Cognitivism and the intellectualist vision of the mind

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Abstract: No one can deny that enactive approaches to the mind are here to stay. However, much of this revolution has been built on the grounds of conceptual confusions and hurried anlyses that undermine enactive claims. The aim of this paper is to weaken the charge of intellectualism against cognitivism developed by Hutto and Myin. This charge turns to be central to the enactive purpose of setting up a fully post-cognitivist position. I will follow a strategy of conceptual elucidation of "intellectualism". Hutto and Myin (2013, 2017) present two alternative characterizations of this notion. The first is tied to the notion of cartesian inside of individuals (which I will call "cartesian intellectuallism"), and the second is tied to the idea that there is no cognition without content (which I will call "semantic intellectualism"). I would like to point out that intellectuallism neither understood as a cartesian thesis nor as a semantic one describes the fundamental tenets of cognitivism.

Key words: Radical Enactivism, Cartesianismo, Computational and Representational Theory of Mind, Mental Content.

1. Introduction

No one can deny that enactive approaches to the mind are here to stay. Across the board, they spur a theoretical change against classical tenets from cognitivism such as representationalism and computationalism. Radicalized positions understand cognition without any commitment to the idea of representational content (Hutto and Myin 2013). Nevertheless, much of this revolution has been built on the grounds of conceptual confusions and hurried anlyses that undermine enactive claims. Aizawa (2014) draws attention to one of these confusions. The heart of his criticism is that some enactivists do not mean by "cognition" what cognitivists have meant by "cognition". Instead, they use this word to describe what in cognitive science would be called "behavior." Let me emphasize that this is not a mere terminological confusion. In addition, it opens the possibility to state that basic cognition lacks representations providing cases of behavior without representations.

In this paper I follow Aizawa´s call for clarity. I will remark another conceptual difficulty that weakens the enactivist´s attempts. I will focus on the critical assumption that congitivism constitues an "intellectualist vision of the mind" (Hutto and Myin 2017, 3). According to radical enactivism, intellectuallism would be the methodological and metaphysicall background involved in the classical idea that the mind computes

over symbols. Hutto and Myin (2013) baptized "I-cognition" the view based on internalist, intellectual and individualist accounts of the mind. In contemporary philosophy of mind, this framework would be based on the manipulation of symbolic representations in the brain. The kind of cognition that we entertain should be brain-based and display a sophisticated mechanism for manipulating representations computationally. In this view, we should capture, process and model information in order to act in the world (Silva, Brito, Ferreira, 2019).

Putting aside "internalism" and "individualism", the aim of this paper is to weaken the charge of intellectualism against cognitivism developed by Hutto and Myin. This charge turns to be central to the enactive purpose of setting up a fully post-cognitivist position. I will follow a strategy of conceptual elucidation of "intellectualism". As far as I am concerned, Hutto and Myin present two alternative characterizations of this notion. The first is tied to the notion of cartesian inside of individuals (which I will call "cartesian intellectuallism"), and the second is tied to the idea that there is no cognition without content (which I will call "semantic intellectualism"). I would like to point out that intellectuallism neither understood as a cartesian thesis nor as a semantic one describes the fundamental tenets of cognitivism. In what follows, I will begin by reviewing some aspects of cartesian intellectualism in order to show how far these claims are from cognitivism. Then I will outline the central aspects owned by semantic intellectualism to arrive to the conclusion that its is a broad thesis to characterize cognitivism. Finally, I will conclude with some brief comments.

1. Cartesian intellectualism

Cognitivism assumes that minds are representational-computational mechanisms neurally implemented. This portrait of the mind has been the target of many criticisms encouraged by those who pertain to a post-cognitivist framework (Goldman 2012, Clark 2008, Chemero 2009, Noë 2012). Particularly, the most radical approach championed by Hutto and Myin understands these classical tenets as a form of intellectualism:

> Contemporary cognitivism takes it to be axiomatic that the mind represents and computes. In doing so it endorses an intellectualist vision of minds that made its debut in early modern times (Hutto y Myin 2017, 3)

> To assume that representational-computational mechanisms are neural is is to endorese an I-conception of mind that is methodologically and methaphisically commited to intellectualism. From such a perspective, cognition only goes on in the intellectual interior of individual (Hutto and Myin 2017, 4)

According to this interpretation, contemporary cognitivism brings back the idea that cognition only goes on in the intellectual insides of individuals. This portrait of intellecutalism collapses with the internalist thesis also captured in what Hutto and Myin called the I-conception of the mind. What is more, this portrait displays conspicous aspects of the cartesian of conception of the mind. In fact, Hutto and Myin usually characterize cognitivism as a form of cartesianism. To embrace radical

enactivism is to press for the "pragmatic turn" in cognitive science, which is the movement "away from the traditional representation centered framework towards a paradigm that focuses on understanding cognition as "enactive," as skillful activity that involves ongoing interaction with the external world (Hutto and Myin, 2017, 36). What is at issue in this turn is to leave aside the cartesinanconception of the mind.

In order to characterize the cartesian intellectualism, Hutto and Myin (2013) introduce Brook´s (2007) work which identifies the historical roots of these ideas. They report that Brooks reminds us that: "Descartes conceived of the materials of thinking as representations in the contemporary sense. And Hobbes was the first to clearly articulate the idea that thinking is operations performed on representations. Here we have two of the dominating ideas of all subsequent cognitive thought: the mind contains and is a system for manipulating representations" (5). Furthermore, they link Chomsky´s (2007) cognitive revolution with the early modern era with which cognitivism would have a historical debt.

In brief, Hutto and Myin address critically a long-established tradition in philosophy of mind and cognitive science that would defend that cognition is fundamentally constituted by internal and intellectual manipulations of representations. Even the brain would show "essentially the same kind of intellectual work" in the sense of processing inner information (Hutto and Myin 2017, 64).

Faced with this, I will present what I call the "argument from the computational and representational theory of mind (CRTM)" to argue that cartesian intellectualism does not apply to cognitivism. Particularly, I will develop some aspects of Fodor´s (1977, 1987, 1998, 2008) proposal which is probably the most paradigmatic cognitivist theory of mind. Following Fodor´s view, neither representationalism nor computationalism are presented as engaged with cartesian intellectualism. Broadly speaking, cognitivists are taking into account subpersonal aspects of cognitive architecture where conscious factors are left aside.

Briefly stated, the argument from the computational and representarional theory of mind runs as follows:

Premise 1: If the CRTM constitutes a form of intellectualism then it evoques the cartesian conception of the mind.

Premise 2: However, correctly understood, the CRTM does not evoque a cartesian conception of the mind.

Conclusion: Therefore, the CRTM does not constitute a form of intellectualism.

Describing the CRTM is not a piece of cake. It involves a number of complementary theses that show its proper complexity. The main idea is that thinking is a computational process involving the manipulation of semantically interpretable strings of symbols

which are processed according to algorithms (Newell and Simon 1976, Fodor 1994, Pinker 1997, Rey 1997). This vision of the mind is grounded on Turin´s works in the sense that the mind is a computational system similar in important respects to a Turing machine, and core mental processes (e.g., reasoning, decision-making, and problem solving) are computations similar in important respects to computations executed by a Turing machine (Rescorla 2020). Although these formulations are imprecise, they might be disclosed on this wise:

1) Cognitive processes consist in causal sequences of tokenings of symbols in the brain.

This claim starts with the assumption that rational thought is a matter of causal sequences of representational tokens ultimately realized in the brain. These causal sequences perform concrete digital and algorithmic computations in the special sense that they are realized in a physical system (Piccinini 2015). To a first approximation, digital computation is the processing of strings of digits according to general rules defined over these digits (Piccinini y Scarantino, 2010). This notion of "computation" was inherited from the pioneering works of Turing (1936) on computable functions. This processing might be algorithmic in the sense that it performs computations over digits following a well-defined and fixed set of instructions (Destéfano 2020). Algorithmic operations would be understood in terms of manipulation of uninterpreted symbols (Turing 1950, Newell 1980, Fodor 1994, 1998).

2) These symbols are conceived as representations with combinatorial syntax and semantics, and further, symbol manipulations preserve its semantic properties.

Technically, the computational theory of mind does not require that symbol have a semantics. Following these approaches, symbols are combined exclusively according to their formal/syntactic properties (such as shape) and these properties would be best understood as discrete properties of digits which are transformed in digital computation (Fodor 1987). However, in practice, symbols have a representational nature which means that they have syntactic and semantic properties. This is where the computational theory is supplemented with the language of thought hypothesis stated by Fodor (1975). Symbols, which are ultimately just patterns of matter and energy, have both representational and causal properties (Schneider 2011).

Mental representations are sentences of an internal language with semantic properties (such as denotation, or meaning, or truth-condition, etc.). To believe that p, or hope that p, or intend that p, is to bear an appropriate relation to a mental representation whose meaning is that p. For example, there is a relation belief* between thinkers and mental representations, where the following biconditional is true no matter what sentence one substitutes for "p": X believes that p iff there is a mental representation S such that X believes* S and S means that p. More generally, each propositional attitude A corresponds to a unique psychological relation $A*$, where the following biconditional is true no matter what sentence one substitutes for

"*p*": *X As* that *p* iff there is a mental representation *S* such that *X* bears *A** to *S* and *S* means that *p* (Rescorla, 2019).

According to the first premise of the argument, and following Hutto and Myin´s suggestion, these theses imply an intellectualist conception of the mind that I have called "cartesian intelletualism". I do not propose to develop an exegetical dispute surrounding Descartes. Although I could depict a detailed portrait of this inherited conception of the mind, it should suffice to grasp some of its fundamental aspects in order to illustrate this kind of intellectualism. Particularly, this conception has promoted that (i) the agent handles internal ideas (ii) consciously and with (iii) epistemic privacy. The first aspect emerges from the modern vision of the mind in which there is a distinction between subjet and mental entities conceived as ideas. The inherited way to understand "idea" focuses on its intermediate status between the subject and what is represented by the idea (Yolton 1987, 1975). Since Reid, Malebranche and Arnauld, ideas had been conceived as mental shadows of real objects in the world. However, it is true that Descartes, also understood "idea" as modes of thinking (Skidelsky 2003, Hamilton 1854). Across the board, ideas are mental entities (manipulted and asociated by the mind) that lacks the causal powers needed to produce physical changes on substance.

The second aspect refers to the standard cartesian theater model of mind that postulates a place where "it all comes together", where the discriminations in all modalities are somehow put into registration and presented for subjective judgment (Dennett and Kinsbourne 1992). A conscious mind is an observer who takes in the information that is available at a particular continuous sequence of times and places in the universe. A mind is thus a locus of subjectivity, a thing it is like something to be (Farrell 1950, Nagel 1974). What it is like to be that thing is partly determined by what is available to be observed or experienced along the trajectory through space-time of that moving point of view. Finally, the third aspect presents the view that mental ideas are something that only the performer can access. This deep intimacy between the agents and the inner objects on their minds has an epistemological value inasmuch as it grounds the possibility of knowledge (Skidelsky 2003).

In what follows, I will be directed toward showing that neiher of these aspects of cartesian intelletualism apply to the CRTM. This constitutes the content of the second premise of the argument. To start with, the CRTM does no state that the agent handles internal ideas in any sense. Theses sucha as:

1) Cognitive processes consist in causal sequences of tokenings of symbols in the brain

and

2) Symbols are conceived as representations with combinatorial syntax and semantics, and further, symbol manipulations preserve its semantic properties.

describe the subpersonal cognitive machinery that enables thinking capacities. Fodor (1987) wonders "…how could the mind be constructed […] What sort of mechanism could have states that are both semantically and causally connected, and such that the causal connections respect the semantic onces?" (14). This is a mechanistic approach of the mind in which the psychological explanation of thought does not require any substantive notion of the agent manipulating mental objects. Theses 1) and 2) refer to the cognitive design of the mind that is autonomous from considerations about agents. Besides, the CRTM considers that tokens of mental representations are physical in all the known cases. Considered as symbols with syntactic properties, representations are able to exhibit causal roles in physical transitions. The paralelism between the causal relations among representations and the semantic that they hold guarantee the kind of intentional realism defended by Fodor (1987). This characterization of mental representations differs significantly from the modern characterisation of ideas.

Furthermore, the CRTM definitely is not engaged with the cartesian theater model of mind. For instance, the kind of internalism defended by computationalists such as Chomsky is not related with any conscious manipulation of inner states:

> When Chomsky speaks of "internalism", he doesn´t have in mind an "inner theater" or essential conscious access to content, rather, internalism is a thesis about states of the brain theoretically individuated to enter into the explanation of stable linguistic phenomena. (Collins 2011, 176)

Back to theses 1) and 2), nothing in these claims implies that computation over representations would be a conscious task. Philosophers who are sympathetic to the computational and representational account of the mind accept that this approach may fall short as explanations of the nature of conscious states. Explicitly, language of thought does not aspire to be a theory of consciousness. Instead, it is a theory of the nature of language like mental processing that underlies higher cognitive functions (Schneider 2009).

Finally, the CRTM does not vindicate any kind of epistemic privacy:

> For there is no reason why a mentalist needs to assume that mental operations exhibit epistemic privacy in any very strong sense of that notion. Indeed, he had better not assume that if he wants his psychological theories to be compatible with a materialistic ontology; neurological events are public (Fodor 1975).

One of the reasons to accept the CRTM is that some of its versions "underlies practically all current psychological research on mentation, and our best science is ipso facto our best estimate of what there is and what it´s made of" (Fodor 1987, 17). This reason makes clear that theses 1) and 2) are linked with the purposes of a public psychological science. Thus, in this scenario, mentalism does fit with any kind of subjective intimacy.

2. Semantic intellectualism

So far, the discussion has gone like this: cognitivism, represented by the core thesis of the CRTM, is not easily related with cartesian intellectualism. However, there is an alternative way in which intellectualism has been presented by the radical enactivist literature. Hutto and Myin (2013) state that:

> The most radical versions of these approaches are marked by their uncompromising and thoroughgoing rejection of intellectualism about the basic nature of mind, abandoning the idea that all mentality involves or implies content. (1).

> If representations are thought to be necessarily contentful, this entails a commitment to Content Involving Cognition (CIC), which defines intellectualism (9).

Following this chracterization, intellectualist accounts of the mind advocate for the credo "no mentality without content". Standard intellectualist accounts regard representations as discrete and meaningful thought contents (Hutto and Myin 2013, Tye 2009). Therefore, this presentation of intelectualism specially relates to the semantic aspect of the CRTM. Those who are interested in language of thought hypothesis accept that this language includes meaningful symbols. Since symbols are the internal vehicles that the meaning lock onto, theories of mental content will be needed to fully understand the CRTM. We will also need an explanation of how carried content or meaning could make a causal difference in cognition.

Mental content in this context is the property that states of mind possess that allows them to represent how things are with the world. Contents are taken to specify the conditions of satisfaction, whether these are understood in terms of truth, accuracy, veridicality, that are met, or fail to be met, in any given instance of mental representation. Thus the kind of content in question is understood as mental representational content (Hutto and Myin 2020). To be in a state of mind with a mental representational content is to be in a state of mind for which the question of whether that state of mind represents or misrepresents how things are with the world can arise.

Against semantic theories of cognition, Hutto and Myin have presented what they called "the hard problem of the content" (2013, 2017, 2020). According to this objection, traditional semantic theories of cognition cannot give a scientifically respectable story of content and hence, we should abandon the idea that cognition involves contentful representations (Kuokkanen and Rusanen 2018). In particular:

> The HPC is an intractable theoretical puzzle for those explanatory naturalists who hold that information can be distilled from the world through environmental interactions, where such distillation contentfully informs concrete representational vehicles (Hutto and Myin 2017, xviii)

The use of the resources of informational theories does not achieve the naturalization of mental content. For this reason, radical forms of enactivism deny that having thoughts

with content is fundamental to all cognition. They flatly eliminate mental content from the theories of the mind.

Leaving the hard problem of content and its consequences aside, semantic intellectualism, as it has been presented by Hutto and Myin (2013), is a broad thesis that does not apply exclusively to cognitivism. Focusing on perpection, Hutto and Myin identify ways of acknowledging that mentality is supported by enactive and embodied means that are committed with the content involving cognition and for this reason they are conveived as intellectualists. These intellectualist proponents can happily accept that various facts about embodiment are causally necessary in making mentality possible and shaping its character without this concession threatening the idea that mentality is wholly constituted by contentful representations. Some authors such as Varela, Thomson and Rosch (1991), Alsmith and Vignemont (2012), Clark (2008), among others, understand the embodiment theses that encourage such weak readings. Many enactivists admit the inclusion of mental content as a virtue of their explanations. For instance, Noë (2004, 2012) suggests a sensorimotor enactivism in which perceptual experience is considered as a contentful phenomenon. Hutto and Myin evaluate Noë´s proposal as follows:

> But Sensorimotor Enactivism is surely committed to intellectualism in another way: through its attachment to the idea that perceptual experience is inherently contentful. Noë avers that "perceptual experience presents things as being thus and such" and that "it has content" (2013, 30)

No one can denny that contents come in a variety of mental kinds: conceptual content, non-conceptual content, propositional and non-propositional content, non propositional concent. And besides, these contents can be manipulated in different cognitive architectures; for example, a modular architecture such as Fodor´s (1983) classical proposal. These different options about content ground the different kinds of intelectualism identified by Hutto and Myin (2013). Always focusing on perception, intellectualism comes in more expensive and less expensive forms such as (i) hyperintellectualism, (ii) minimal intellectualism, and (iii) maximally minimal intellectualism.

Not only are hyperintellectualists committed to the existence of contentful representations of the relevant perceptual formation principles, but they also take it for granted that specific concepts must inform what is given in experience if experiences are to have their particular world-referring objective content. To illustrate, Fodor (2008) takes it that perceptual capacities also necessarily involve subsuming unconceptualized representational contents under some concepts, for to represent X as F it is necessarily required mastery and deployment of the concept F.

Against hyperintellectualism, minimal intellectualism abandons the idea that there is a kind of given—an informational or minimally representational content that is supplied by the senses. Moreover, this intellectualism abandons the idea that perceptual content must, always and everywhere, be conceptually informed. There have been many

different nonconceptualist proposals since the possibility was first articulated by Dretske (1981) and Evans (1982).

Finally, maximally minimal intellectualism rejects the intuition that if perception is representational then it must represent in a truth-evaluable way (Gunther 2003). Of course, it does not follow that perceiving is contentless if not all content need be truth conditional. However, if perceiving is to have content, then it must have conditions of satisfaction of some kind. This is the most general and the most minimal requirement on the existence of content.

To sum up, it is clear that content involving cognition (CIC) defines intellectualism. According to Hutto and Myin nothing else is needed to charaterize this thesis. The intelectualist tenet is the semantic claim that cognition requires the existence of contents of some kind or other. Nevertheless, semantic intellectualism depicts a logical geography of positions in the philosophy of the mind and cognitive science that differs from the state-of-the-art background. If "logical geography" means a set of concepts/theses/positions actually in use, which represents just one way of carving up the space of possibilities (Sloman 2006), then intellectualism does not respect the logical space that separate cognitivists from post-cognitivists. As it was shown, semantic intellectualism unifies cognitivist proposals with post-cognitivist ones. According to Hutto and Myin, from Fodor to Noë, there are a variety of intellectualist positions that have very little in common. For that reason, semantic intellectualism unifies approaches that are supposed to be in clear opposition in the literature. "Intellectualism" is a broad label that applies to cognitivism and to any proposal, even in the post-cognitivist framework, that is opposed to radical enactivism. Hence, cognitivism is not particularly targeted and described when Hutto and Myin present it as a form of intellectualism. In this context, the intellectualist characterization loses accuracy.

Perhaps, Hutto and Myin pretend to settle down radical enactivism in an alternative space of discussion. Ryle (1949) suggested that a good way for philosophers to resolve some philosophical disputes (often by discovering that both sides were based on conceptual confusions) is to reshape the 'logical geography' of the concepts involved. There are different ways of carving up that space into different categories or identifying different relationships that can occur within it. Those different ways define different "logical geographies" (Sloman 2006). Our actual concepts, whose logical geography carves up only a small subset of that space, is based on only a very shallow and restricted understanding of the space.

In this sense, semantic intellectualism would be a conceptual resource introduced by Hutto and Myin to reshape the current scenario of discussion between cognitivism and post-cognitivism in order to establish the need of a deep revolution towards radical enactivism. With it they try to argue that no current position is able to avoid the problems of the content involving cognition. Neither classical cognitivism nor post-cognitivism have answered different presentations of the hard problema of content. If

this interpretation is right, "intellectualism" becomes an empty label needed by radical enactivism to reject all vestiges of the idea that basic mentality is necessarily contentful. Specifically, it would be an empty label in the sense that nothing is said particularly about the intellectualist tenet which finally collapses with the idea of "contentful cognition". In this logical space created by Hutto and Myin, cognitivism would not be an intellectualist position in any special sense, and once again, this characterization loses accuracy.

3. Final remarks

Following the radical enactive literature, I identified what I called "Cartesian" and "semantic" intellectualism. On the one side, cartesian intellectualism has promoted that (i) the agent handles internal ideas (ii) consciously and with (iii) epistemic privacy. I argued that none of these properties owned by cartesian intellectualism are related with the thesis of the CRTM. Properly characterised representationalism and computationalism are not forms of cartesian intellectualism. Given this conclusion, what about Fodor´s (2008) endorsment to cartesianism about concept possession? As Fodor sees it, two views about the nature of concepts are fundamentally in competition with each other. Pragmatism is the doctrine that 'concept possession is constituted by certain epistemic capacities'. On the other hand, according to the kind of cartesian view of concepts Fodor advocates, concept possession is an intentional state but not an epistemic one. Having the concept DOG is just being able to think about dogs ('as such'). However, this distinction is not associated with the modern claims that I presented as cartesian intellectualism. Whats is more, presumably everyone who thinks that there are concepts thinks that one of the things that they do is allow their possessors to think about or represent part of the world (Weiskopf and Bechtel 2004).

On the other side, semantic intellectualism states the credo "no mentality without content". In this case, I have argued that this is a broad thesis that does not characterize cognitivism with precision. In brief, on the one hand, cartesian intellectualism does not apply to cognitivism and, on the other hand, semantic intellectualism lacks the needed accuracy to describe it. These conclusions try to prove that the intellectualist charge against cognitivism is more an irreflective use of the label "intellectualism" jointly with a misreading of cognitivism than a real step toward a post-cognitivist revolution.

It is true that Fodor and Chomsky are lined up in the defense of a mentalist and internalist conception of the mind. However, this kind of mentalism and internalism differ from their modern versions. If "intellectualism" means "mentalism" and "internalism", then Hutto and Myin should eliminate the first notion from their criticisms and develop a more accurate argument exclusively against the mentalist and internalist aspects of the CRTM.

This target has not been successfully achieved considering "intellectualism" in the semantic sense. It seems that, for Hutto and Myin, the only function of semantic intellectualism is to strenghen the need of a pragmatic turn. Several contemporary

philosophers have been developing tenets in pragmatism (broadly construed) to motivate it as an alternative philosophical foundation for a comprehensive understanding of cognition opposed to the representationalist tradition. Far from accurately describing the cognitivism approach, intellectualism intends to show this approach (and others) as an old-fashioned philosophy, thus showing the intellectualist charge was born only from rethorical needs.

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