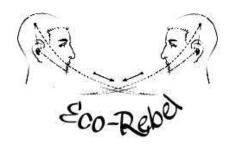
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ECOYSTEMIC DISCOURSE ANALYSIS (EDA)¹

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Resumo: O objetivo deste artigo é apresentar a Análise do Discurso Ecossistêmica (ADE). Por ser parte da Linguística Ecossistêmica (LE), ela pode fazer uso de todas as suas categorias de análise. Mas, a ADE tem suas categorias específicas, que ficam invisíveis da perspectiva macro da LE. Para ter acesso a elas, é necessário lançar mão do método da focalização, que leva a uma aproximação microscópica, momento em que os conceitos específicos da ADE são visualizáveis. Por ter como fontes de inspiração o Ecologia Profunda, o Taoísmo e a filosofia de vida de Gandhi, e tendo como pano de fundo a visão ecológica de mundo (VEM), o praticante de ADE aborda as questões de uma perspectiva holística, que não exclui o lado político-ideológico. A ADE pode ser usada na análise de todo e qualquer tipo de texto-discurso, não apenas dos de caráter político-ideológico. Tanto que se faz a análise de um silogismo, um dos textos mais abstratos que existem. No entanto, os textos-discursos prototípicos da ADE são os que envolvem questões de vida na face da terra e que sejam de caráter dialógico.

Palavras-chave: Análise do Discurso Ecossistêmica; ecoideologia; visão ecológica de mundo; análise de textos-discursos em geral.

Abstract: The objective of this article is to present Ecosystemic Discourse Analysis (EDA). Since it is part of Ecosystemic Linguistics (EL), its practionner may avail himself of any of EL's categories. However, EDA has its specific categories, which remain invisible from the macroperspective of EL. They can become accessible through the focussing method, through which the investigator zooms in and makes those concepts and categories visible. EDA's main sources of inspiration are Deep Ecology, Taoism, and Gandhi's philosophy of life, all this against the backdrop of the ecological view of the world. After having a microscopic view of its object, EDA approaches it holistically, taking all sides into consideration as far as possible. It does not restrict itself to texts-discourses smacking of political ideologies. To substantiate this principle, the article analyses of one of the most abstract texts-discourses possible, a syllogism. However, EDA has ist preferred texts-discourses, i.e., those implying life on earth, formulated in dialogical format.

Key-words: Ecosysemic Discourse Analysis; ecoideology; ecological view of the worls; analysis of texts-discourses at large.

1. Introduction

The new discipline Ecosystemic Discourse Analysis (EDA) emerged inside the Brazilian version of Ecolinguistics known as Ecosystemic Linguistics (FINKE, 1996; TRAMPE, 2015; COUTO, 2018). For this reason, it was originally called Critical Ecosystemic Linguistics in order to show that it was that part of Ecosystemic Linguistics whose objective was to be a framework for "critical" analysis of texts-discourses². This name was also influenced by Norman Fairclough's Critical Discourse Analysis. Around two years later it was changed to Ecological Discourse Analysis (EDA). However, due to the fact that in Europe and elsewhere there are also some trends in Ecolinguistics calling themselves "Ecological Discourse Analysis" – in China it is making stride –, as pointed out by the British ecolinguist Arran Stibbe, the discipline was finally re-renamed Ecosystemic Discourse Analysis. This last name clearly shows that the discipline is part of Ecosystemic Linguistics. If we substitute the name Discoursistics for Discourse Analysis as suggested by Couto (2020), the two terms 'Ecosystemic Linguisitics' and 'Ecosystemic Discoursistics' would be perfectly parallel. It is important to stress the fact that these three changes in the name were only "nominal", that is, they did not cause any change whatsoever in the content of the theory. The two last changes maintained the acronym EDA.

EDA is the part of Ecosystemic Linguistics (EL) that deals with texts-discourses. Therefore, let me begin by briefly presenting EL. Although this has already been done in several other publications, it is important to give an outline of it here because practically all its concepts and categories may also be used in EDA. It was originally defined as the study of the relationships between language and environment. Since this definition gave place to some misunderstandings – such as a reification of both "language" and "environment" –, a better definition would be that it is the study of the verbal interactions that take place inside the linguistic ecosystem. This term will be discussed in more detail in the next section.

2.Ecosystemic Linguistics: a brief presentation³

The fact that EDA is part of EL implies that every EL's concepts may be used in EDA. The central concept of Ecosystemic Linguistics is linguistic ecosystem, of which there are at least four. The first is the natural ecosystem of language, consisting of a specific people (P_1) whose members live in their territory (T_1) and communicate among themselves by means of the traditional way of communicating, their language $(L_1)^4$. We will see that this ecosystem is the point of departure for EDA because its main concern is life. The second linguistic ecosystem is the mental ecosystem of language, made up of the brain as the locus or "territory" (T_2) of the neurons, which are the agents (P_2) of the interactions that make up language (L_2) as a mental phenomenon. The third is the social ecosystem of language. It consists of the members of the population (P_3) as social beings, with several social roles, whose social interactions constitute language (L_3) as a social phenomenon. The locus, or "territory" (T_3) of these socio-verbal interactions is society.

The three ecosystems are contained in the integral ecosystem of language, an all-embracing linguistic ecosystem. It says simply that a language (L) can only exist if there is a people (P) in its territory (T). It is different from the natural ecosystem of language because it is a general concept, embracing the natural, the mental and the social. In summary, these linguistic ecosystems are different perspectives from which language can be looked at.

The integral ecosystem of language may be seen from the perspectives of language community (LC) and speech community (SC). LC is the domain of what is called language in common parlance. For instance, the LC of English comprises England, the United States, Canada, Australia, New Zealand, and some other regions of the world. SC designates any domain the linguist delimits

to investigate. It can be of any size, as, for instance, a whole continent, a country, a part of it, a town, a neighborhood of this town, a household in the latter and even two people engaged in conversation. All this is compatible with the original concept of ecosystem in Biology (TANSLEY, 1935).

The most important concept inside biological and linguistic ecosystem is interaction, both organism-world interaction and organism-organism interaction. In EL the former corresponds to reference (signification); the latter, to communication, or communicative interaction. Language is seen as verbal interaction, or communicative interaction, inside the linguistic ecosystem. Therefore, the main type of rules underlying communicative interaction is interactional rules, not systemic rules (grammar). On the contrary, the latter are part of the former. However, the acts of communicative interaction only succeed if there is a previous communion between the dialogue partners. All this is seen from an ecological point of view, not from the logical point of view. From an ecological-philosophical optic, Ecosystemic Linguistics is situated inside the ecological view of the world, which is similar to the Oriental view, not the Occidental Newtonian-Cartesian view. Let me close this brief presentation of EL by pointing out that whereas most ecolinguists around the world do "Ecological Linguistics" – by borrowing concepts from Ecology and using them as metaphors in language studies - EL follows Garner's (2004) suggestion of using ecological concepts not as mere metaphors, but as real ecological concepts. Ecosystemic linguists are "écologistes de la langue" (ecologists of language), as Claude Hagège said of the XIXth century linguist Charles Nodier. Ecosystemic Linguistics is a way of doing Ecolinguistics from within Ecology, not from without. In section 4 there are more ecological categories used in Ecossytemic Linguistics and, consequently, in Ecosystemic Discourse Analysis. For a detailed presentation of the theory in English see Couto (2018).

3. Ecosystemic Discourse Analysis as ecological analysis of discourse

Due to its origin and the philosophical framework it belongs to, Ecosystemic Discourse Analysis is ecosystemic analysis of discourse, not necessarily analysis of ecological discourse (ALEXANDER; STIBBE, 2014). It is a new way of doing discourse analysis. This is partly due to the influences it had. The first one is Ecology. Not only biological Ecology, but also philosophical Ecology, or Ecosophy, as is the case with Deep Ecology, formulated by the Norwegian philosopher Arne Naess (1973, 1989, 2002). General Ecology is part of Biology, the science of life. We will see that the main concern of EDA is life. But, there are other sources of influences of EDA.

From the point of view of valuing life above everything, which includes non-violent action, one of the most conspicuous influences EDA received is Mahatma Gandhi's philosophy of life (PRIVAT, 1957). From Taoism it adopted the ideas or harmony, not segmenting, of emphasizing the whole, not its parts in isolation. It does not separate life from death; they are seen as forming a whole. Martin's (2004, 2006) Positive Discourse Analysis suggested to EDA the idea of emphasizing the positive side of the question, not the negative one (see also STIBBE, 2018). This is also present in Deep Ecology.

We have seen that EDA is not "analysis of ecological discourse", not even of anti- or pseudoecological discourse. It is squarely "ecological analysis of discourse". Of any type of discourse, not only of environmental ones. What is ecological is the analysis, not necessarily the discourse. As a part of Ecosystemic Linguistics, it is an ecological discipline that studies language phenomena, not only a linguistic discipline that studies ecological phenomena. It reminds us of ecolanguage (ecolinguagem), as can be seen in Matos et al. (2014). It pushes forward some ideas

of Positive Discourse Analysis (MARTIN, 2004, 2006; VIAN JR., 2010), which is heavily influenced by Fairclough's Critical Discourse Analysis.

Political ideologies are very important and unavoidable. However, these ideologies frequently emphasize conflict as is the case with the conflict between a "dominant" and "dominated" class or between man and woman (androcentrism). In accordance with the ecological view of the world and Oriental philosophies, like Hinduism, Budhism and Taoism (COUTO, 2012), EDA looks at concepts like *good-evil*, *large-small*, *white-black*, *high-low* from a different perspective. The Occidental view of the world sees them as antagonistic, as one against the other. According to the ecological and Oriental views, *good* only exists if related to *evil* and vice-versa; *large* only in relation to *small*; *white* only in comparison with *black* and so on. In other words, these philosophies see them as forming a whole, inside which they are articulated along the same axis. They are seen from the perspective of harmony, together with everything that has to do with it, not from the viewpoint of the antagonism of political ideologies. For more discussion on this subject, including graphic representations, see Silva (*this volume*).

It is important to point out that ADE is not opposed to the social and class struggles that exist and that are legitimate, such as feminism, the black movement, the LGBTQIA + movement, class movements etc., undertaken by minorized and marginalized social groups, whose aim is to combat or alleviate the inequalities caused by oppression and exploitation inherent in the capitalist system. It in this sense that we understand the value of these mobilizations, and their potential is seen in conjunction with the principles proposed here, unless they are based on excesses that are contrary to EDA's basic purposes. Apart from extremisms – which are exceptions within social and class movements –, which can lead to violent acts, the undertaking of a struggle for human rights must be taken into account in a holistic perspective, in order to fight the inequalities existing in a discriminatory and selfish society. After all, the main objective of ADE is to achieve peaceful respect for diversity and social equity through a humanized look at reality.

The Marxist category of humanism is not welcome, because it smacks of anthropocentrism. It is true that this was not the intention of Marx at the time he lived. Marx (1968) treats nature as something invaluable for the maintenance of human life. In this perspective, nature would be an extension of the human body, establishing a continuous relationship with him that makes life possible. In this case, humans would be the "kings of creation"; everything else exist to serve them, therefore, they may use and abuse everything in the world at their own convenience. This ideology is leading us to a dead end, since we are destroying all the bases of life on earth, a suicidal attitude. EDA follows the principles of Deep Ecology (NAESS, 1973, 1989, 2002; COUTO, 2012: 49-67), and defends self-realization of all beings. Humans do not have more right to life than the other living beings.

EDA does not ignore political, and other, ideologies. As pointed out above, they are unavoidable. For this reason, EDA looks at them from the point of view of ecoideology, the ideology of life. It defends life and fights any form of suffering by a living being. Political ideologies also have to do with life, albeit very indirectly. EDA's practitioners look at them from the perspective of ecoideology, as can be seen in Silva (2020, and *this volume*). In this case, the two main tenets of EDA is a defense of life, accompanied by a fight against avoidable suffering.

It is true that suffering and pain are a kind of protection living beings have against death. Were it not for them, living beings would not mind if their body were mutilated. For this reason, all of them are always looking for their own self-realization or well-being, as can be seen in Deep Ecology. Death exists to give continuity to life, so that nature can recycle the matter of one being into another. Notwithstanding all this, whenever pain, suffering and death are avoidable they must be avoided.

According to Ecosystemic Linguistics' categories, it is important to distinguish physical (natural), mental and social suffering because we are not only animal beings (natural); we also have a mental life and live in society. Physical suffering occurs when there is wound, mutilation of the body: lack of ability to feel pain may lead to a non-noticing of injuries and, consequently, to the loss of parts of the body, as is the case with people with Hansen's disease. Every physical suffering is a movement towards death, which is the maximum physical suffering. Looking for one's own self-realization is an attempt at avoiding or at suppressing it. However, there are degrees of suffering. A pinch, for instance, may be much less serious than a mental torture, an act of harassment or a stream of invectives (mental suffering). Being slandered or ridiculed by somebody publicly (social suffering) is also much more offensive than a pinch. Fernandes (*this volume*) discusses the concept of suffering in detail. The author distinguishes it from pain, and associates both to respect, compassion and fear. Among other things, he shows that it is fear that makes living beings avoid situations that can lead to suffering and to pain as well as to feel compassion for the suffering of other beings.

If a student of EDA decides to analyze a text-discourse about a woman who is frequently beaten by her drunken husband (sometimes she may be even murdered by him), he defends her not for being a woman, as feminist ideology rightly does, nor because it is the case of an act of male chauvinism (machismo). He defends her because she is a living (human) being who is suffering. In other words, she is defended in the name of a much more important cause. Some forms of extremist feminism and ecofeminism deal with questions like these from the point of view of conflict, that is, from the side of confrontation, whereas EDA does it departing from the side of conciliation and harmony, as suggested by Martin's Positive Discourse Analysis. It is not by chance that one important concept in EL is communion.

It should be pointed out that in our society women are objectified and conceived as objects of possession, which justifies the demands of the feminist movement for rights that lead to a more just society in which women can live and fulfill themselves as human beings that they are. The struggle undertaken by the feminist movement is seen by EDA as a legitimate mobilization, unless it reaches the extremes of violence and antagonism, as it occurs in rare exceptions. EDA incorporates the feminist agenda in its holistic view, thinking oppression in general as a result of the ailments caused by the anthropogenic ecosystem in which human relationships are established. It tries to find and reflect on the deep roots that support a reality in which suffering stands out. EDA aims to impact human perspectives on life, showing that, within a society that marginalizes and oppresses differences through a hegemonic pattern, there are ways to accept and value diversity.

By departing from the positive side of the question, EDA sees woman as a man's equal, not his antagonist. The same holds in cases of racism, homophobia, ethnocentrism and so on. In the case of some traditional practices, as the treatment women undergo in some Muslim countries (clitoris excision, for instance), infanticide among some Amerindian groups and others, there is the dilemma of staying on the side of life preservation or of deeply rooted traditional customs. EDA's position is clear: it is decidedly on the side of life. After all, traditional mores may change along the time, but death is irreversible. However, it must be kept in mind that EDA gives only general guidelines from which each individual case may be judged. As a matter of fact, each case is a case, and must be evaluated in the context in which it emerged but having these guidelines as a backdrop. For instance, what to do in the case of the sacrifice of a child – which will cause him/her the maximum suffering (death) – against the suffering of the whole group if its tradition is violated? Let me sum up some of the general characteristics of EDA. Firstly, it places life on earth on the foreground because it is part of Ecology, which is part of Biology, the science of life – remember

that the first linguistic ecosystem is the natural ecosystem of language (see above). Once since political ideologies are inevitable, EDA subordinates them to the ideology of life or ecological ideology (ecoideology). Secondly, due to EDA's affinities with Oriental philosophies (Hinduism, Buddhism, Taoism), it emphasizes cooperation, which may lead to harmony. Thirdly, EDA departs from the ecological point of view, defended by the German philosopher of language and ecolinguist Peter Finke (1996). This point of view is all-embracing, holistic, therefore, very different from the Occidental one. Therefore, EDA analyzes, criticizes and prescribes/recommends behaviors that favor life and avoid suffering. EDA is biocentric and ecocentric. Its preferred object of study is dialogical text-discourses, although it does not exclude other types of discourses. It looks at the text-discourses under investigation as a constituent of communicative interaction, not as its product. In summary, it sees them as an unfolding process, not as a product of acts of communicative interaction. Looking at text-discourses as product of these acts, implies its reification, i.e., considering them an artifact, a thing. EDA, together with Ecosystemic Linguistics, puts emphasis on the process of discourse production, das Fliessen selbst (the flow itself), as Fill (1993) put it.

The ecology of communicative interaction is the nucleus of Ecosystemic Linguistics, and of EDA, by the way. It was hinted at above that EDA does not restrict itself to the social side of language, the social ecosystem of language. On the contrary, it sees language as a biopsychosocial phenomenon. It starts off from the natural side (natural ecosystem of language) but it goes through the mental and ends up in the mental ecosystem. Since it is part of Ecosystemic Linguistics, it recognizes three ecosystems of language, namely, the natural, the mental and the social. It does not refrain from analyzing even spiritual dimension that may exist in the domain it examines. In other words, it does not segment the human being – looking only at his social side –; it looks at him in its entirety, as a biopsychosocial being.

Couto (2019) says that simply applying an existing theoretical model in the analysis of an environmental question is not doing Ecolinguistics. The same can be said of approaches from other areas like Sociology, Philosophy and Psychology which borrows concepts from Ecology in the analysis of texts-discourses having to do with environmental questions. There are some academic M.A. theses and PhD dissertations dealing with these questions even before the emergence of EL/EDA with Fill (1993). An environmental linguist could be induced to consider them Ecolinguistics essays, even if some of them were done by sociologists, psychologists or earth sciences.

Even the layperson can say what s/he thinks about environmental questions. But this is not science, which cannot be defined only by its object of study. In order to be a science Ecolinguistics – which includes Ecosystemic Linguistics, which includes Ecosystemic Discourse Analysis – must be ecological from the epistemological (theoretical model), the methodological and empirical (object of study) points of view. This is what EL and EDA strives to do.

At this point, one could ask the following question: How is it possible that EDA is part of EL – is contained in it – but has its specific concepts, not directly available to an EL analysis? In fact, it is relatively easy to answer this question. As discussed by Silva (2020, and *this volume*), EDA's specific concepts are invisible from a macroscopical point of view, which is the point of view of EL in general. In order to have access to the EDA specific concepts it is necessary to apply what Garner (2004) called 'focusing method'. By doing this, EDA starts off from the natural ecosystem of language. In other words, the investigator focus on life, without adjectives. As can be seen in several parts of this article, EDA follows Deep Ecology's recomendation of intervention in order to defend life. EDA follows not only ethical principles but also deontological ones.

4. Further Categories of Ecology through Ecosystemic Linguistics

There are several other ecological concepts used in Ecosystemic Linguistics that may be used in EDA too. Let me begin with diversity. To accept diversity entails an attitude of tolerance towards the other, above all when s/he is different from us. Not accepting it entails intolerance, what may lead to aggression and violence, mainly against minorities of all types. Acceptance of diversity presupposes an attitude of cooperation and harmony. Cooperation exists in biological Ecology, under the name of harmonic interactions, both intraspecific and interspecific. In the first case, there are the interactions among human beings; in the second, between them and beings of other species as can be seen in Arran Stibbe's and Diego Forte's ecolinguistic investigations. In EL harmony is known as communion. Intimacy among all living beings is one of Deep Ecology's main tenets.

On the opposite side is the stance of subordination of the weak to the more powerful and the consequent imposition of the will of the latter upon the former. This is a question of power, which may lead to fundamentalism, which is frequently associated to violence. For this reason, Deep Ecology recommends a Gandhian attitude, that is, to be firm but without violence. As we have seen, EDA respects diversity of all kinds.

Intimately associated with diversity there is the question of interactions (inter-relations, relations), to the point that interaction is the defining characteristic of language. Nothing is isolated inside the ecosystem, everything is related to everything, directly or indirectly. For this reason, the ecosystem is a network of inter-relations that obtains between and among organisms and environment. The more diversity there are, the more interactions will obtain. But interaction is also intimately associated with the harmony of the whole, hence, with the concept of holism. Interactions are multilateral, multipolar and pluricentric. As Edgar Morin pointed out, there is no center in the interior of an ecosystem. Totalitarianisms of all kinds, on the contrary, are monocentric and centripetal, what frequently leads to conflicts; diversity is not welcome.

In the dynamics of inter-relations, there is always an adaptation of organisms to their environment, and vice-versa, as well as of the organisms among themselves. In the phylogenetic beginning of life on earth adaptation of the environment to organisms was less evident. However, it is increasing each day due to technology. This movement may lead to a dead end. The world and culture (which includes language) are dynamic. They are constantly changing and adapting to the new situations that nature (and culture) presents. Not to adapt is to resist, what may also lead to disharmony, to conflict and violence, both against humans and other beings, living and non-living ones –, as can be seen in predatory actions. According to Darwinism there are competition and survival of the fittest. However, the most recent investigations have shown that more adaptable beings have more chances of survival, not necessarily the strongest, as was the case with dinosaurs. Adaptation is a way of living in harmony with the environment as well as with the other beings. Harmony is a central concept of Taoism and of Deep Ecology as well.

Adaptation is one side of the coin whose other side is evolution. It is well known that evolution takes place cyclically. Everything in nature moves in cycles. This is the case with alternations such as night/day, the seasons of the year, the biological rhythm of our organism and so on. Even in culture and language changes are cyclical. In the world of fashion, for example, how many times we see designers, those who dictate what is fashionable, say that "now what existed in the 1960s and 1980s is chic"? It is enough to create a new term to designate the phenomenon, as, for instance, *retro*. In Couto (2012: 179-199) there are some examples of cyclical evolution in literature and in language. This leads us to the domain of recycling, which could be a precarious solution for capitalist consumerism. Unfortunately, only a minority of people is aware of the fact that consumerism and disposability are harmful to the maintenance of life on earth,

above all in the long term. To do this it is necessary to practice a sustainable economy, that is, one that takes ecology into consideration.

Ecological ideology defends the "3R' principles of the United Nation's Sustainability Goals: Reduce, Reuse, and Recycle" (DASH, 2020). Discarding everything instead of reducing, reusing and recycling implies the use and abuse of natural resources – and not only of living nature –, besides polluting it. Our intervention in nature is increasing each day and becoming increasingly unsustainable. This brings suffering to other living beings, as in the case of exaggerated meat consumption, which requires the sacrifice of hundreds, thousands, millions animals. The extensive raising of cattle destined to slaughterhouses – and for milk production – requires large portions of grasslands for them to graze, in general with only one grass species, as, for instance, bracchiaria plantaginea. This entails the reduction in the diversity of flora, fauna and microorganisms. In order to reduce the number of pests, one avails oneself of pesticides. As is well known, pesticides kill the microorganisms living in the ecosystem at stake, i.e. their annihilation leads to the disappearance of the birds and other species that feed on insects (CARSON, 1962). Back to the ecosystem as a whole we note that it inter-relates with the environing ecosystems, giving and taking matter, energy and information to/from them. In other words, this whole shows up the characteristic of openness, sometimes also called porosity. Together with diversity this characteristic implies tolerance with beings of other species, other ethnic groups, besides running against ethnocentrism, racism and all the remaining "-isms", some of which are mentioned above. It shows us that nothing is isolated. On the contrary, everything is influenced from the outside, besides influencing it. It leads us to be receptive and respect the opinion of the other, even when we disagree with it. Respecting it does not mean to adhere to it. After all, concepts such as "right" and "wrong" are socially created, what implies that they are relative. Besides not existing in nature, they vary from community to community and from social segment to social segment. If we are to use the concept of "wrong", it should be applied to what causes suffering as it is understood in the present context. What does not cause suffering on other beings cannot be legitimately considered wrong. As pointed out by the American ecologist Aldo Leopold, "a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (apud DRENGSON; INOUE, 1995, p. v).

There are several other ecological concepts that can be used in EDA. Among them there are the already mentioned harmonic versus disharmonic relationships, both intra- and inter-specific. Among the inter-specific harmonic relations we could mention inquilinism, and mutualism. In regard to the inter-specific disharmonic relationships, there are above all predatism (predator versus prey) and parasitism (since humans are carnivores, they are predators of several species). Here one could argue that the predator causes suffering in its prey, therefore one should not eat meat⁵. This is true. However, it is also true that this is part of the trophic chain of living nature. It is a way of maintaining its balance, its sustainability. Among the intra-specific disharmonic relations we could mention competition, which also exists inter-specifically. What we call communion in Ecosystemic Linguistics – a pre-requisite to communication – belongs to the intraspecific harmonic relationships. That is to say, in general Ecology, as well as in its philosophical, sociological and anthropological versions, we have many of the concepts for the critical study of texts-discourses referring to the most diverse subjects. Keeping in mind the fact that Biology is the science of life, we do not need to fear biologism. Using general Ecology as a basis for cultural – and linguistic – studies is assuming the point of view of life, rightly studied by Biology of which general Ecology – and Ecolinguistics, above all Ecosystemic Linguistics – is a part.

We should fight even the depredation of inanimate nature. If we do not take care of the waters, for instance, they may be polluted to the point of poisoning not only humans but all other living beings. They can even disappear, in which case humans would also disappear. We would not even have oxygen to breathe. We ought not use certain products that cause the greenhouse effect because we run the risk of being toasted or of dying of skin cancer, or both. It is not simply a question of having an apocalyptic or catastrophic view, a doomsday view. It is a question of being realistic. What we have seen up to now points in this direction. Why not care, why not being prudent?

5. Brief analysis of an abstract text

To analyze environmental, anti-environmental and pseudo-environmental texts-discourses from a politico-ideological point of view is not too difficult. This may be done from the most diverse perspectives, as pointed out above. EDA can be used not only in the analysis of dialogical texts-discourses dealing with life questions. It is appliable even in the analysis of abstract ones, from an ecological point of view. This is what I intend to do with a syllogism, one of the most abstract types of text-discourse, because it would contain only logical relations. The syllogism I will analyze is the following, which belongs to the Aristotelian tradition:

All men are mortal. Socrates is a man. Therefore, Socrates is mortal.

The "subject" of this syllogism is death. Death is related directly to life, it exists only in relation to life, and vice-versa. When we talk about life, death is implied because only living beings die, and all living beings die. In this case, we are coming near the ecological view of the world, since, as we saw above, life is studied by Biology, and Ecology is a part of it.

As stated in *Webster's Encyclopedic Unabridged Dictionary*, syllogism is an "argument the conclusion of which is supported by two premises, of which one (major premise) contains the term (major term) that is the predicate of the conclusion, and the other term (minor premise) contains the term (minor term) that is the subject of the conclusion; common to both premises is a term (middle term) that is excluded from the conclusion". The handbooks of introduction to Logic tell us that syllogism does not describe anything, its value would lie only in the internal logical relations. However, when we look at it from a historical point of view, we see that *Socrates* refers to a man who existed in ancient Greece, whereas *men* refers to the totality of beings like him (*men* and *women*). As to *mortal*, it refers to a feature or quality of all living beings, not only *men* and *women*. These facts were already pointed out by Russell (1982: 56-57), reporting to Parmenides. Therefore, the three pillars of the argument contained in the syllogism refer to the natural world, immediately or mediately. Without this reference there would be no logical connection whatsoever. As the thinkers of the Port-Royal school emphasized, there are logical connections only between entities of the real world (natural, mental, social). Without these entities the syllogism would be meaningless.

Coming to the nucleus of language according to EL and EDA, communicative interaction, we can see that the syllogism is made up of three declarative sentences. As some linguists and philosophers of language have demonstrated, every declarative utterance is an answer to some question, even when it is only a tacit one. In the present instance, *all men are mortal*, *Socrates is a man* and *Socrates is mortal* certainly emerged as answers to philosophical questions of this type. The tacit questions probably were: *are all men mortal? is Socrates a man?* and *is Socrates mortal?* In this case, the components of the syllogism would be indirectly placed inside the nucleus of Ecosystemic Linguistics, and of its extension Ecosystemic Discourse Analysis, namely the

ecology of communicative interaction, which basically consists of questions and answers, i.e., interlocution or dialogue. Something similar happens to proverbs. Paremiologists have demonstrated that mini-texts like *the taste of the pudding is the eating*, may have been produced in some real act of communicative interaction in some time of the past. In this case, the mini-text was an answer to the question: *what is the taste of this pudding*? Somebody could answer: *taste it*! Afterwards, he could exclaim: *Do you see*? *The taste of the pudding is the eating*.

Again, as with the proverbs, the first time the text of the syllogism was produced there was probably a speaker saying to a hearer that "Socrates is mortal because he is a man and all men are mortal", somewhere in ancient Greece. In this first moment the sentence was part of a full ecology of communicative interaction, which included a scenario. Unfortunately, it is practically impossible to recover this context. We can only guess that it may have existed because the "utterance" has been repeated all along history. If it is a repetition, there must have been a first repetition, a moment following its very first use, when it was proffered for the first time. In other words, the historical dimension is also important, as can be seen in Bertrand Russel's text mentioned above.

As to the logical connectors, they may be interpreted in terms of inclusion: *Socrates* belongs to the class of *men*. The latter, on its side, belongs to the class of living beings. For the simple fact of belonging to this class, *men* die, i.e., they are *mortal*. The relation of inclusion exists in nature independently of a living being to observe it. Couto (2009, p. 284-285) mentions the case of the stone inside the fruit. It is there without being placed there by a living being. Nor is it dependent on an animated being to observe it and "create it discursively". Inclusion is one of the most primitive relations, in the sense of being natural. It is the relation par excellence. So much so that the preposition that codifies it, *in*, exists in practically all languages of the world, and is one of the first to be acquired by children. In summary, even "logical relationships" have to do with the natural world in which the drama of life unfolds.

A fundamental difference between EDA and (C)DA is that the former departs from the ecology of communicative interaction as a whole, not only from the product of this interaction, i.e., the utterance, the text-discourse. EDA's preferred type of text is dialogue, not monological texts-discourses as Mikhail Bakhtin put it.

In summary, EDA does depart from the product of the interaction between, say, writer and reader, which appears under the form of a text, which the materialization of what the speaker intended to say. Since it is part of Ecosystemic Linguistics, EDA is interested not only in this product that, in the end, is an artifact, a "thing", but in the whole process of its production. Text-discourse is a "point" in the chain of inter-relations of the process of communicative interaction. Otherwise it can be looked at as the interaction between what the "sender" sent to the "receiver" and the content implied in it. For more comments on EDA, see Couto, Couto & Borges (2015). For a preliminary idea of what is understood by text in Ecosystemic Linguistics, see Couto (2015).

6. Conclusions and outlook

One might think that a new model of Discourse Analysis is not necessary because there are so many available. To the point that they fight one the other. As has already been said of Functionalism in Linguistics, they are a confederation of theories whose only common denominator is the opposition to the Pope. The "pope" in this case is Structuralism, especially Generativism. I am convinced that EDA brings new ideas to the fore of Discourse Analysis for which political, religious and partisan ideologies are not the most important things, although they can also be dealt with. EDA's concepts are not new. They are borrowed from already existing theories philosophies, some of which were mentioned above. But it has something in common

with other theories. For instance, it shares with Marxism looking at the object of study as a totality (which resembles ecological holism), dialectics (akin to ecological interactions), historicity (evolution in Ecology), and the inclusion of the physical, materialism (natural ecosystem of language).

There are basically two types of valid scientific studies. The first is the one that brings new data (unknown phenomena) to our knowledge, as when physics discovers a new body, as an asteroid, a planet or a galaxy or when chemistry/pharmacology "discovers" a new drug that heals a violent disease. Unfortunately, in the domain of human sciences we can hardly "discover" new facts or phenomena, although we can "invent" some, like "political correctness". However, social sciences can create a new theoretical model (point of view) to interpret already known facts differently. If the new interpretation is more interesting than the previous one, the new theoretical model may be considered valid. Otherwise it must be discarded. I am sure that EDA can shed new light on Discourse Analysis. It may even happen that it does not catch on, that is, it is possible that it will not be accepted and/or considered valid by academy. However, one thing is sure: there does not exist any other proposal of a model of Discourse Analysis within the domain of the ecological view of the world, departing from within ecology, not from without.

Notes

- 1. The first Portuguese version of this paper was published in 2013, one year before Alexander & Stibbe (2014), as "Análise do discurso ecológica (ADE)". It is available at
- https://meioambienteelinguagem.blogspot.com/2013/04/analise-do-discurso-ecologica.html . An enlarged and revised version of it was published in *Antropologia do imaginário, ecolinguística e metáfora*. Brasília: Thesaurus, edited by Elza do Couto, Ema Dunck-Cintra & Lorena Borges, 2014, p. 27-41. The present article is a fully revised version of the latter.
- 2. I prefer the use of the compound "text-discourse" because discourse is always materialized in a text. There is no discourse hovering in the air.
- 3. For more discussion on Ecosystemic Linguistics in English, see the papers available in my blog "Ecosystemic Linguistics"

http://ecosystemic-linguistics.blogspot.com/

Couto (2018) is the most detailed presentation of the theory in English.

- 4. The indices are used to indicate that P, T and L have different values in each of the three ecosystems (natural, mental, social).
- 5. There are some initiatives intended to overcome this problem by producing protein without the animal (JACOBS, 2019a, 2019b).
- 6. For the discussion of environmental questions there is salso Environmental Linguistics, despite its fuzziness: it does not require a specific theory or methodology. It is basically defined by the object of study, environmentalism albeit necessarily using a linguistic theory. In Harré; Brockmeier; Mühlhäusler (1999), Mühlhäusler (2003) and Couto (2019) there is some preliminary discussion of Environmental Linguistics.

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