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APINAYÉ AND *KRAHÔ* LINGUISTIC ECOSYSTEMS: A STUDY FROM THE PERSPECTIVE OF ECOLINGUISTICS

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ABSTRACT

Ecolinguistics or Linguistic Ecology studies the interactions between Language and Environment evolving, over time, to ecosystemic linguistics, considering that a language relates to a speech community surrounded by a natural environment, which is also verbal, giving identity to speakers. This is a reality in indigenous communities, which present themselves as guardians of the forest, in a systemic relationship, when Language, ecology and people interact with themselves and with the Environment, constituting a simultaneously stable, balanced and self-sufficient system. In this regard, we present this article that aims to describe a study on the *Apinayé* and *Krahô* linguistic ecosystems, from the theories of eco-linguistics. The methodological procedures adopted are qualitative and bibliographic research, wherein, in addition to classic studies we also surveyed the state of the art from the describers: Linguistic Ecosystems; Apinayé indigenous people; Krahô indigenous people; Ecolinguistics; Ecology; and language ecology. The results indicate that the indigenous people maintain a systemic relationship with the environment, treating nature as the living being, that is, taking from the land only what they need for the survival of the groups,

in a symbiotic exchange. The indigenous people name everything in the natural environment in which they live -plants, animals, rivers and forests for them, are an extension of their homes. In addition to these, phenomena such as rain, sun, cold, heat are appreciated to the extent that human biological life needs all this biodiversity for medicinal treatments, the forest being seen as a pharmacological laboratory.

Keywords: Ecolinguistics. Linguistic ecosystems. Speech community. *Apinayé*. *Krahô*.

RESUMEN

La ecolingüística o ecología lingüística estudia las interacciones entre la lengua y el medio ambiente evolucionando, con el tiempo, hacia la lingüística ecosistémica, considerando que una lengua se relaciona con una comunidad de habla rodeada de un medio natural, que también es verbal, dando identidad a los hablantes. Esta es una realidad en las comunidades indígenas, que se presentan como guardianas de la selva, en una relación sistémica, cuando la lengua, la ecología y las personas interactúan consigo mismas y con el medio ambiente, constituyendo un sistema simultáneamente estable, equilibrado y autosuficiente. En este sentido, presentamos este artículo que tiene como objetivo describir un estudio sobre los ecosistemas lingüísticos Apinavé v Krahô, a partir de las teorías de la ecolingüística. Los procedimientos metodológicos adoptados son la investigación cualitativa y bibliográfica, en la que, además de los estudios clásicos, también se revisó el estado del arte a partir de los descriptores: Ecosistemas lingüísticos; Pueblo indígena Apinayé; Pueblo indígena Krahô; Ecolingüística; Ecología; y ecología de la lengua. Los resultados indican que los indígenas mantienen una relación sistémica con el medio ambiente, tratando a la naturaleza como al ser vivo, es decir, tomando de la tierra sólo lo que necesitan para la supervivencia de los grupos, en un intercambio simbiótico. Los indígenas nombran todo lo que hay en el medio natural en el que viven -plantas, animales, ríos y bosques para ellos, son una extensión de sus hogares-. Además de estos, fenómenos como la lluvia, el sol, el frío, el calor son apreciados en la medida en que la vida biológica humana necesita de toda esta biodiversidad para tratamientos medicinales, siendo el bosque visto como un laboratorio farmacológico.

Palabras clave: Ecolingüística. Ecosistemas lingüísticos. Comunidad de habla. Apinayé. Krahô.

INTRODUCTION

Indigenous communities maintain a systemic relationship with the natural environment where they live, which historically accredits them to be the "Guardians of the Forest", in an allusion to responsible involvement with the Environment, favoring a balance that is both stable and self-sufficient. All this in the face of the attacks of non-indigenous society which in a predatory and oppressive way removes from the land everything that has material value for it, decimating not only nature, but also the original peoples who inhabit it -indigenous societies and *Quilombola*, and riverside communities. Among these, we highlight, for the purposes of our work, the *Apinayé* and *Krahô* indigenous people, who maintain a relationship with nature where solidarity prevails over selfishness, coexisting with a concern not only to provide materially for those who are there, but also to worry about future generations, considering that nature is a subjective creature which requires it to be treated with care and compassion.

In fact, Ecolinguistics and Linguistic Ecosystems are the starting point for our reflections, analyzing their evidence in the *Apinayé* and *Krahô* indigenous contexts. Ecolinguistics has its most solid configuration in the interaction between Language and Environment Habitat, overlapping with Linguistic Ecosystems as an integral part of the Ecosystem as a whole, where speakers relate to the respective environment verbally too. In this regard, speech communities admit relevance, notably the *Apinayé* and *Krahô* indigenous peoples of northern Tocantins, Brazil.

The objective is to present a study carried out on the Linguistic Ecosystems of the *Apinayé* and *Krahô* indigenous groups, remaining indigenous peoples of the great *Timbira¹Nation*, speakers of homonymous languages belonging to the "Macro-Jê"

¹ *Timbira* is the name given to a group of indigenous peoples in Brazil, speakers of the *Timbira* language (*Macro-Jê* trunk, *Jê* languages): Apanyekrá, Apinayé, Canela, Gavião do Oeste, Krahô, Krinkatí, Pukobyê. Other Timbira ethnicities no longer present themselves as autonomous groups, the few in number: Krenyê and Kukoikateyê who live among the Tembé and Guajajara, who speak a Tupi-Guarani language (Teneteara language); the Kenkateyê, Krepumkateyê, Krorekamekhrá, Põrekamekrá, Txokamekrá, gathered and dissolved among some of the seven Timbira peoples listed initially. Source: Beto Ricardo; Fany Ricardo, ed. (2011). Povos Indígenas no Brasil: 2006-2010. São Paulo: Instituto Socioambiental.

Linguistic Branch", linked to the $J\hat{e}$ Linguistic Family. The aim was to identify, in the indigenous context, the relationship between "Language and Environment" from the perspective of "Ecolinguistics", understanding how "Linguistic Ecosystems" are constituted, considering ethnic borders and all the complexity in which indigenous people are included.

In this regard, and considering the symbiosis of how indigenous people interact with the Environment, forming Linguistic Ecosystems, we realize that everything in the universe of these people is sacred: plants, stones, animals, rivers, forests, cold, myths, rites and everything else. The earth takes on a subjectivity that borders on the sacred, just like the rain and the sun, the moon and the stars, bread and water, singing and praying, the sky and the wind, in short, life and death. For each of these elements or phenomena, every people, individually has their own cosmology, embedded in the complex structures of their native languages.

METHODOLOGY

The methodological procedures, in an interdisciplinary conception (Fazenda, 2008) were qualitative, bibliographic and ethnographic research (Gil, 2002; Almeida et all, 2017; Miranda and Silva, 2019), netnographic research (Kozinets, 2014; Melo, Oliveira and Almeida, 2020), wherein the internet and its artifacts were used as a source of consultation.

Thus, in addition to resorting to classical studies, we have also surveyed the state of the art based on the descriptors: Linguistic Ecosystems; *Apinayé* indigenous people; *Krahô* indigenous people; Ecolinguistics; Ecology; and Ecology of Language, categories that, in dialogue made it possible to achieve the objectives listed. Hereupon, we used books, book chapters, e-books, in addition to consulting Google Scholar, digital libraries and online journals indexed in *Capes*.

THEORETICAL BACKGROUND

Ecolinguistics and Linguistic Ecosystems: Towards Ecology of Language

⁷⁶³ pages. ISBN 9788585994853. Available: https://pt.wikipedia.org/wiki/Timbiras. Accessed on: November 28, 2022.

Ecolinguistics or Language Ecology emerged in Brazil in the 1970s, but it was only in the 1990s that it was consolidated as an area of study in Linguistics. Couto & Couto (2016) credit Haugen (1972) with the first studies addressing the relationship between Language and the Environment, giving rise to Ecolinguistics. For these authors, the prefix "Eco", as well as the definition of Ecolinguistics, point in the direction of Ecology as it is studied within the scope of Biology, identifying the Environment Habitat as a component of the ecosystem, that is, the place in which a certain species or group of species live and interact with each other.

It is, therefore, a systemic relationship, and when the Environment is studied in interaction with human beings who are located there, Ecolinguistics emerges, nourishing the relationships between people, animals, plants and other living beings, overlapping with what we understand as an ecosystem.

In that regard,

[...] 'ecosystem' is defined as consisting of a population of organisms and their interrelations (interactions) with the respective habitat (ecological niche, biotope, territory, Environment), depending upon the point of view, as well as the interactions of organisms with each other. As the expression Environment has given rise to misunderstandings, suggesting a direct association only with the issue of environmentalism, we believe that a better definition for the discipline is that "Ecolinguistics is the study of interactions between Language and its social, mental and natural context, via population (Couto; Couto, 2016, p. 382)". (Highlight of the original text).

Indeed, the interactions between Language and the contexts where speech communities are located are what the cited authors call ecolinguistics. In other words, Couto & Couto (2016) argue that Ecolinguistics is the study of linguistic interrelations that take place socially, mentally and naturally, avoiding a reification² of Language, as can be seen in Haugen's studies. According to Garner (2015, p. 67), "[...] Haugen suggested that language could be thought of as an organism and its community as the

² Reification is the act of transforming ideas into concrete things. According to the text Technique, body and objectification: working notes on the theme of technique by Theodor W. Adorno, the process of reification of social relations is mediated by technique, which makes people similar to machines, bringing to light all the violence and barbarism present in human beings, which were culturally dominated. For Adorno, technique is overvalued and fetishized to the point that people relate to it in an exaggerated and irrational way, making it the central point of life. In the process of reification, people lose the traces of subjectivity and individuality, becoming part of a group of people whose lives are mediated by technique (Bassani and Vaz, 2008; Adorno, 1951).

environment" and, therefore, "[...] the work of linguists would be to describe the characteristics of the two entities and show how the interaction between them can give rise to different things".

Garner (2016, p. 67) affirms that, Haugen in his theory argues that historically, linguists treated "[...] language metaphorically as if it was a living organism. Terms such as 'birth' and 'death' of languages, 'family trees' and others prove this." (highlights from the original text). "Of course, scholars did not actually consider language as a true organism, but it was comfortable for them to compare it to organism" (Garner, 2016, p. 68), however, "[...] a problem with the ecological metaphor is how we view the environment. [...] This, says Haugen, is not a metaphor: the true environment of the language is the society that uses it" (Haugen, 1972, p. 329), (Idem).

Linguistic Ecosystems

Linguistic Ecosystems occur in the Environment, in the natural Habitat of any species and, according to Couto & Couto (2016, p. 382), "[...] it is an integral part of the ecosystem, within which the speakers relate to the respective Environment verbally. It is about [...] individual-world (reference) and individual-individual (communication) relationships". The expression "Linguistic Ecosystems" needs to be understood in an almost literal sense, as it is a type of study of language phenomena which starts from the concept of ecosystem to raise its theoretical bases and, in this regard, ecology is defined as the study of interactions between living organisms in a given region and their habitat, the Environment.

The existence and persistence of a linguistic ecosystem depends on the memory of all the individuals that constitute it. This means that it also depends on the memory of each of them. After all, if we start from the totality of individuals and divide it into segments, we will reach a point where it will no longer be possible to divide, at that point we will reach the "individual" which, etymologically means "one who cannot be divided". This is equivalent to saying that what is valid for the individual is also valid for the totality (community) of which they are part, and vice versa (Couto; Couto, 2020, p. 185) (Quotation marks from the original text).

From this perspective, talking about the Linguistic Ecosystem leads us to understand that it's about the community (of language and speech). For Couto (2015), when we talk about Linguistic Ecosystem, we are already suggesting an ecological

approach, in this case, that of Brazilian Ecolinguistics, the so-called Ecosystem Linguistics. "The author sees language from three ecosystems namely: the natural, mental and social, all of which are part of the integral ecosystem of language" (Couto; Couto, 2020, p. 185).

Couto (2015) arguments that:

[...] In fact, there is not just one linguistic ecosystem, but there are at least four, depending on the perspective from which we look at language phenomena. These are: 1) natural ecosystem of the language, 2) mental ecosystem of the language and 3) social ecosystem of the language. The three converge or merge into the 4) integral ecosystem of the language. In each of them the language must be related to the respective environment, in this case, the 1^{st}) natural environment, 2^{nd}) mental environment and 3^{rd}) social environment of the language. Finally, we have the 4^{th}) integral environment of the language (Couto, 2015, p. 56).

We can notice that when we talk about the Environment, we are referring to at least four things that are interconnected and depend on each other, which dialectically constitute and are constituents of habitat.

If ecosystem is the central concept of ecology, interaction is the central concept of ecosystem. For the ecologist, what matters in the ecosystem is not directly the population of organisms, since they are the object of biology and, perhaps, genetics and anatomy. Nor it is the habitat itself that matters. In fact, the focus of attention is the interrelationships that occur within the ecosystem, both the interrelationships, or interactions, that occur between organisms and the world, and those that occur between the individuals that make up the population (Couto, 2015).

In this sense, in linguistic studies, organism-territory interactions are equivalent to reference, while organism-organism interactions correspond to communication. Furthermore, ecology is in tune with the discoveries of modern science, such as the theory of relativity and quantum mechanics, according to which the world as a whole is an immense web or network of interrelations. "Hence there are affinities with more current aspects of these disciplines, such as systems theory, complex systems, Prigogine's dissipative structures³ and, sometimes, even with

³ Dissipative structures are characteristic of irreversible processes and reveal that the creation of order occurs far from thermodynamic equilibrium. Chaotic or irreversible phenomena are not reduced to an increase in "disorder", as is commonly thought, but, on the contrary, have an important constructive role (MASSONI, 2008). Source: https://www.scielo.br; Accessed on: 01-Dec-2022.

fractals (as in the iteration seen in the construction of sentences" (Couto, 2015, p. 49) (Our footnote).

In this context, the issue of interaction is present in the definition of all other characteristics of the ecosystem. "In the case of language, the ecosystemic view shows us that it is basically interaction. The interactions that compose it take place within the linguistic ecosystem; with each part can be seen as an ecosystem in itself" (Couto, 2015, p. 50).

In a more general sense, ecosystemic linguistics does not use the concept of "structure". It prefers to work with networks, more specifically organic interaction networks. At a microscopic level, as in the plan of Deleuze & Guattari (2000) cited by Silva (2021, p. 25), we can even talk about structure, but only provisionally and operationally.

APINAYÉ AND *KRAHÔ* INDIGENOUS LINGUISTIC ECOSYSTEMS

The relationship between Language and the Environment, i.e., the habitat, expands beyond linguistic boundaries when the focus is on the interrelationship between the Environment and the speech community. According to Labov [(1972) 2008], a speech community is a group of people who share common social norms and attitudes in a context where humans and other groups in the ecosystem interact. Here, the indigenous people admit the status of interveners so that this relationship occurs in an associative way and in symbiosis.

Couto & Couto (2016) argue that the most expressive Linguistic Ecosystem is the natural ecosystem of the Language, and they present as an example "The *Kamayurá* Indigenous", the people "(P)" who lives in a place called the Xingu Indigenous Park, which is "their territory (T)", interacting verbally through the traditional way of connecting, which is "their Language (L)", "the *Kamayurá*".

Apinayé Linguistic Ecosystem⁴

⁴ Source: Almeida and Albuquerque (2021). Dicionário [e-Book]: rumo à civilização da religação e ao bem viver/Rosamaria Arnt, Paula Scherre (orgs.). Fortaleza, CE: Editora da UECE, 2021. PDF. ISBN 978-85-7826-802-2. Available: http://www.uece.br/eduece/wp-content/uploads/sites/88/2021.pdf. Accessed on: 29-Nov-2022.

The *Apinayé* are an indigenous people remaining from the Eastern Timbira (*Timbira Orientais*), called *Jê*, as the native language belongs to the *Macro Jê* Linguistic Trunk and *Jê* Linguistic Family. The group lives in the north of the state of Tocantins in the mid region of "*Bico do Papagaio*", comprising the municipalities of *Tocantinópolis* and *Araguatins*. According to data from the Special Indigenous Health District (DSEI, 2022) based in *Tocantinópolis*, the *Apinayé* population is 3,009 distributed across 53 villages.

The relationship of the *Apinayé* with the Environment is perceived from their origin and location, as they historically occupy a transition area between the tropical forest and the *cerrado*⁵, marked by riparian forests cut by streams that flow enormously into the Tocantins and Araguaia rivers, and through closed fields that separate each of these streams where they do not need to cut down trees to be able to impose the stigma of their culture on the natural environment: circular villages with a square in the center, the original mark of the *Jê* groups (DaMatta, 1976; Almeida; Moreira, 2011).

According to DaMata (1976), the *Apinayé* people build their villages on slightly elevated ground and close to a perennial watercourse between the riparian forest and the savannah countryside (*cerrado*). Like the other *Jê* people, the group prefers to establish their villages in the countryside, using the forest for hunting and agricultural activities. The villages where they build their houses are located on top of hills and the farms are built on their slopes next to the river, where a piece of the riparian forest is domesticated. In addition to these fields marked by undergrowth vegetation, rivers, and riparian forests, this region is covered by "*Orbignia Speciosa*" better known as "*Babaçu* Palms" (DaMatta, 1976, p. 34). The expression "Apinayé Ecology" is coined by the same author DaMatta, who described the relationship between indigenous people and the Environment, which is confused with the history of the exploration of each of these niches and which, according to DaMatta, depends on the way in which dominant society has been limiting, stimulating, destroying or creating in the natural environment, inhabited for centuries by the *Apinayé*, products capable of being explored by the communities.

⁵ *Cerrado* is a type of forest in the center-west of Brazil which covers most parts of the surrounding areas of the capital of Brazil, Brasilia.

DaMatta (1976) describes the effects of this contact and the situation of conjugation with national society as part of the *Apinayé* ecological environment, highlighting the procedures through which they take better advantage of their natural environment. For this author, the *Apinayé* survived contact with non-indigenous society, creating social mechanisms that, on both sides, were activated to configure the situation of conjugation. "To see *Apinayé* ecology from this perspective is to take the environment in a broad sense, as a point of conjugation and passage from the tribe's geography to its history" (DaMatta, 1976, p. 34).

In this regard, the "Apinayé Ecology" is understood as the set of social relationships that this indigenous group maintains with other peoples and with nature. Nevertheless, Ecology is a recurrent term in contemporary debates, tiresomely conveyed by the media that trivialize it and make it an inspiration for fashions and trends, symbolizing consumption, a kind of object for disseminating a way of life and/or trend, "[...] but that occurs through the consumption of standardized, industrialized and high-cost products, with a very broad global market that is not always committed to human beings and their environment" (Almeida; Moreira, 2011, p. 144).

An example of these "ecologically correct" activities is the production of decorative and ornamental objects, made from natural raw materials, such as seeds and other derivatives of plants found in the villages of Indigenous people, and which are widely sold by non-indigenous people at high prices, which are not passed on to them. Furthermore, "*Babaçu* Almonds" are sold with a large industry in Tocantinópolis, which pays ridiculous amounts to the indigenous people, as they resell their derivatives/products not only in Brazil, but abroad too, with significant profits.

According to DaMatta (1976), *Babaçu* is consumed in the national market, notably in the states of Rio de Janeiro and São Paulo, and its nuts are exported to Europe and the United States. The care for the Environment that the Apinayé people practice is also present in their agricultural activities, in the cultivation of corn and cassava, among others, which are used for internal (domestic) consumption and the resale of surplus at markets in *Tocantinópolis* and *Araguatins*. The cultivation is organic, i.e., free from the use of any type of pesticides.

Krahô Linguistic Ecosystem⁶

The *Krahô* indigenous people are included in the same ethnic context as the *Apinayé*, they speak the *Krahô* Language belonging to the *Macro Jê* Linguistic Branch and the *Jê* Linguistic Family. The group is located in a demarcated territory and the population is 3,848 people occupying 55 villages (DSEI, 2022).

We reiterate that the classic concept of Ecolinguistics is the relationship between Language and the Environment and this, therefore, can be defined as everything around us that pulses, that is alive, encompassing biological, chemical and physical factors in symbiosis. Environment and ecology are associated in a symbiotic way. However, according to Couto (2007; 2009), this definition sparks controversies and leads us to question: a.) what is Language? b.) what is the environment of Language? C.) what are the relationships between Language and the Environment? We add to these, "What is *Krahô* Ecolinguistics?"

According to Couto (2009, p. 127):

[...] it is as difficult to answer the first question as it would be for a biologist to say what life is. Provisionally, we can establish that Language is how community members communicate with each other, verbally or in sign language (or in a gestural way). To talk about the Environment, we need to use ecology, which, in fact, does not use this expression as a technical term. Instead, it uses habitat/niche, biotope and territory. Therefore, when I talk about Environment, any of these concepts can be understood. It turns out that, to talk about Environment, it is necessary to insert it into the ecosystem, of which the four ecological concepts mentioned are part. That can be defined as the set of organisms in a given territory and their interrelationships, both among themselves and with the territory or Environment itself. In short, an ecosystem consists of a population of organisms, a territory and their interrelationships. As ecosystem is the most important concept in ecology, the first step for anyone who wants to practice ecolinguistics is to look for its equivalent in Language.

Therefore, considering the ecosystem within the scope of the ecological configurations that identify an indigenous community, it is possible to identify a Linguistic Ecosystem. According to Couto (2009, p. 127), when you have contact with

⁶ Source: Albuquerque (2021). Dicionário [e-Book]: rumo à civilização da religação e ao bem viver/Rosamaria Arnt, Paula Scherre (orgs.). Fortaleza, CE: Editora da UECE, 2021. PDF. ISBN 978-85-7826-802-2. Available: http://www.uece.br/eduece/wp-content/uploads/sites/88/2021.pdf. Accessed on: 29-Nov-2022.

a language for the first time, the question you ask is which people use it. In view of the answer obtained "[...] we seek to know where these people are located. The people or population (P) corresponds to the population of the ecology; where, to the territory (T); the patterns of interrelationship, to Language (L). The basic linguistic ecosystem is the whole formed by P, T and L".

As we know, nature is sacred for indigenous people. In this regard, the relationship they maintain with ecology, notably with regard to the language that names all living beings, involves symbolization where "population" (P), "territory" (T) and basic linguistic ecosystem (L) take on the shape of an entity, a living being with almost human characteristics. In this way, and considering that Language is the way people communicate with each other and with the Environment, an interaction coexists, a system that adds behavior and wisdom to the interactional patterns that are established between the members of P, producing a communicative interaction with T and Environment.

Indeed, the *Krahô* Language presents itself as a natural environment, favoring the bases and foundation for what Couto (2009, p. 128) names as the "fundamental ecosystem of the language", since the natural environment of the Language presents itself as that which provides the bases, the foundations for others. Furthermore, "[...] this ecosystem consists of a people or population (P), living in a certain territory (T) and speaking their own language (L). Without territory, there is no population and without population there is no language" (Couto, 2009, p. 128).

The relationship between the *Krahô* and the language that identifies them is systemic. That's so much systemic that the name of the people is the name of their language. The *Krahô* people speak the *Krahô* Language, which also defines a culture where nature and community are dialectically confused. In this duality, according to Freitas (2001, p. 267), one of the main dialectical pairs, so much present in Krahô culture, is the "[...] bipolar game between the villages and the forests, in a reflexive materialization of the very relationship between culture and nature as a delimiting point of community values, social order and cosmological dynamics".

Krahô Ecolinguistics is already demonstrated in the name of the tribe, as it establishes a direct connection with the natural environment. The term *Krahô* is an external name for the group, presented beneath two translations. The first is given by

the indigenous people themselves and occurs through the conjunction of the words $Kr\acute{a}$ (paca) and $h\^{o}$ (hair) "Hair of Paca". The second is $Ikr\acute{a}$ (son) and $h\^{o}$ (leaf), that is, "Children of the Leaves", according to Campelo (1957) cited in Freitas (2001).

CONCLUSION

Ecology, Ecolinguistics and Linguistic Ecology demonstrate themselves dialectically in the interactions between Language and the Environment, favoring the emergence of "Linguistic Ecosystems" or "Ecosystemic Linguistics", a branch of Ecolinguistics which studies in language everything that can be explained naturally. It is, therefore, an unfolding of the concept of ecosystem and its idiosyncrasies. Such predicates are extremely relevant for Ecolinguistics, and language takes on superior status, since it establishes communicative interaction through a repertoire, favoring interactions in the natural environment.

Language gives identity to speakers who interact in the natural environment that is also verbal, as it is the case of more than 300 Brazilian indigenous ethnicities. Furthermore, indigenous people living in villages are known as guardians of the forest, maintaining a systemic relationship between Language, Ecology, and Environment in a stable, balanced and self-sufficient relationship.

When the focus is on indigenous peoples, Ecolinguistics expands beyond ethnic borders and Linguistic Ecosystems acquire a superior status in a symbiotic relationship. Here, the reciprocity of contact between humans and nature in all its abundance is mediated by an ancestry that pulses in a cosmological universe, with an almost devotion to the elements, i.e., water, earth and air, in addition to animals and plants.

In all work activities, symbiosis is shown, as well as in sports and leisure, through rituals and ceremonies specific to each indigenous people and their personalities. In these manifestations, the songs and sports practices that always take place in the forest contribute even more to a rich linguistic diversity within the scope of the interrelations between man and the Natural Environment.

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167

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