

## RADICALIZING ENACTIVISM: BASIC MINDS WITHOUT CONTENT<sup>1</sup>

Marcos Silva (UFAL)<sup>2</sup>  
marcossilvarj@gmail.com

Carlos Brito (UFC)<sup>3</sup>  
carlos@lia.ufc.br

Francicleber Ferreira (UFC)<sup>4</sup>  
francicleber.ferreira@gmail.com

HUTTO, DANIEL D. & MYIN, ERIK. *RADICALIZING ENACTIVISM: BASIC MINDS WITHOUT CONTENT*. MIT PRESS, 2013. ISBN 9780262018548

In contemporary discussion, some authors are developing tenets in pragmatism (broadly construed) to motivate it as a comprehensive model of cognition, alternative to a far-reaching representationalist tradition. The latter constitutes the orthodoxy in some influential areas of philosophy investigating language and mind. Roughly speaking, a representationalist would answer the question “What are we?” by saying that we are consumers of representations, which could be satisfied or not by (that is, correspond or not to) the world. And to the question “What is the world?” we could expect receiving an answer like this: The

---

<sup>1</sup> Recebido: 20-01-2016/Aceito: 24-02-2016/Publicado on-line: 06-03-2016.

<sup>2</sup> Marcos Silva é Professor Adjunto da Universidade Federal de Alagoas, Maceió, AL, Brasil.

<sup>3</sup> Carlos Brito é Professor no Departamento de Computação da Universidade Federal do Ceará, Fortaleza, CE, Brasil.

<sup>4</sup> Francicleber Ferreira é Pós-doutorando no Departamento de Computação da Universidade Federal do Ceará, Fortaleza, CE, Brasil.

world is assumed to be, as in a typical Cartesian tradition, the totality of things that can be represented, or can be the content of our cognition. The world, according to this view, should be held as a domain of entities that could make our representations true or false. Thus, cognition or intelligent behavior is what make possible to representers to access and to manipulate the representations of reality, standing “out there” to be revealed by our thoughts. Sometimes, we could also act and do things in this rational and static world.

As a matter of fact, we may challenge this scenario. We could well hold that in the beginning was the deed, as Goethe put it in his *Faust*, instead of the word (or any representational content). Before representing the world, we have to enact in it. Actually representing demands enacting. In short, representing can very well be held as a kind of action in the world. As a result, a shift in the traditional picture can be illuminating: from "We must think in order to act" to "we act before we think." Abilities should be prior to theories; competence should be prior to content. As a result, "knowing how," rather than "knowing that," should be taken as the paradigm of cognitive states. Thinking is not a propriety of an immaterial mental substance, but rather a special capacity of some organisms to act in their environment.

Several authors in the pragmatist and related traditions call attention to the import of inherited practices, cooperation and *Handlung* in order to understand language, intentionality and cognition. They take seriously evolving biological systems and situated individuals interacting in communities over time as preconditions of our rationality, features often dismissed as not central in a representationalist tradition. What role do notions such as situatedness,

contextual dependency, shared attention, openness and vagueness play in representationalism? The answer is: a very marginal role (if any). Wittgenstein, for example, already in his *Tractatus* (1918), instructively suggested that language is an integral part of the human organism (TLP 4.002, our emphasis). There it is already signaled (although not worked out) the idea that language should be best understood by appealing to dynamically unfolding, situated embodied interactions with worldly offerings.

Hutto and Myin's (2013) book belongs to this broad pragmatist tradition which we could call anti-representationalism. They develop the view that basic cognition, that is, mental processes involved in obtaining knowledge through intentional directedness in perceptual experience, is not a matter of consuming representational content which imposes to reality some conditions of satisfiability. In order to understand what cognition is we must understand how organisms dynamically interact with others and their environment. Here we must raise a caveat: our authors do not put forward a thorough rejection of contents, since they defend that representations may turn out to be necessary in a full account of complex human cognition, especially language skills.

This book is highly readable and relevant for current debates in philosophy of mind and related battle fields where representationalism can (and should) be challenged. Hutto and Myin's work does an impressive job of calling into question what they call CIC (Content Involving Cognition) and CEC (Conservative Enactive Cognition). CIC states that cognition, and also perceptual experience, must be contentful. CEC, in contrast to CIC, holds the importance of situated, environment-involving embodied

engagements as a means of understanding minds, but still maintain the need for some manipulation of content in basic cognition. Hutto and Myin critically analyze CIC and CEC in order to make a case for REC (Radical Enactive Cognition), a form of enactivism where no form of content is used to explain intentional directedness and phenomenality.

If enactivism is already a defensible model and applicable to many hot contemporary discussions (as the mind/body problem and the development of Artificial Intelligence), REC, Hutto and Myin suggest, can do even more. It can be strategically applied as a tenable framework for different areas and problems, such as naturalism, *qualia* and extended minds.

What does it mean to promote REC? First, the main line of enactivism is maintained, that is, the idea that cognition is environment involving and dynamically unfolding. Not just human agency, but also experience should be thought of as a situated and embodied organismic activity. As a result, interactions with other organisms and engagement with the environment is not just a matter of fact. They are crucial to understand what mind is. Second, to hold *radically* enactive cognition means to hold that we can understand cognition without any appeal to contents and representations (i.e., to conditions that must be satisfied by the world). Against the view that REC cannot “scale up,” Hutto and Myin hold that the scope of REC is indeed much wider and can be more fruitful.

Hutto and Myin’s work is well informed in contemporary problems and literature. It provides a good review of the enormous literature on the topic. However, we see some problems in their book. Content is hardly character-

ized in the whole work, and its connection with the notion of information is somewhat obscure. Also, the association they make between representationalism, internalism and intellectualism is not that evident to be just assumed. Moreover, Hutto and Myin hold in various moments that perception is an act; but the reader may have a hard time to understand that. They do not explain this crucial thesis.

It is also important to highlight that our authors show sometimes a limited view of the logic used in computer science. For instance, they say that “The Information-Processing Challenge appears to present a formidable problem for REC. But it takes for granted that the standard computational and information-processing explanatory strategies of cognitivism are in perfectly good order under standard renderings” (p. 37). Nowadays approaches to computation can be real time, adaptive and interactive in several ways. This has been an agenda worked out by several important computer scientists in contemporary research.

Besides, we do not really understand why our authors do not discuss some particular philosophical traditions. By way of example, Descartes and Kant are very scarcely debated. This choice obscures the fact that matters of cognition are widespread in the history of philosophy. Descartes, for instance, was not interested in cognition *per se*, but in facing skepticism and finding a new model for science.

#### **IN WHAT FOLLOWS WE BRIEFLY DESCRIBE HUTTO AND MYIN’S BOOK CHAPTERS.**

In Chapter 1, they clarify pivotal theses and introduce main players. Embodied cognition is characterized as concrete spatio-temporally extended patterns of dynamic

interaction. This view is complemented by a development-explanatory thesis, which holds that mental interactions are grounded on the history of the organism's previous interactions. Here they highlight that REC rejects all vestiges of the idea of contentfulness.

Chapter 2 shows how denying CEC means an ultimate rejection of CIC. Although the authors do not offer any clear definition of intelligent behavior, they hold that perceptual experience and intentional directedness do not imply content. Further, they assess some “sister accounts” of REC, including Noë's Sensori-motor Enactivism (which, they think, makes just a modest advance) and Autopoietic enactivism (which, they hold, has a too broad concept of cognition). Both accounts deny dualism, emphasize input/output processes and hold that the mental emerges from spontaneous self-organization and self-creativity of living beings. But these approaches, our authors criticize, still presuppose some kind of meaning being created, consumed and carried.

In Chapter 3, Hutto and Myin bring robotics and insects to the discussion. They also claim that enactivism can account for complex human activities of reaching and grasping objects. Content is not just unnecessary for basic cognition (even though it is relevant for complex human cognition); it can encumber development in AI and robotics, they maintain. The whole model of mentality holding information as the basic commodity of cognition has to be dropped. Information is not used, extracted, manipulated, carried in basic cognition. In fact, it would be very weird to think that children learn to grab something by means of some abstract instructions. REC can explain also distinctive human cognition, not just insects and simple robots. The

variety of manual activities is too large and diverse to be captured by some general and abstract rules. We have to learn how to regulate actions in a wide range of dynamical environments.

Chapter 4 is their most important contribution for the discussions. They come back very often to this chapter throughout the whole book. In a nutshell, they suggest therein that CIC is not the case, on the grounds that we cannot make naturalism and CIC compatible. The challenge is that, if we take CIC seriously, we cannot explain what the origin of content in nature is. As Hutto and Myin explain: “they [defenders of CIC] are unable to account for the origins of content in the world if they are forced to use nothing but the standard naturalist resources of informational covariance.” (p.xiv) After proposing this far-reaching challenge, our authors answer two common problems suggested by defenders of CIC, namely: 1) REC does not address any relevant form of cognition because what it calls basic cognition is *too basic*, and 2) REC cannot be generalized. However, if we start with dynamical explanations of a system, representation loses its import. Basic cognition mechanisms may have the proper function of guiding the system's actions in the environment. Actually, according to REC and to some other naturalist accounts, organisms should be taken as sensitive to information. This means that organisms exploit correspondences in their environment, that is, co-variance among several phenomena, and not manipulation of representations, in order to adaptively guide their actions.

Chapter 5 shows that CIC is inappropriate and unnecessary, since it cannot explain highly sophisticated and intentionally directed behaviors. Behaviors of artificial

agents and some insects, as well as reaching and grasping by human hands are explored in this chapter. Our authors evaluate Hyperintellectualism, which holds that perceptual experience is always inherently contentful and depends entirely on representational activity; and Minimal Intellectualism, which maintains a more modest view of how perceptual experience might be essentially contentfully representational. The leitmotif for Hutto and Myin's criticism is perceptual human vision. Those accounts claim that visual experience implies representational activity. Hutto and Myin are against these views, but they don't really answer how without the very idea of content we could pass from perception to belief and judgment. Hutto and Myin do not even pose this relevant question. It is not an accident that Kant, among others, holds that perception has to be conceptual.

Furthermore, the problem of false information is not touched in the book. How perception can be false if it should have no content at all? Here the whole discussion seems to presuppose that representational content should be independent of linguistic capacities (as they point out very quickly on page 87). They do not provide any reason for this assumption.

Chapter 6 evaluates some alternatives that try to make sense of content ascription in perceptual processes. A maximally minimal representationalism has much agreement with REC, namely: no concepts, no proposition, no truth conditions, no given. But it still holds there is need for conditions of satisfaction. This minimal CIC is modest, less expensive and more plausible. Are there compelling reasons to think that perceiving is representational? If not, we have to go REC, as our authors claim.



Chapter 7 deals with problems related to the boundaries of mind. Hutto and Myin defend that minds are in fact *extensive* and wide-ranging, and (contrary to the extended mind view) not merely extended. The crucial point is that we do not have things in our minds, but rather operate with objects in the world; our minds should not be thought of as a vehicle, but rather as a capacity. If REC is true, the extended mind hypothesis is not radical enough. External features of the environment are always constitutive of the mental. Extended-mind defenders are too deferential to internalism.

Chapter 8 discusses if whether phenomenal properties of experiences can be extensive. Hutto and Myin try to dissolve the well-known Hard Problem of Consciousness. When we describe phenomenal properties, we cannot help but mention environment-involving interactions. *Qualia* discussions, they hold, make up an agenda of solving impossible problems. REC should liberate both science and philosophy to pursue goals they are able to achieve.

As a conclusion, we agree that "not only science but also philosophy benefits by radicalizing enactivism" (p. 178), since the idea that several relevant mental processes and basic minds require neither contentful representations nor manipulation of content indeed deserves a better hearing. It is hard to expect that basic minds represent the world with specified conditions of satisfaction. As the book imposes itself as a reference, we think that people for or against enactivism should react to it if they want to make advances in this field.