

DOSSIER

On the notion of dialectics in the linguistic bodies theory

Sobre a noção de dialética na teoria dos corpos linguísticos

Nara M. Figueiredo¹

ABSTRACT

This paper addresses the notion of dialectics in the linguistic bodies theory. First, it presents it as a three-aspect concept, namely, the ontological aspect, the methodological aspect, and the dialectical model. Subsequently, it discusses the ontological aspect and the dialectical model and, based on the enactivist linguistic notions of concreteness and abstraction, suggests that it can be conceived as a two-fold concept: methodological and epistemological. This suggestion intends to avoid the paradox we are led to by acknowledging three ontological enactivist claims and a few assumptions of the methodological approach.

Keywords: Dialectics, Enactivism, Language, Epistemology, Ontology.

RESUMO

Este artigo aborda a noção de dialética na teoria dos corpos linguísticos. Em primeiro lugar, apresenta-o como um conceito de três aspectos, a saber, o aspecto ontológico, o aspecto metodológico e o modelo dialético. Posteriormente, discute o aspecto ontológico e o modelo dialético e, a partir das noções enativistas linguísticas de concretude e abstração, sugere que o conceito de dialética pode ser concebido como um conceito duplo: metodológico e epistemológico. Essa sugestão pretende evitar o paradoxo a que somos levados pelo reconhecimento de três afirmações ontológicas enativistas e suposições da abordagem metodológica.

Palavras-chave: Dialética, Enativismo, Linguagem, Epistemologia, Ontologia.

¹ Universidade Estadual de Campinas (Unicamp), Centro de Lógica, Epistemologia e História da Ciência (CLE), Cidade Universitária "Zeferino Vaz", Rua Sérgio Buarque de Holanda, 251, Barão Geraldo, 13083-859, Campinas, SP, Brasil. Email: naramfigueiredo@gmail.com.

Introduction

In order to provide a new enactive-based approach to cognition that deals with the categorical gap between lower-order and higher-order cognitive processes the authors of the book *Linguistic Bodies: The Continuity Between Life and Language* (2018, MIT Press) proposed a rich and intricate theory of cognition aiming at dissolving the incompatibility between correction criteria and natural explanations. This theory provides a framework, or model, for the understanding of bodies, social practices, and language that frames cognition as a three-level domain, namely, the organic viability, the sensorimotor grasp, and the social interaction, and shows several steps for the realization of *linguistic agency*. The theory, which I call linguistic enactivism, rests on a fundamental notion that cuts across the whole model: the concept of dialectics. This concept is understood as a 'unity of opposites' instead of as the traditional conception of dialectics involving a contradiction between opposites sides. I will explain this difference in section 2. As a unity of opposites, dialectics occurs in many, if not all, dimensions of the model and on the very domains that frame cognition. In other words, dialectic situations occur in the three levels of cognition and among them, and in each step of the model towards the realization of linguistic agency, for each of those steps is the result of an interplay between tensions that logically anticipate them (Di Paolo; Cuffari; De Jaegher, 2018).²

The notion of dialectics is presented in different ways throughout the book, and, due to the fact that these differences are not explicitly pointed out, the reader might be confused by them. I have identified three ways in which it can be understood and I classify them in this text as (1) methodological, (2) ontological, and (3) a feature of the model. In section 2.1, I address the author's first understanding of dialectics as "a method of inquiry that moves thought from the abstract to the concrete" (LB, p. 112). This understanding characterizes the first aspect that I point at, the methodological one, for it is clearly a methodological claim. In section 2.2, I present my reading of the first general description of dialectics as "(...) the thinking of opposites and circularities, of relations and tendencies, together with their counter-tendencies, and of transformation and becoming" (LB, p. 107). At this point, the reader will grasp the concept as part of an ontological claim about the nature of cognitive systems, for, it refers to tensions that emerge from the systems: "Dialectical tensions, instead, originate within the system and the multiple relations that constitute it. Tensions emerge as the disharmony and contradictions of the tendencies of operation or potentialities for change between different parts, norms, or functions" (LB, p. 114). Thus, the reader can infer that dialectical tensions exist among opposite tendencies in the world itself.

Later on, when the categories of the model are more specifically explained, the reader faces the question of whether dia-

lectics encompasses also the very model, which is dialectical and "inseparable from the concrete relations we find in the human lifeworld" (LB, p. 138). Thus, in section 2.3, I present a third way the reader can understand the concept of dialectics, namely, as a feature of the model. This third aspect illustrates the main challenge to which I point at, namely, when we say that the theoretical model is inseparable from concrete relations we find in the human lifeworld, which reflects the perspective put forward in the book - that we bring forth a world in the relations with our *milieu* (social environment) - we must acknowledge that everything there is, is constituted by relations, there is no ontological claim deeper than that. If everything is relationally constituted, then, our conceptions and models can only be epistemological perspectives, resulting from our relations with our milieu. There is no independent dialectical world that we can account for ontologically, since things are what they are (to us) only in relation to us, according to the way we relate to them, be these ways perceptual-conceptual relations, scientific investigations or any other.

As we can see, the reader can identify three aspects under which one can understand dialectics: the supposed ontological aspect, the methodological aspect and the very dialectical model. In this paper, I will first unfold these aspects and suggest that the authors don't have to compromise with an ontology, but only with an epistemological claim that is consistent with their view of concreteness as a *constant goal* of considering elements as embedded within the totality of their relations. Thus, I will suggest that dialectics could be understood as a two-fold concept according to its methodological aspect and to its epistemological aspect.

Thus, I will suggest that dialectics should be understood as a two-fold concept according to its methodological aspect and to its epistemological aspect. This suggestion rests on a clear-cut distinction between ontology and epistemology which I understand as follows: ontological claims are, in a broad way, claims in the context of the study and establishment of what there is - what exists - and of the features and relations of these things (Hofweber, 2020). Epistemological claims are, in contrast to that, claims in the context of the study of what we *know* about what there is. Thus, the central point of epistemological claims is our cognitive success, may it be in perceptual-conceptual situations, in scientific investigations, theoretical frameworks, among others, given all the available evidence and the methods of investigation we have.

To achieve my aim of presenting the very notion of dialectics and suggesting it could be understood as a two-fold concept: methodological and epistemological, I will first introduce the enactivist linguistic theory, subsequently present the three aspects under which one can understand the notion of dialectics and finally suggest the reason why it could be understood as a two-fold concept: it avoids the paradox of the enactivist dialectics, which we are led to when we acknowledge three ontological enactivist claims and a few assumptions of the methodological approach.

² All references to the book will be made by the abbreviation 'LB'.

1. Linguistic Enactivism

The theory of linguistic bodies proposes that we conceive bodies (our bodies) as three-domain entities. These domains can be named as (1) the biological, or organic, body, (2) the sensorimotor body and (3) the interactive, or intersubjective, body. The organic dimension of the body is characterized by “anatomical structures or physiology, or as bundles of sensors, effectors, and neuromuscular tissues” (LB, p. 24), physicochemical processes of the organism, metabolic, immunological processes etc., and precarious processes of self-individuation and adaptive engagement (coupling) with the environment. These structures and processes can be, and in general are, explained by investigations in the natural sciences. The sensorimotor dimension involves the processes of engagement (coupling) of the agent³ with the environment. These processes are not separated from neurobiological processes or from the relationships of organisms with other agents (LB, p.21). The intersubjective dimension is characterized by the agent’s interaction with other agents that relate to him/her not only as objects of contemplation, obstacle or use, but as powers of interpellation, which inquire him/her, ignore him/her, support him/her, respond to him/her, smile, cry, and share a world of activities and concerns with him/her (LB, p. 62).

The thesis presented in the book is that dialectical tensions occur between the most diverse opposing trends. At the corporeal level, they occur between and within the body’s own dimensions, which are: organic, sensorimotor and intersubjective. One example is the primordial tension of the autopoietic systems that occurs between the tendencies of self-production and self-distinction: “The primordial tension between an organism’s distinctiveness and its opening to the world is inherent in living bodies” (LB, p. 41). Let me briefly explain that: every living organism is an autopoietic system. Autopoietic systems are autonomous, in the sense that they self-regulate, but they are not independent, for they need means for self-production. Autopoietic systems can be defined as networks of “biochemical processes organized in such a way that the operation of these processes” (LB, p. 329) support the organism and its relations with the environment. These processes involve the system’s self-distinction in relation to the environment, as well as the system’s self-production from the environment. Self-production is the process by which the system uses matter and energy, from the environment, for its own self-organization; and self-distinction is the process of rejecting the matter and energy from the environment. Self-production and self-distinction interact dialectically. This means that the organism adaptively regulates its coupling with the world selecting what it accepts and what it rejects from the world.

Dialectical tensions - and their overcoming by means of transformations and mutual influences - constitute the normativity of a certain domain, which interacts with the normativity of other domains, ultimately resulting in the behavior of organisms that we observe in interactive encounters, when we consider human interaction, for example. In other words, from the primordial tension between self-distinction and self-production we can conceive dialectical pairs of opposite tendencies not only in specific domains of a body, but also among the domains and among bodies. For example, there can be a tendency of a biological need in the organic level, but a countertendency of a sensorimotor challenge on the sensorimotor level, or even on the intersubjective level - let us say one must use the toilet but the door of the only toilet available is locked, i.e. the conditions of the environment prevent the navigation of the organism to the toilet bowl. This is a tension between the organic and the sensorimotor levels. Now let us assume that the overcoming of this tension is given by the solution of peeing on the grass outside the house, this could provoke a tension between the organic and intersubjective levels, since many humans are conditioned not to pee in public. As we can observe, the very conception of dialectics - as constant tensions that originate between multiple relations that constitute a system - is a key element of the theory, for it identifies the very source of normativity. These tensions are due to the disharmony and contradictions of operating trends between different parts, norms or functions of the system (LB, p. 114).

Thus, we have *individual normativity* followed by *interactive normativity*, which is the idea that in social encounters, two or more organic systems co-regulate, for the interplay of their own sensorimotor normativities constitutes a dialectic tension. The interactions of the organism with the world and with others promote *sense-making*, which is defined as “The active adaptive engagement of an autonomous system with its environment in terms of the differential virtual implications for its ongoing form of life. The basic, most general form of all cognitive and affective activity manifested experientially as a structure of caring” (LB, p. 332). As sense-making can be done jointly and it is affected by coordination patterns, breakdowns and recoveries undergone during social encounters, *participatory sense-making* comes into play. Participatory sense-making is, then, “(...) the coordination of intentional activity in interaction, whereby individual sense-making processes are affected and new domains of social sense-making can be generated that were not available to each individual on her own” (LB, p. 73). Sense-making and participatory sense-making are the conceptual foundation of our linguistic capacities.

From participatory sense-making and the interplay between individual and interactive normativity, the authors

³ See Barandian; Di Paolo; Rohde (2009) for a definition of agency.

⁴ The theory of linguistic bodies, as a whole, aims to show “the logic of the activity of using language” (LB, p. 133). What I call ‘dialectical model of cognition’ is defined as a theoretical model that explains the “conceptual emergence of linguistic bodies out of participatory sense-making” (LB, p. 254). This model of how participatory sense-making leads to linguistic bodies is part of the theory.

present the dialectical model of cognition⁴, which encompasses dialectical tensions that operate from biological (organic) to social (interactive) levels and it builds up through seven other dialectic steps leading us to the notion of linguistic agency. Each step “breaks into its main form of tension” (LB, p. 160) and generates, or leads to, the next step. To illustrate, I will briefly explain the first step of the model: participatory sense-making. Participatory sense-making breaks into individual norms and interactive norms. As I mentioned before, individual norms are constituted by the essential tensions between self-production and self-distinction among the three dimensions of embodiment.⁵ Each interactive situation has its own interactive norms, which are constituted by the combination of the individual normativities. In practical terms, a good example for this autonomous normativity of interactive situations is the narrow corridor case: subject A wants to walk through a narrow corridor towards the exit of the building while subject B is coming on the opposite direction, both people want to pass by each other, but they bump into each other a few times before being able to pass by, because the corridor is narrow and the space is restricted. Both agents, together, self-regulate their actions, despite the fact that they are not explicitly intentionally coordinating⁶ their actions at first (LB, p.142), otherwise they wouldn’t bump into each other. This example illustrates how the combinations of opposite tendencies offered by the individual’s own normativities and the constraints of the scene is transformed in the dialectical relation.

2. The concept of dialectics

In philosophy, dialectics is traditionally understood as a method of argumentation that involves two opposite sides and a contradiction between them. “(...) Plato, for instance, presented his philosophical argument as a back-and-forth dialogue or debate, generally between the character of Socrates, on one side, and some person or group of people to whom Socrates was talking (his interlocutors), on the other” (Maybee, 2018, para. 1). Linguistic enactivism, in contrast to that, relies on the notion of dialectics in Marxian and Engelian thought, which has its ultimate origin in Hegelian philosophy and takes the transcendence of dichotomies in favour of “a unity of opposites” (Loader, 2015).⁷

2.1. Dialectics as a method

The first aspect the reader can identify in the book is the conception of dialectics as a method, which is strongly influenced by the Hegelian view of systematic dialectics, for it is a way of thinking. As I mentioned before, dialectics is considered in the linguistic bodies theory as an “inquiry that moves thought from the abstract to the concrete” (LB, p. 112). For understanding their view, let us consider their conception of abstractness and concreteness.

Concreteness is traditionally considered in the twentieth century philosophy as a feature of a material object in contrast to abstractness. This distinction marks a line in the metaphysical debate about entities. There is no consensual account of what they are, but there are clear paradigmatic cases that enable the distinction: “(...) [I]t is universally acknowledged that numbers and the other objects of pure mathematics are abstract (if they exist), whereas rocks and trees and human beings are concrete” (Rosen, 2020, para. 1). According to the authors of linguistic enactivism, the philosophical tradition maintains that “(...) the concrete is that which is closer to actual perceptions, to the facticity of the real world, while the abstract is that which is more general, that which, removed from the senses, indicates commonalities across actual instantiations” (LB, p. 111). Indeed, it is acknowledged that the distinction between the mental and material realms have been a crucial factor in the development of distinction between abstract and concrete since Descartes (see Rosen, 2020).

Linguistic Enactivism (LB, p. 112), in contrast to the traditional distinction presented above, conceives concreteness “as both material operations and epistemological attitudes.” In this perspective, abstractness is considered as “synonymous with isolation, decontextualization, or separation from a set of relations.” This understanding is also justified by the etymology of the word, “ab+trahere ‘to pull or draw away from, to remove’” and it can be applied to both realms distinguished by cartesian views, either to the realm of ideas, or to the realm of material objects. Concreteness is then, “equally applicable to both ideas and objects and involves the opposite move of examining something by considering it increasingly embedded within a network of relations.” In other words, the more something - either

⁵ Keep in mind that we are talking about situated (embedded) bodies, which interact constantly with others and with the world. These processes don’t start from the individual. They are constantly developing and immersed in networks of relations. The theory is an attempt to abstract and objectify parts of these processes which are constantly happening. As all abstraction and objectification, according to the authors, it has its limitations, and it will always have. It is worth noting that the very concepts of abstraction and objectification have its own specific definitions in the book. I am using them here according to these definitions.

⁶ I would like to refer here to the important concepts of dissonance and synergy. Although I shall not go into the details here, these concepts are fundamental for explaining social interactions.

⁷ According to Loader (2015), we can distinguish Hegel’s dialectics into two different domains: one that is the very unfolding of events and one that has to do with a categorization of the world - despite the fact that sometimes the very categorization of the world is the logic of the unfolding of events. The first one has to do with transitions manifest in the activities of individuals, and their consciousness. The second one has to do with the categorical analysis characteristic of our understanding of material phenomena. In this categorization domain, the Hegelian dialectics is a way of thinking that avoids the process of understanding a phenomenon by considering its parts in isolation from other parts.

an object or an idea - is considered in isolation from its network of relations, the more abstractly it is considered. An example of that is the scientific common practice of studying an object of study in the lab, in isolation from its natural surroundings. Take as an illustration the famous drug study conducted for the first time on rats living in a socially favourable environment.⁸ The study investigated the difference of morphine self-administration of rats in isolated standard laboratory cages and in a large open box that reproduced living social conditions of rats (Alexander et. al., 1978). This is a good example of an attempt to consider an object of study more concretely according to the definition of linguistic enactivism. In line with this thought, there has been an increasing interest in the study of "cognition in the wild" (Hutchins, 1995), i.e., "to consider the complexities of everyday sociomaterial engagements, the experience of living and interacting in the real world, stepping outside the lab" (LB, p. 111)

As a method, dialectics is, then, a particular way of approaching something by attempting to consider the biggest number of possible forms of relations it is involved in, for it is a way of going towards the concrete relations. In this activity of considering something in its concreteness, there is an "ongoing confrontation between patterns of thoughts and real situations" (LB, p. 112), for, due to the very nature of our epistemological condition we will constantly fail to consider something in its concrete totality.

Concreteness is, then, the never reaching aim of a dialectical method. For, it is the way things are, namely, essentially related to uncountable other things, i.e. in their network of relations, and it is an impossible task to understand things in their totality. Nevertheless, "Concreteness guides us into making appropriate interpretations of the terms of the definition, or amending those terms, eventually even rejecting them if necessary" (LB, p. 29). Formal or theoretical definitions, in this context, are the abstract counterpart of concrete totalities, they may be given by patterns of thoughts or linguistic expressions. Their main characteristics is the fact that they are a partial way of cognitive living systems of interpreting, conceiving or perceiving, concrete totalities. In this context "(...) formal definitions [are used] as tools for thinking, not as ways of abstractly capturing once and for all the phenomena of interest" (LB, p. 29). Thus, the proposal of concreteness as a guide into appropriate interpretations is an alternative to considering formal definitions as ways of capturing once and for all phenomena. As an example, a definition of 'recursion' as a feature of language by means of which we refer to internal

elements of a sentence⁹ is a theoretical definition that selects a notion as central at the cost of ignoring the networked relations it is involved in when it is working in its concrete totality (LB, p. 29).

The methodological approach suggested in the book for avoiding the selection of central notions at the cost of ignoring its relations is best described in this passage:

In practice, this means proceeding by a series of steps. First, a complex whole is presented, initially using a well-chosen starting point, an abstraction that captures something important about the actual whole. Second, since the abstract whole is not fully realized or totally determined, its dialectical situation must be revealed through an analysis of tensions in potentialities and barriers, tendencies and countertendencies, and so on. Third, a passage toward a new dialectical situation is described by presenting the empirically known conditions and events that are able to realize the potentialities in the original situation. In general, these actualities will be historically contingent. The steps are then repeated, keeping to a minimalist spirit to avoid jumping stages, and describing the progressive concretization of the whole with as much detail as required (LB, p. 113).

The result of this methodological proposal is the concretization of concepts, i.e. of notions selected and developed from concrete totalities. This concretization is illustrated by the concept of autopoiesis (autopoietic systems), which substitutes the formal definition of organism: the example of the primordial tension of autopoietic systems, i.e. "[...] autopoiesis as opposite tendencies of self-production and self-distinction] is a less abstract understanding of the initial whole (a formal, set-theoretic notion of the organism turns into a situated, dynamic concept of lived activity). [Thus,] Concretized concepts are what the method yields" (LB, p. 114).

Dialectics as a method can¹⁰, then, be considered as an *epistemological tool*

(...) useful for tracking the changing relations between systems and the evolution of concepts themselves. Dialectics can set the stage for dynamical analysis, (...) can serve

⁸ See the article "The effect of housing and gender on morphine self-administration in rats" by Alexander, B. K., Coombs, R. B., & Haddaway, P. F., published in 1978 in *Pharmacology*. This illustrative example is merely to explain the difference of considering an object abstractly or concretely according to the definition of linguistic enactivism. There are several studies both questioning and reinforcing the effects of rats drug consumption depending on environment enrichment. It is also worth pointing out that results of experiments may be influenced by the very settings of experiments, which consider objects of study in isolation of their natural environment.

⁹ This is a general definition for illustrative purposes. Recursion is a complex concept, often used in slightly different ways (see Corballis, 2011).

¹⁰ There are several benefits of the method suggested by the authors. I will not explore them here.

as a way of revealing the conceptual linkages between elements, [and] (...) it can also serve for understanding how the tensions between elements change over time (LB, p.109).

This methodological aspect of dialectics is in line with the systematic domain in Hegel's dialectic. For, it has to do with the categorical analysis characteristic of our understanding of material phenomena (Loader, 2015). In this categorization domain, the Hegelian dialectics is a way of thinking that avoids the process of understanding a phenomenon by considering its parts in isolation from other parts. Dialectics is a way of thinking that seeks *understanding* by considering that "(...) things are what they are only in relation to other things and can only be adequately understood in their interconnectedness" (Loader, 2015, p. 83) in their change over time and in the superseding of dichotomies.

This character of the methodological aspect of dialectics is a key element for me to propose the view that dialectics should be understood as methodological and epistemological because it highlights that the method is a way of thinking that seeks understanding, which is in itself, an epistemological stance.

2.2. Dialectics as an ontology

The ontological aspect of dialectics can be identified in several passages of the book. It is identified by the underlying claim that the very nature of cognitive systems is dialectical and it is in line with the Hegelian domain of dialectics manifested in the very unfolding of events:

Dialectical tensions, instead, originate within the system and the multiple relations that constitute it. Tensions emerge as the disharmony and contradictions of the tendencies of operation or potentialities for change between different parts, norms, or functions. When a passage out of a dialectical situation into another occurs, oppositions are transformed rather than equilibrated (LB, p. 114).

Thus, the reader wonders that in the Linguistic Bodies theory, dialectics should not be understood merely as a methodological aspect useful to comprehend cognitive systems. Dialectics is a mode of relation between opposing tendencies in nature. As it is exemplified by the aforementioned tension between self-production and self-distinction in autopoietic systems and it is present on every co-dependent pair of opposite tendencies, i.e. "[t]he tension (...) is manifested at all levels with the result that living systems are rendered intrinsically active, self-differentiating, and restless" (LB, p. 41).

Based on Simondon (2016), the authors conceive dialectical *situations* - indicating the ontological approach - as "(...) a tension between unrealized potentialities and barriers to their realization. It is a metastable situation that may lead to a process of innovative resolution or individuation if met with appropriate material conditions and triggering events" (LB, p. 113). In this context, dialectics is a constant interaction, or engagement, between tendencies where there is no equilibrium or golden mean,¹¹ but the ongoing negotiation between tendencies, for they are codependent and frequently superseded and transformed. In other words, my understanding of the expression 'met with material conditions and triggering events' is that these constant engagements require and acquire different outcomes depending on several contingent conditions of the parts involved and on several contingent features of situations. This, let us call it, *broad contingency*, is given by the very lived situations an organism enacts and it is approached by the authors, in the domain of linguistic bodies interactions, by the seventh step of the model: *participation genres*.

For a textual reference to the reading I presented in the previous paragraph, I refer to two citations, where the authors explain the opposing tendencies of the sixth step of the dialectical model - between *utterance production* and *interpretation* -, and where they refer to the superseding of dialectical situations, respectively. In these passages, they mention precisely the negotiative aspect: the non-golden-mean outcome and the transformation: "The codependence and polarity between production and interpretation result in divergent tendencies. They demand an active negotiation among the participants. There is no context-free golden mean" (LB, p. 178); and "When a passage out of a dialectical situation into another occurs, oppositions are transformed rather than equilibrated" (LB, p.114). As we can see, the authors consider that the very ever-present process of self-individuation enacted by living organisms, "(...) is precisely the avoidance of full stability by ongoing renewal of metastable states rich in potentialities" (LB, p. 41).

The point is, then, that the notion of dialectics is clearly intended also as part of an ontology of organisms, for, throughout the book and as I referred to in section one, the authors defend the claim that dialectical tensions are inherent to living beings from the primordial tension between the organism's opening and its distinctiveness of the world to the most sophisticated forms of social interactions when it comes to the tension between production and interpretation in linguistic understanding.

2.3. The dialectical model

The third aspect that I highlight about the concept of dialectics is the characterization of the theoretical model. The

11 A golden mean is an intermediate state between two extremes where the precise middle, the equilibrium, is achieved.

theory of linguistic bodies encompasses an eight-step theoretical model that describes the “conceptual emergence of linguistic bodies out of participatory sense-making” (LB, p. 254). The steps are: (1) Participatory sense-making, (2) Social acts, (3) Coordination of social acts, (4) Normativity of Social acts, (5) Community of interactors, (6) Dialogue and recognition, (7) Participation genres and (8) Reported utterances. As I mentioned before, each of these steps “breaks down into its main form of tension” (LB, p. 160) and generates, or leads to, the next step.

The reasons why the model is theoretical and dialectical are, in my understanding, three. First, it is a theoretical model because it is an elaboration of conceptual categories. In this sense, it is not a mathematical model, nor a computational model. Second, the steps of the model are divided into opposing tendencies - their main form of tension. This is the main reason why the model is considered dialectical, because it reproduces the tensions assumedly present in the phenomena it describes. Then, since dialectics is a way of thinking (as we have seen in section 2.1) that allows us to get closer to the concrete, the third reason why the model is dialectical is that it is understood as a more concrete approach than other conceptions of cognition. This understanding is due to its two main characteristics, the aforementioned (1) consideration for the tensions in which the steps are divided into, which is taken to be a way of getting closer to the concrete; and (2) the consideration of the relations between the very steps of the model and the dimensions of embodiment.

When the reader takes (1) and (2), namely, the accounting for tensions and the accounting for relations, as features which are proper of the concreteness of the model, she assumes that these methods (1 and 2) are ways of treating the object of study in question as immersed in its network of relations. And, as we can read on the text, the model is conceived as inseparable from concrete relations:

The development of categories in the dialectical model is inseparable from the concrete relations we find in the human lifeworld. It is also inseparable from history and from cognitive and social development. These concrete relations and historical elements feed into the understanding of the transitions between the forms of social agency we analyze here (LB, p. 138).

As the model is considered as a development of categories, and as the authors indicate that the theory and the model should be corrected and complemented from its current version, I take the model to be one possible framing of concrete relations. If this is correct, or, in other words, the model is one possible understanding of concrete relations, then, this is where we see how important is the epistemological character of dialectics, for, the very theoretical model of cognition is composed of claims that reflect our understanding of how things are.

3. Final remarks: the ontology of linguistic enactivism

The three conceptions of dialectics that I identified throughout the book and presented above can be synthesized as (1) method, (2) ontology and (3) model because (1) dialectics is “a method of inquiry that moves thought from the abstract to the concrete” (LB, p. 112); (2) “Dialectical tensions originate within the system and the multiple relations that constitute it” (LB, p. 114); and (3) dialectics is also “The development of categories in the dialectical model” (LB, p. 138). These definitions indicate that the method is a way of analyzing and framing the concrete relations that originate in the systems that we want to understand; for the ontological aspect is a way of accounting for the nature of things; and the model with its categories, together with the statement that it should be developed and corrected (LB, p. 133), indicates that it is one possible way of framing the concrete.

After identifying these three aspects of the concept of dialectics and analyzing them more carefully, I would like to propose a new understanding of it, as a twofold concept: methodological and epistemological. For this proposal, I start from that broad first understanding provided by the methodological aspect, namely, dialectics as a way of thinking that seeks *understanding*, given that things can only be understood in their interconnections and their change over time. As stated in the introduction, I take that epistemological claims are made in the context of what we know about what there is. This context is a context of relations; in other words, our ways of relating to the world we inhabit are ways in which we know it. As dialectics is a way of thinking that seeks understanding, or knowledge, it is, with no doubt, an epistemological enterprise. So, from the methodological aspect we are easily led to the epistemological aspect. But let us unfold this a little further before getting to the suggestion that we could avoid committing to the ontological stance of dialectics.

There are three important ontological enactivist claims and a few assumptions of the methodological approach that are important to my argument. The ontological enactivist claims are: (1) Things are concrete - essentially related to other things, as we have seen in section 2.1; (2) Environment and organism are mutually constituted (Varela; Thompson; Rosh, 2016); and (3) Things change over time. The assumptions of the methodological approach are indicated by the relevant passages (LB, p. 113) I mentioned in section 2.1, namely, that we must start the application of the dialectical method by considering “(...) an abstraction that captures something important about the actual whole.” This starting point should, then, be considered as an abstract whole which “(...) is not fully realized or totally determined (...)” Then, “(...) a passage toward a new dialectical situation is described by presenting the empirically known conditions and events (...) [and] in general, these actualities will be historically contingent” (LB, p. 113).

In assuming that things are constantly changing and that every description is a partial description, as it is assumed by the dialectical methodological approach, we must concede that every theory is itself an epistemological enterprise; in other words, it is one way of framing concrete relations which we will never know, or understand, as a whole. This means that, in analyzing a situation dialectically or engendering in the methodological approach offered by linguistic enactivism, one is not describing how things are in their totality, one is proposing an epistemological take, a perspective - a partial description, by definition, which is observed in the dialectical model presented in section 2.3. Thus, we have the methodological and epistemological aspects of dialectics. Let us now address the question of ontology.

The authors say that ontological questions are not reduced to epistemology, as we can read on section 6.2:

(...) the whole system is set in motion and ontological questions are neither reduced to epistemology nor severed from it. As we have seen in the first part, significance is enacted by bodies in the world, which are also bodies of the world. But this is nothing if not the dialectical transformation of a solid dichotomy into a fluid, dynamic, ongoing becoming of bodies in action. This is at the core of the original formulation of enactive ideas when it is said that enaction brings forth a world (Varela et al. 1991). In this sense, dialectics is, and has been since the start, one way of thinking enactively (LB, p. 111).

Despite the fact that ontological questions are not reduced to epistemology, I believe that it is precisely for the fact that significance is enacted by bodies which are also part of the world, that every significance is already an epistemological perspective, and dialectics is, as mentioned in this very quotation, a way of thinking, which brings us more understanding of the world and of ourselves. Let me unfold the statement that every significance is already an epistemological perspective: significance is enacted by bodies according to their relations with the world, this means that it may be different according to the constitution of these bodies - for example, a tall body affords actions that a short body doesn't - and contingent on body constitutions, tools, scientific tools, historical relations with a certain situation and so on. Thus, every significance is constitutively dependent on an epistemological perspective.

Therefore, if we accept the primary ontological claim that things are concrete¹², including our own interaction with the world we live in, our conceptions and models can only be epistemological perspectives, resulting from our relations

with our milieu. There is no independent world that we can account for ontologically, since things are what they are (to us) only in relation to us, and according to the way we relate to them, be these ways scientific investigations or perceptual-conceptual relations.

This is our paradox in the enactivist framework: for a claim to be ontological, it must be epistemological, for the world is constituted in the epistemic relations we have with our milieu. This means that, on every theory, when we try to offer an ontology, we are committed with an epistemological perspective, by definition. My interlocutor may object to this by suggesting that I haven't grasped the difference between ontology and epistemology and arguing that I am dissolving the ontological proposal by suggesting that there is no such thing as the study of what there is (ontology). I do not suggest that. I do acknowledge that there are proper ontological claims in the enactivist theories, and, more than that, I believe that the main ontological claim, namely, the claim that everything is mutually constituted, prevents us of defending that the concept of dialectics can also be an ontological concept. This is so because dialectics must be our way of interacting with the world, which is the way we make sense of the world (we know, understand, conceive and so on).

Consequently, this is the paradox of the enactivist dialectics: dialectical tensions abstracted by the model cannot be ontological if they depend on constant concretization given that concretization is an epistemic activity. That is, the dialectical model has to be epistemic because it is built from the epistemic relationship. On the other hand, it may be that the authors say that the dialectical model is intended to explain the very nature of cognitive processes (and of all relations in the world - which are dialectical) so it is a claim about what they are, being, in this case, ontological. Then, we should accept that the model explains the dialectics that there is in the world. In this case, the dialectical model is ontological. But, once again, the dialectical model depends on the constant concretization, and in this sense, it will change according to the way we relate to the world.

Maybe, the best way to conceive this paradox is, in an admittedly circular manner, as a form of dialectical tension between ontology and epistemology. This would mean that we could consider the world as constantly changing and our relations to the world as constantly changing as well. But I will not explore this idea here. I will, for now, propose that the concept should be understood as twofold: as a methodological proposal and as a feature of the model (epistemological) - which is the partial result of the ever-present investigations towards the concrete - as long as it keeps its main feature as an "(...) ongoing confrontation between patterns of thoughts and real situations" (LB, p. 112). This proposal avoids the aforementioned paradox by acknowledging other enactivist ontological claims rather than the notion of dialectics. In this

¹² This ontological claim can be developed into a stronger ontological claim, namely, that everything there is are relations. Although I'm very sympathetic to this claim I will not unfold this view here.

way, linguistic enactivism can be free of this issue by conceiving dialectics as twofold.

Dialectics can be defined, then, in an epistemological perspective, as a co-developing pair: method and model. For they constantly feed from each other by the updates of the model given the very nature of the method as an ongoing process of confrontation between patterns of thoughts and real situations. Thus, given the very nature of the method of confronting patterns of thought with concrete relations present in real situations, which are, by definition, dynamic and autonomous in their normativity, the model is not only in its current stage open to further applications, extensions, “scrutiny, criticism, and interpretive accommodations” (LB, p. 133), but it will remain always open to that; and it is the perennial task of philosophy to keep developing it.

References:

- ALEXANDER, B. K.; COAMBS, R. B.; HADAWAY, P. F. 1978. The effect of housing and gender on morphine self-administration in rats. *Psychopharmacology*, **58**(2): 175–179. doi:10.1007/bf00426903
- BARANDIARAN, X. E.; DI PAOLO, E.; ROHDE, M. 2009. Defining agency: individuality, normativity, asymmetry, and spatio-temporality in action. *Adaptive Behavior*, **17**(5): 367–386. doi:10.1177/1059712309343819.
- CORBALLIS, M. C. 2011. What is recursion. In: M. C. CORBALLIS *The Recursive Mind: The Origins of Human Language, Thought, and Civilization*, Princeton, Princeton University Press, p. 1-16.
- DI PAOLO, E.; CUFFARI, E.; DE JAEGHER, H. 2018. *Linguistic Bodies: The Continuity between Life and Language*. Cambridge, MA, MIT Press.
- HOFWEBER, T. 2020. Logic and Ontology. *The Stanford Encyclopedia of Philosophy* (Summer 2020 Edition), Edward N. Zalta (ed.).
<<https://plato.stanford.edu/archives/sum2020/entries/logic-ontology/>>.
- HUTCHINS, E. 1995. *Cognition in the Wild*. Cambridge, MA, MIT Press.
- LOADER, P. 2015. Marx and enactivism. *Intellectica*, **63**: 65–91.
- MAYBEE, J. E. 2018. Hegel's Dialectics. *The Stanford Encyclopedia of Philosophy* (Summer 2018 Edition), Edward N. Zalta (ed.).
<<https://plato.stanford.edu/archives/sum2018/entries/hegel-dialectics/>>.
- ROSEN, G. 2020. Abstract Objects. *The Stanford Encyclopedia of Philosophy* (Spring 2020 Edition), Edward N. Zalta (ed.).
<<https://plato.stanford.edu/archives/spr2020/entries/abstract-objects/>>.
- SIMONDON, G. 2016. *Sur la Philosophie* (1950–1980). Paris, PUF.
- VARELA, F. J.; THOMPSON, E.; ROSCH, E. 2016. *The Embodied Mind: Cognitive Science and Human Experience*. Revised Edition. Cambridge, MA, MIT Press.

Submitted on October 12, 2020.
Accepted on December 07, 2020.