (p.33). Language, as per Morris (1983), is an extension of the human sensorium, and it explains its biological role.

The third-generation, cognitive science provides a fresh tactic to language (Kravchenko, 2007), rejecting the conventional coding model, based on the biology of cognition as a living systems theory proposed by Humberto Maturana (1970). Language is, instead, seen as a physiologically based, socially defined, and cognitively driven orientational activity within a consensual space. Linguistic relations that establish and maintain the cognitive human niche as a living system are an important ecological component that influences the evolution of human. This concept of language ecology differs significantly from that of Einar Haugen (1972), which was used to define the subject field of a different linguistic science - eco-linguistics.

2. Theoretical Background
2.1Ecolinguistics and Ecology

Nordquist (2019) maintained that "Linguistic ecology is the study of languages in relation to one another and to various social factors. Also known as language ecology or ecolinguistics." (p.1) Stanlaw (2020) reported that the ecology of language or ecolinguistics is somehow a new subject in linguistics field. It "takes into account the physical and social ecological context in which language operates, and, in turn, how language and discourse affect the environment and ecology". (p. 1) Stanlaw further added that "the International Ecolinguistics Association defined

"ecolinguistics" as a field which "explores the role of language in the life-sustaining interactions of humans, other species and the physical environment".

Kravchenko (2015) explained that since Ernst Haeckel (1886) first described "ecology as the scientific study of organisms' interactions with their environment" (p.2), it has developed into a core component of biology that examines and analyzes life characteristics at the supra-organismic organization level. Its main focus is the study of communities of living things that interact with one another and their living environment, or system, in order to survive. In cognition biology, such systems are regarded as living (cognitive) systems, with their organization depending on "the coherence of their interactions within their cognitive niche". Hence, when discussing something as ecology, it is critical to keep in mind that it falls under the umbrella of the idea of an organism or a community of organisms as a living system; otherwise, the term ecology will lose its meaning. Kravchenko (2015) added that Cowley (2014) noted that "the term biology and other related terms are rarely discussed in ecolinguistics" (p. 63). Even after acknowledging that the name "language ecology" is just a metaphor (Wiertlewska, 2011). In this vein, Cowley (2014) mentioned that academics in the subject are still concerned about what they are really researching. If there is human-environmental interaction that is cultural and natural (including speech vocalizations), then the ecology of human sociability should be taken into account. Although language is a crucial component of the human species, it neither exists independently nor even as an organism. Nonetheless, in accordance with the standards of the 20th century, "ecolinguists attempt to exclude nature from participation in language" (p. 14).

Kravchenko (2015) added that the term "language ecology" refers to the study of language interaction with the environment; it was coined by Einar Haugen in his seminal book, "The Ecology of Language" (p.3). Haugen's well-known definition of language ecology summarizes the subject of ecolinguistics as a scientific discipline:

> Language ecology may be defined as the study of interactions between any given language and its environment . . . The true environment of a language is the society that uses it as one of its codes. Language exists only in the minds of its users, and it only functions in relating these users to one another and to nature, i.e. their social and natural environment. Part of its ecology is therefore psychological: its interaction with other languages in the minds of bi- and multilingual speakers. Another part of its ecology is sociological: its interaction with the society in which it functions as a medium of communication. The ecology of a language is determined primarily by the people who learn it, use it, and transmit it to others. (Haugen,1972, p. 325)

2.2 Ecolinguistics and the Biomorphic Metaphor

Kravchenko (2015) argued that language, according to Haugen, interacts with society as its environment. He also considered it a code that the society employs it as a tool. This necessitates the question "How can a living thing/agent be utilized as a tool, unless one is talking about a domesticated animal like a dog or horse?" That is, language is not comparable to a horse that carries (transfers) the load of conceptions from one person to another and again; nonetheless, this is precisely what Haugen's ecolinguistics implies—otherwise, the term "ecology of language" becomes meaningless (p.4).

The conceptual difficulty of language, as per Garner (2014), implied that its ecology cannot be used as a "heuristic metaphor" (as cited in Kravchenko, 2015, p. 4):

> On the one hand, there is a metaphorical entity: 'language-as-organism', and on the other, a literal entity: environment as the community of speakers of a language. The ontological status of the third element—interaction—is therefore inexplicable: what kind of interaction can be

there between a metaphorical and a literal entity?

Kravchenko (2015) reported, Garner believed that the solution to this inconsistency is by accepting ecology as an epistemology, sometimes referred to as "ecological philosophy" (Garner, 2014, pp. 210-213). Such a concept addresses its topic of study using four characteristics: holism, dynamism, reciprocal interaction, and situatedness.

The approach of ecology sees language as an integral part of the complex of human behavior, which comprises patterns that are learned through an interaction within a community of users. Language ecology takes all meaningful behaviors, whether 'linguistic' or 'non-linguistic', as manifestations of the same processes, which can be best studied within a broad and multi-disciplinary approach to human sociality. It is only when we see language as in its very essence an ecological phenomenon that the full implications of Haugen's proposal can be realized (Garner, 2014, as cited in Kravchenko 2015, p.4).

Ecolinguists who accept the concept of language ecology evade the inquiry of the system that the term ecology is applied. They maintained, "the ecological approach to language considers the complex nature of the relationships that occur between languages, the environment, and the people that speaks the languages" (Wendel, 2005, as cited in Kravchenko 2015, p. 4). While the connection between human as living beings and their habitats falls within the umbrella subject of ecology. It is difficult to categorize them as independent entities in ecological system languages. Languages are neither organisms nor environment as per Wendel's definition. Accordingly, what exactly are they? This definition implicitly assumes that languages are used by people as tools (aka 'codes') in their association with the environment, and if this is true, it is meaningless to be talking about the concept of language ecology (Kravchenko, 2015, p. 5).

Bang and Trampe (2014) presented a "programmatic article" recently where they expressed their view for an integrative language ecology theory using Kuhn's (1970) "disciplinary matrix of: (i) model concepts, (ii) symbolic generalizations, (iii) shared values, and (iv) exemplars for problem-solving to bring together two schools of ecolinguistic thought, Dialectical Linguistics (Bang, Døør 2007) and "the language-world-system model" (Bang & Trampe, 2014, as cited in Kravchenko 2015, p. 5). This brings three developmental phases of ecological approaches to language: "language as an organism" (Schleicher, "language as a part of a form of life (Schleicher) and "the transfer of the metaphor of ecology to language" (Kravchenko 2015, p. 5).

Bang and Trampe (2014) further maintained that:

For an ecological theory of language, a trans-disciplinary understanding of ecology is fundamental. An ecological theory of language manifests itself as a linguistic ecological theory, i.e., a linguistic and trans-disciplinary approach that generates empirical hypotheses, which describe and explain the manifestation and organization of linguistic processes in organism–environment relations. (p. 89) (as cited in Kravchenko, 2015, p. 6)

2.3 From Haugen's Seminal Work to Current Trends

Even though Haugen was an ardent supporter of language ecology, he was unable to persuade others to agree with him. His seminal' article has been chastised for containing too many second-hand citations and a lack of ecological refinement. Owing to his European and American dual origin, Haugen managed to provide a singular reflexive perspective on his area of inquiry (by adding personally to the historiographies of linguistics) in the American linguistics history. Furthermore, he lived through a pivotal moment in linguistics history, namely the birth of the "Chomskyan revolution" and the development of sociolinguistics and

interdisciplinary methods, primarily by Hymes and Gumperz. Focusing on the entirety of Haugen's work has thus shown to be quite useful in searching the history of the ecological approaches or ecological paradigm in general in linguistics.

The 1971 essay also clarified how the work on language contact and bilingualism by Haugen aided language ecology (i.e., he questioned what was going on in people's heads throughout shift processes and how they are associated with one another and with their surroundings). Many cross-citations to Haugen's definition(s) on the ecology of language may have caught the attention of those who have interest in ecological approaches to linguistics. However, it is believed that the most essential aspects of his article are not based on these few lines that have been transformed into dogmas, but rather on some more pertinent points. For example, when Haugen used Aristotle's concepts of ergon and energeia to suggest that languages are not just a product or a human activity, but both. He added that it "manifests as action, like all behavior, but exists as a potential in the mind that can be considered a thing that signifies the possibility of action" (Haugen, 1972, p. 20); or when much priority is given to the role of sociology. The necessity of a more integrative linguistics is emphasized by Haugen's focus on human ecology, which aligns with the contemporary trends in psychology, sociology, and linguistics to move toward situated and enactivist anthropology, or ecological methods. In terms of the article's socio-historical background, it should be noted that Haugen initially presented it as communication in 1970 for the CAL conference on comprehending and archiving global languages, as well as on language typology. Then, Haugen's communication provided a justification for an ecological language approach, that has no theoretical foundation.

2.4 Language Myth and Ecolinguistics

Misinterpreting language as "one of the codes that society uses" (Kravchenko, 2015, p. 7) is a phase of the fable of language. The false impression that the venture of language is to replicate ideas and to transmit these ideas from one thinking to another. The delusion of language is the end result of two intertwined errors.

Both the "telementation fallacy" and the 'determinism fallacy' are totally based on the concept that a language is a set of codes. The constant code fallacy ingrained in training explains why there is a big faith that language is a device for speaking ideas. In this case, each language and idea emerge as ontologically autonomous. However, this type of ontological autonomy is the product of an "epistemological disconnect" between the "observed" (language as a variety of human reflexive activity) and the "observer". (Kravchenko, 2015, p. 7). Cognition is considered a natural concept, and to comprehend it, one must consider and explain the observer's role in cognition. This is the case in orthodox linguistics as stated by Maturana (1978) where language is considered a code or sign system employed as a way of communication. However, communication entails transferring mental material using linguistic signs as a channel for such transmission (Kravchenko, 2007). However, when we consider the origins of the concept of code, one can see how inadequate it is.

Science is a closed cognitive domain in which all statements are, of necessity, subject dependent, valid only in the domain of interactions in which the standard observer exists and operates. As observers, we generally take the observer for granted and, by accepting his universality by implication, ascribe many of the invariant features of our descriptions that depend on the standard observer to a reality that is ontologically objective and independent of us". (Maturana, 1978, p. 29, as cited in Kravchenko, 2015, p. 7)

There should be two origins of the existing idea of code as a conversion rule utilized in the conversation theory. The first one is the act of

punishing petty criminals with the aid of tying them to a wood stump in historic Rome. In each situation, the connection between the wooden and something is connected to it is unmistakable and leaves no room for interpretation. It is a kind of "what you see is what you get" (Kravchenko, 2007, p. 45) notion. As a result, a conversation code is essentially a synthetic signal motors device that can be transcribed into some other synthetic signal device motors gadget through watching a tight rule. It is really worth noting that whilst a code is made up of a one-to-one matching between two historically decided signal motors systems, the structures do not contain greater than one wonderful language now. The area of herbal human language is targeted on interlocking the conducts that include patterned vocalizations, practices and heterogeneous artifacts that are species-specific adaptive recursive behaviors (Languaging). A change in unique artifacts, such as the photo photographs used by a populace to depict their thoughts, does no longer trade their language from the relational sphere, the place in which they exist as unities of interactions, into a distinct relational sphere. Hence, Morse code cannot be viewed as a language, simply as Tajik Persian wrote that the Cyrillic alphabet cannot be viewed as a specific structure of language from the Tajik written in the Persian script (Kravchenko, 2015, p. 2).

Notwithstanding their seeming contradiction, each of the biomorphic and instrumental views to language is grounded on exterior realism philosophy-the idea that an actual world exists independently of people and what they say or assume about it (Searle, 1998). To the traditional linguist, language, whether or not viewed as a device (a bodily object), or as a residing creature, is an issue of the actual world, and is in this capability expanded to the ludicrous level.

2.5 *Language and Ecology in the Living Systems Theory*

Living structures are divided into three classes in cognitive biology: "first-order (monocellular organisms)", "second-order (multicellular organisms)", and "third-order (socially organized)" systems (Muaturana, 1970, as cited in Kravchenko, 2015, p. 7). If a herd of "wild animals" and people are being viewed as structures of residence of the identical order, then, the query becomes, "what aspects shape the difference that makes a distinction in the employer of these systems?" "Language" is the apparent answer. The human relational area is described via languaging, which is described as species-specific socially and traditionally described behavior. This conduct provides to the prosperous heritage of the human ecological area of interest and improves its appreciation (Steffensen & Fill, 2014, pp. 6-25) (as cited in Kravchenko, 2015, p. 8). The greatest effects with regard to the dynamic machine steadiness (these effects represent the evolving phenomena of self-consciousness and free will) are restricted to a restrained matrix of linguistic interactions and exhibited inside the confines of the composite team spirit of languaging humans.

Steffensen and Fill (2014, pp. 7-10, as cited in Kravchenko, 2015, p. 8) reinvented ecolinguistics as they were not satisfied with the present day circumstance of ecolinguistics as an idea lacking unifying conceptual premises. They begin through recognizing the four fundamental methods that language ecology has been understood in the past, namely, as: "a symbolic ecology (the notion of languages co- presents and associates in an inter-language ecology inside a given niche)", a "natural ecology (the notion of language being reliant on the herbal language customers habitat)", a "sociocultural ecology (the thinking of linguistic interplay constituting and being constituted with the aid of large societal and social constructions like institutions, sociocultural resources, and monetary processes)", and a "cognitive ecology primarily based on Gibson's ecological psychology and the environmental affordances for the organism's action–perception cycles". The variety in the conceptual terms emerged from a number of views on language ecology, and was summarized as follows: If one considers those scientific

disciplines are terrorist, ecolinguistics resembles an archipelago as a substitute than a continent". Then, they showed that this disagreement on the concept of "language ecology" is not the result of whether or not the idea of (linguistic) ecology is utilized metaphorically or non-metaphorically as Steffensen and Fill (2014, pp. 6-25) recommended in the past study. The metaphorical utilization of 'language' is at the basis of all problems. This metaphorical idea "presupposes the presence of a phenomena of language, an 'it' that 'does' something 'purposeful' in 'human affairs,' an entity that may be labeled both 'language' or 'discourse" (p. 16) (as cited in Kravchenko, 2015, p. 8).

The language epistemological lure makes it hard to note the hood of the folks view of language as an object or a tool, which has disastrous ramifications for language sciences. According to Kravchenko (2007), linguistics is a science of analyzing verbal patterns, or "words," that exist as impartial entities with meanings being merged and recombined to create "sentences/utterances" as expressions of opinions that are "exchanged" at some point in communication. Encyclopedias, faculty and university texts, dictionaries, and different sources help this viewpoint. This cannot be viewed in a scientific way of language clarification. Besides, its purpose is rather, a naïve thought supported through the literal grasp of the worldview as evidenced in the expressions of the very language that linguists attempt to describe. For instance, "an oasis in the wasteland as a proof of water", or "sighting empty beer cans in the wooded area to endorse human presence", are sturdy examples of top proof as claimed by Kravchenko (2007). Similarly, the following ideas are unarguably sound:
(1) "An oasis in the wasteland IS NOT water".
(2) "Empty beer cans in the wooded area ARE NOT human presence".

When we witness empty cans in a place, it is our world experience, our grasp of how matters work. That entails that there ought to be water in an oasis or that there should be human

beings in the forest. It, in addition, implicates that one can make such claims due to the fact that s/he has viewed water as something that can be determined in specific areas (not constantly an oasis (Kravchenko, 2015)

Linguists use special recursive auditory phenomena (verbal patterns, or utterances) in the dynamically difficult conduct of people as justification for language. However, even as the previous judgments show up of course rational, so does the following judgment:
(3) Verbal patterns ARE NOT language.

Our human fashion of articulating the members of the family between a range of objects in our bodily realm, or the cognitive area of relationships, is to use proof as a tactile signal of some concept to exist in actual space/time. Water has no relationship with the palm timber in an oasis outdoor of the realm of human perception, simply as water has no relationship with the palm trees. Our discovery of them all collectively invites a semiotic justification in phrases of signs and symptoms ('A is a signal of B'), but symptoms are solely a type of bodily factors chosen by the way of people for the utilitarian goal of "orienting" in these surroundings (Kravchenko, 2015). If verbal traits are language symptoms or evidence, then, the notion is that verbal developments and language continually co-exists like smoke and hearth ("smoke is a signal of fire"), however that verbal developments are now not language, simply as smoke is no longer fire. Verbal tendencies are digital phenomenological entities that originate from human organisms adopting a 'linguistic attitude' (Cowley, 2014); see also (Kravchenko, 2015, p. 10).

Kravchenko (2015) also reported that Steffensen and Fill (2014) provided the following description primarily based on a naturalized viewpoint of language and the Extended Ecology Hypothesis- the human ecology is stretched with the aid of an incorporating price, which is derived from the linguistic exchanges into ecological structures:

Ecolinguistics is: (1) the study of the processes and activities through which human beings– at individual, group, population and species levels – exploit their environment in order to create an extended, sense-saturated ecology that supports their existential trajectories, as well as (2) the study of the organismic, societal and ecosystemic limits of such processes and activities, i.e. the carrying capacities for upholding a sound and healthy existence for both human and non-human life on all levels. (Steffensen & Fill, 2014, p. 21)

This definition emphasizes a critical aspect of human creatures and society, which has an impact on the emergence of "cognitive living systems" and is frequently overlooked by the traditional linguistics.

3. Conclusions

The study of the bio-cognitive side of language aims to preserve the living human community system as a unity of its cognitive interactions (orientational linguistic). It varies from Haugen's language ecology concept in its epistemological foundations. This kind of method permits an in-depth understanding of the way societal linguistic activities influence the species' evolution in phylogeny and ontogeny. It also contributes to the construction of existential trajectories and orientational values on both the social and individual levels. These, it has been argued, should guide the scientific discipline of eco-linguistics. The latter is said to focus on the functions and purposes of language as a form of the structure of the life system. It further participates in shaping the consciousness, mind, and brain. Although studies have just commenced, the expectations are promising. No previous study has yet been conducted theoretically and practically speaking with respect to ecolinguistics and the ecology of language in the Iraqi Academic journals, theses, or dissertations. Therefore, this review paper aims at giving a theoretical point of view, surveying the turns being found in definitions, pioneers, and the significance of the ecolinguistics approaches.

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