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UNCOVERING DOUBLE STANDARDS: A CRITICAL ASSESSMENT OF RADICAL  
ENACTIVISM'S TREATMENT OF BASIC MINDS AND DEPARTURE FROM  
RELAXED NATURALISM

Master's Thesis in Philosophy

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## 1. Introduction

In recent years, 4E approaches to cognition have been at the heart of discussions regarding the origins of mental content and the means whereby such content is manipulated in cognition. The approaches known as "4E" approaches to cognition propose that the process of thinking is not limited to the brain alone, but also involves the body, environment, actions, and external tools that support cognitive activities. These theories see cognition as being constituted by various external factors beyond mere neural activity inside the brain and stress the importance of direct and active engagement with circumstances external to cognition. Hence, the four E's stand for 'embodied', 'embedded', 'enacted', and 'extended.'

The thesis concerns a variety of research programmes under the umbrella of the enactivist theories of cognition – Radical Enactivism. Developed by Daniel D. Hutto and Eric Myin, the theory is called “Radical Enactive, Embodied account of Cognition” (REC). REC emphasises the role the body and its dynamic coordinated engagements with the environment play in cognition. The central negative claim of the theory is that so-called “basic minds”, or “basic cognition”, are contentless; in contrast to contentful “non-basic minds”. In this thesis, I am specifically interested in Radical Enactivism’s theoretical treatment of “basic minds”.

In developing REC, Hutto & Myin commit to 'Relaxed Naturalism', a philosophical position very broadly concerned with "thinking about the natural world and our place in it" (Hutto 2023, 2). The articulation of the philosophical program of Relaxed Naturalism was itself an endeavor initiated by Hutto in collaboration with philosopher Glenda L. Satne (2015, 2017, 2018a, 2018b). They define Relaxed Naturalism in opposition to both 'scientific/strict naturalism,' which they deem to be too strict in its dedication to hard sciences, and 'liberal naturalism,' which they deem to be too permissive in regards to 'supernatural' phenomena. Relaxed Naturalism aims to negotiate a moderate position between these two approaches to naturalism by "draw[ing] upon and harmoniously integrat[ing] the discoveries from a wide range of sciences and disciplines" (Hutto 2022, 165). I assert that a close examination of the treatment of 'basic minds' in radical enactivism undermines REC's proclaimed commitment to Relaxed naturalism. Moreover, I demonstrate how the three core notions utilized in REC's analysis of 'basic minds' — autopoiesis, adaptivity, and normativity — support REC's alignment with strict naturalism rather than relaxed naturalism, as they provide a comprehensive account of basic minds within the framework of natural sciences alone. Insofar as Hutto & Myin deem it unnecessary to employ the extended repertoire of concepts offered by relaxed naturalism, they betray their own argument for its methodological necessity. I demonstrate this by uncovering REC’s double standards that can be found in its treatment of basic minds. REC criticises rival

theories for their strictly naturalistic purview of the mind, yet, applies the same perspective in its own treatment of basic minds, thus applying its principles rather unfairly. In my thesis I aim to demonstrate how Radical Enactivism's unfair application of its own principles undermine its commitment to Relaxed Naturalism, particularly regarding its perspective on "basic minds."

The thesis proceeds as follows: In section 2, I review the history of enactivist theories about cognition and introduce the theories that play a core role in my argument about Radical Enactivism's treatment of basic minds — namely, Radical Enactivism itself and its main rival theory of Autopoietic Enactivism.

In section 3, I provide an overview of the varieties of naturalism and introduce the kind of naturalism upon which REC relies. In 3.1, I show how Relaxed Naturalism arises as a naturalist approach from its dissatisfaction with Strict Naturalism. In 3.2, I explain the principles of Relaxed Naturalism and how its implications are foundational for the theoretical posits of REC .

After getting acquainted with the general overview of the theories, I proceed to the core claims of REC about basic minds. These claims, I think, are to be found in REC's discussion of the problem of seeking for the origins of content in nature – the so-called Hard Problem of Content (HPC). Hence, in section 4, I introduce the HPC, as coined by Daniel D. Hutto and Erik Myin. I first review the structure of the argument for the avoidance of the HPC (4.1), showing the logic behind Hutto and Myin's development of core principles of REC. Then, I provide the expanded explanation for the avoidance of the HPC, according to Radical Enactivism (4.2).

In section 5, I turn to the notion of 'autopoiesis', foundational to defining the nature of basic minds, and its place in the theory of REC. As follows, I show how REC's interpretation of autopoiesis exhibits striking similarity to the interpretation of the strictly naturalistic Autopoietic Theory.

I then proceed to clarify how other characteristics of cognition, normativity and adaptivity, relate to REC's reading of autopoiesis and can be interpreted as in line with the assumptions of Strict Naturalism.

In section 7, I summarise the conclusions to which I came in the course of the thesis and show how they contribute to uncovering REC's double standards in regards to basic and non-basic minds. .

## **2. The Enactive Approach to Cognition**

The main argument of this thesis presupposes an acquaintance with two distinct theories, both of which share a commitment to enactive cognition, where this is understood as dynamic interaction of mind and its environment. In this section, I begin by discussing the reasons why enactive cognition is incorporated into the broader 4E research program. I then offer an overview of two approaches to enactive cognition: autopoietic enactivism (henceforth, AE) and radical enactivism (REC).

E-valenced research programmes came into being in the 1980–1990s due to dissatisfaction with traditional cognitivism. Old cognitivism is here understood as a category of theories that includes Representational Theories of Mind (RTM) and Computational Theories of Mind (CTM). Representational theories are themselves a set of theories that rely on the notion of so-called ‘mental representations’, where a ‘representation’ is to be understood as a mental object bearing semantic properties. Semantic properties may be read in terms of being about something, or, rather, in terms of truth and falsity, content and reference, correctness conditions, etc. Computational theories aim to explain cognition as analogous to the ability to compute, e.g. to manipulate mental representations, often in accordance with a set of rules. According to both RTM and CTM, cognition is understood as necessarily contentful. For many, CTM and RTM may be completely synonymous, yet, I consider the distinction fruitful for the purposes of the aims pursued here.

Proponents of 4E insist that cognition should not be regarded merely as some inner doings of minds; instead, cognition is tightly woven into the unity of a body as a whole and its surrounding environment. The E-valenced frameworks consist in viewing cognition as emerging in enactive dynamic adaptation to the environment. By approaching cognition as distinctly embodied, embedded, extended, and enacted, the 4E framework addresses the previous neglect of the relation of organisms to their environment. Although 4E theories of cognition vary significantly with regard to their stances on features of cognition in RTM and CTM, there exists a similarity in how these theories view the talk of ‘mental representations’. The biggest point of convergence of 4E theories is their tendency to deny mental representations, making them, for the most part, antirepresentational. In 1996, Larry Clark formulated a rather universal rationale behind theories of enactive cognition:

Thesis of Radical Embodied Cognition: Structured, symbolic, representational, and computational views of cognition are mistaken. Embodied cognition is best studied by means of noncomputational and non-representational ideas and explanatory schemes involving, e.g., the tools of Dynamical Systems Theory (Clark 1996, 148)

In this work, I focus on one of the four E’s: enactive cognition. According to Ward et al. (2017) and Hutto & Myin (2013, 2017), there exist three main strands of enactivism: sensorimotor enactivism, autopoietic enactivism (AE), radical enactivism (REC); I limit my research to the

two latter strands. It is not the purpose of this research, however, to provide a classification of the strands of enactivism. While REC is the focus of my thesis, AE has been the chief rival of REC for at least the past decade. Quite often, in writings of the proponents of REC, core presuppositions of theirs are formulated to contrast the ones in the framework of AE. The heated debate between the two positions makes them intimately interwoven and failing to adequately detail what precisely is entailed by AE would introduce significant difficulty to understanding REC.

## 2.1 Autopoietic enactivism

In this subsection, I focus on autopoietic enactivism. A discussion of its central commitments will become relevant in discussing REC's account of 'basic minds. I will lay out the central beliefs of the two theories immediately with the promise that a comprehensive argument is to follow in the subsequent chapters. Being acquainted with the central posits of the theories right away, will make it easier for a reader to delve deeper into the upcoming criticism of Radical Enactivism.

AE views an autonomous (may be referred to as 'autopoietic') organism as paradigmatically exemplified by a living cell. The cell has features of being self-constructive and self-sustaining. Consequently, the feature of self-sustenance is often considered as sufficient to recognise an organism as an agent. Stemming from autonomy/autopoiesis is the process of sense-making, the core concept of this brand of enactivism. Sense-making should be understood as the process of an organism saturating the world with sense and acting in accordance with its values (Thompson & Stapleton 2009, 24-25). The exemplary case of sense-making is that of an *E. coli* bacteria 'striving for' a sugar gradient as it provides a source of nutrients needed for bacteria to maintain itself (Thompson 2007, 74–75, 157–158; Varela 1991). The world would be deprived of any meaning if it was not for the organism's need to persist and navigate 'the precarious conditions' it finds itself in. Proponents of autopoietic enactivism firmly uphold that the sense would not have been there if it was not for the activity of the agent. Value as such arises in an organismic perspective and is anchored in it. When bacteria picks a sugar gradient out of all the features of the environment as 'worth' moving towards, it exhibits adaptation. When features of the environment start to be recognised as better or worse, salient or insignificant, beneficial or harmful from a perspective of an organism, AE views it as a normative evaluation. Taken together, AE regards a selective and adaptive evolutionary history of an organism as a history of attributing 'values' to certain features of the environment. Normativity appears to the autopoietic enactivist to be the hallmark of even the most primitive organisms.

Within the discussion about normative concepts, they are often grouped into two categories – evaluative (i.e. good, better, the best) and deontic (i.e. the ought). Autopoietic enactivists discuss the evaluative kind of normativity. In the process of making sense of the environment, an organism stands out as an agent that establishes its norms with regard to accomplishing the goal of autonomy preservation. Thanks to this procedure of a value-ascription, life advances from non-sense to sense – so Autopoietic Enactivism presumes. Committed to the continuity of life and mind, AE considers its vision of cognition to be applicable to all living beings.

## **2.2 Radical Enactivism**

Radical Enactive Cognition (REC) stands, as framed by Hutto and Myin, in opposition to the other 4E theories of mind. REC holds that autopoietic and other kinds of enactivism do not renounce certain representational commitments completely and are not actually antirepresentationalist. It is the ‘radical’ cleansing of the enactivist approach that is the task REC takes on board. Committed to standing up against conventional cognitivism, REC defies RTM and CTM, together with cognition as located in neural processes and as necessarily content-involving. To be clear, however, the elimination of representational content is limited to “basic”, not the “non-basic”, minds.

The distinction between basic and non-basic minds is a defining feature of REC. REC holds that basic minds are necessarily non-contentful and non-basic minds are contentful. Basic minds may exhibit very complex patterns of adaptive behaviour, yet, this behaviour is to be understood as exhausted by evolutionary selection. Only with the introduction of sociocultural scaffolding do basic, contentless minds become non-basic and contentful. According to Hutto & Myin, social and cultural practices are what allows basic minds to obtain the capacity to manipulate representational content. The failure or success of a biological function of an organism cannot be formulated, according to REC, as an incorrect or correct contentful judgment. Stated otherwise, REC denies that basic minds have representational content because they define content through the presence of correctness conditions. Content by REC is always understood as representational content, hence the definition of it through the correctness (or satisfaction) conditions. By understanding basic minds as contentless and non-basic as contentful, REC denies the continuity of life and mind; that is, where both kinds of minds are contentful or both are contentless.

Summing up, REC upholds that there is no need “to posit any kind of content at the basement level of cognition in order for the sciences of mind to do their fundamental explanatory work” (2017, 51).

### **3. Radical Enactivism and Varieties of Naturalism**

The pursuit of understanding REC well cannot happen without clarifying the methodological stance of the programme. In their works, Hutto, Myin, and Satne, all proclaim REC's commitment to naturalism, or 'explanatory naturalism'. After clarifying what being committed to 'explanatory naturalism' presupposes for Hutto, Myin, and Satne, they come to formulate their specific methodological position known as 'Relaxed Naturalism'. The explanation of their naturalistic methodology, however, is not the focus of the books dedicated to the matters of basic and non-basic minds. Nonetheless, writings on methodology are developed side-by-side in separate publications and are foundational for REC's discussions about cognition. Each one of the REC's claims about the origins of content or basic minds is tied to their "positively relaxed" take on naturalism. For instance, the possibility of introducing two kinds of minds, basic and non-basic, is made possible by REC exactly owing to its reliance on Relaxed Naturalism. Considering how crucial Relaxed Naturalism is for the theoretical claim about basic minds that is posited by REC, clarifying its roots and defining it properly is necessary for my main argument. In this section, I will argue that Relaxed Naturalism should be considered as a framework that was initially elaborated in opposition to Strict Naturalism (3.1). Then, I conclude by defining Relaxed Naturalism and emphasising the claims that bear the biggest weight on REC's approach to cognition (3.2).

#### **3.1. Relaxed Naturalism and Strict Naturalism**

To begin, I lay out a generic explanation of the varieties of naturalism. Traditionally, the two main strands of naturalism are considered to be Strict (Scientific) Naturalism and Liberal Naturalism.

Following Macarthur (2015), I understand a position as fitting the label of Strict/Scientific Naturalism in case it commits to either one or both of the following claims. First, if a position agrees with "the actual existence of only those things that are recognized by successful science", it endorses Ontological Scientific Naturalism. Second, if a position agrees that "the only genuine knowledge or understanding we have is that provided by successful science", it endorses Methodological Scientific Naturalism (569).

Liberal Naturalism is generally associated with the figure of McDowell (1994) who himself coined the term. As De Caro and Macarthur put it, "Liberal naturalism makes room in its vision of the world for nonscientific realities (that are not posits of successful scientific explanations) and nonscientific knowledge or understanding" (2022, 2). The stance arose in

response to Scientific Naturalism, aiming to expand the image of the world beyond rigid scientific knowledge. Liberal Naturalism allows for a realm of non-scientific, yet, non-supernatural entities to which belong, for instance, persons and works of art. Among liberal naturalists are considered to be Wittgenstein, Davidson, Price, Dewey, Strawson, and others. REC is discontent with Liberal Naturalism due to it allowing for different kinds of entities (both scientific and non-scientific). The criticism of Liberal Naturalism Hutto (2023) channels via the ridicule of liberal assumptions in application to research of Eleanor Rosch on Tibetan lamas: “[...] making room for the transmission of deep wisdom states emanating from dead high lamas by subtle energies looks like a parade case [...]” (9). The aforementioned example is of Rosch allowing for entities that, as Hutto believes, run counter to proper naturalism. Liberal Naturalism hence is rejected for its lack of strictness. ¶The relationship of REC with Liberal Naturalism, however, is not of importance for this thesis as it is Strict Naturalism that REC aimed to demarcate itself from for the past few decades.

Relaxed Naturalism is a recently developed stripe of naturalism in the field of philosophy of mind, formulated and presented mainly in the work of Daniel Hutto and Glenda Satne (Hutto & Satne 2015, 2018; Hutto 2022, 2023). The thesis of Relaxed Naturalism has been formulated as an answer to what the authors call ‘Strict Naturalism’ or ‘Scientific Naturalism’ that they associate with “varieties of post-Quinean naturalism – specifically those variants of physicalism that operate with and only tolerate a narrow vision of nature that can be etched out by the hard natural sciences or, even more restrictively, a completed physics” (Hutto, 2023, 1). One has to be careful here and not hurry to ascribe the label ‘Strict Naturalism’ to, say, representatives of all the natural sciences. Indeed, one has to be wary of such ascriptions as Hutto and Satne construct their understanding of the strictly scientific variety of naturalism in their criticism of one particular figure — Alex Rosenberg. Rosenberg's (2013, 2014, 2018) understanding of naturalism becomes a central point of departure in contradistinction to which Relaxed Naturalism defines itself.

What is Rosenberg's view on naturalism? First, Rosenberg's proposal is methodological, namely that in naturalism, we should rely on “the methods and findings of the mature sciences – from physics across biology and increasingly neuroscience” (2013, 17). One can also pinpoint a naturally following promise; namely, to answer philosophical problems by using the aforementioned “methods and findings”. So, when Rosenberg is called “a fierce defender of this brand of naturalism [Strict Naturalism]” (Hutto & Satne 2014, 579), one may be tempted to project a seemingly universal label of ‘strict naturalism’ in Rosenberg's interpretation onto other naturalistic theories. Yet, here one should pause and clarify Rosenberg's view as a whole.

In a few words, Alexander Rosenberg is an eliminative materialist, a reductive physicalist, who preaches a so-called “disenchanted naturalism”. All in all, “disenchanted naturalism” holds that “[...] the chemical, biological, psychological, social, economic, political, cultural facts — supervene on the physical facts and are ultimately explained by them.” (2014, 19). Naturally, it implies anti-realism about ethics and moral knowledge, rooted in its eliminativism of purpose and meaning, perception of history as “bunk”, and calling any conceptions about ourselves as humans — “illusions” and “conspiracy theories”.

I would maintain that the relaxed naturalists conception of “Strict Naturalism” is, in the body of literature produced by the schools of thought of Hutto, Satne, and Myin, targeted mainly on the Rosenberg’s extremist position, with him being the aim of the critique and foundation for the theorists own theses (Hutto & Myin, 2013, 2017; Hutto & Satne 2015; Hutto 2022). Hutto and Satne did ground the view of Relaxed Naturalism and its commitments in Wittgenstein scholarship (2018a, 2018b), as well as Davidson’s (2017) . In so doing, they briefly mention Kornblith (2017) and Machery (2017) as “exclusive scientific naturalists” (2018b, 146). Yet, besides picking out the quotes related to Rosenberg's understanding of methodology, the authors do not substantively engage with Kornblith and Machery ever again. After getting acquainted with the frameworks of REC and Relaxed Naturalism, as well as the former's commitment to the latter, a reader would struggle to pinpoint any other opponent of Relaxed Naturalism besides Alex Rosenberg. If there are others, then engagement with them is definitely missing from the REC’s scholarship. Rosenberg is aware of the extremity of his view; he separates himself from other naturalists who, one way or another, “adopt a variety of physicalist antireductionism” (2014, 34).

When formulating its premises, proponents of Relaxed Naturalism and hence Radical Enactivism heavily rely on the figure of Alex Rosenberg as the “chief champion” (Hutto 2022, 167) of the scientific vision of philosophy. By highlighting Rosenberg’s position as a target of REC’s argument, I clarify that REC’s pronounced engagement with Strict Naturalism is actually focused on a specific interpretation as put forward by Rosenberg. Henceforth, when addressing REC’s criticism of Strict Naturalism, we will identify it as a criticism of Rosenberg’s position and not the field of naturalistic theories as a whole.

### **3.2. Defining Relaxed Naturalism**

In the previous subsection, we looked at some of the roots of Hutto, Myin and Satne’s dissatisfaction with the program of strict naturalism. Now, it is time now to lay out Relaxed

Naturalism's claims and adjacent commitments that were formulated in response to Strict Naturalism.

When laying out their criticism of existing theories of content, Hutto and Myin (2013) mention the notion of “explanatory naturalism” (66). The recognition of it is regarded as necessary for everyone who aspires to be considered as a theorist respectful of scientific findings. “Explanatory naturalism”, they claim, is satisfied by agreeing with the so-called “Muggle Constraint.” Following Michael Wheeler (2005), Hutto and Myin re-introduce the term “Muggle Constraint” coined by the theorist: “One’s explanation of some phenomenon meets the Muggle constraint just when it appeals only to entities, states and processes that are wholly nonmagical in character. In other words, no spooky stuff” (5). Such formulation for many might seem as concerningly non-restrictive, possible to be accommodated within different kinds of naturalisms. It could possibly imply that REC accepts Liberal Naturalism if it was not for REC’s rejection of the latter as well. The point of this constraint is to deny so-called supernaturalism, or to deny explanatory force of supernatural states, entities, and processes. If the Muggle Constraint is respected, no matter what is introduced into an explanandum, then there is a tension between the philosophical and scientific explanation, the former is to be either withdrawn, or revisited (see Wheeler 2005, 156). In short, any conflict with science violates the Muggle Constraint. So, one may think of it as a minimal requirement for a theory to be considered naturalistic – i.e., to be not conflicting with science. As it is a minimal condition, REC theorists narrow it down further in order to accommodate their dissatisfaction with Strict and Liberal Naturalism. Namely, through defining the framework of Relaxed Naturalism.

What kind of goal does Relaxed Naturalism aspire to achieve? The motivation behind Relaxed Naturalism is to formulate a naturalism that would respectfully handle the mature sciences while not falling down the slippery slope of reductionism. Relaxed naturalists take issue with ‘Strict Naturalism’ in building its scientific image of nature by relying on the resources of natural sciences. So, how does Relaxed Naturalism claim to avoid the trap of reductionism while productively serving both philosophical and naturalistic understanding of worldly phenomena? The answer is methodological: to rely on something besides “the methods and findings of the mature sciences’. As Hutto writes, “Relaxed Naturalism holds that humanistic disciplines, and their diverse methods and findings, in conjunction with those of the sciences, can be relevant to investigating and understanding what we find in nature” (2022, 165). It is hence to be understood as a synthetic philosophical approach that opposes reductionism by integrating knowledge from diverse fields, such as “anthropology, developmental psychology, comparative psychology, cognitive archaeology, and social neuroscience” (Ibid., 166), to understand various

aspects of the natural world, including human practices and activities. According to this approach, synthesized knowledge is the only way to fight off reductionism. It is the role of philosophy, rather than natural sciences, to engage in self-reflection and provide a philosophical account of nature. Or, worded otherwise, philosophy's contribution and aims are "wholly clarificatory and descriptive." (Hutto 2023, 10). In the end, Relaxed Naturalism can be summarised as thinking about concepts and their properties in natural sciences and humanities as not always verifiable, emphasising that they are "part of the living fabric of our public practices rather than being confined to the heads of individuals" (Hutto 2022, 174).

It should be stressed that Relaxed Naturalism is not simply "a broad or more expansive version of scientific naturalism" (Hutto 2023, 1). Instead, Relaxed Naturalism completely rejects the assumptions of Strict Naturalism. While REC may appear compatible with the methodology and conclusions of Strict Naturalism, this apparent compatibility raises questions and warrants closer examination due to the explicit and complete rejection of the strictly naturalistic assumptions by Relaxed Naturalism.

#### **4. Radical Enactivism and "basic minds": The Hard Problem of Content (HPC)**

According to REC, content-involving cognition is limited to the public realm of socioculturally scaffolded use of symbols and to be found on the level of its "root forms". Representatives of REC are not eliminativists about content — they just aim to prove the existence of content as limited to exclusively non-basic minds. In order to prove this, Hutto and Myin formulate a theory of basic forms of cognition that would strengthen their claim about the sociocultural origins of content. Interested in the latter, they undertake a bottom-up approach. The bottom-up approach means that the theorists try to prove that content has sociocultural origins by first dismissing the need to look for it on the level of basic forms of cognition. Attempting to achieve this, they focus on "basic minds" ending up with, largely, the theory of basic cognition.

The existing programmes of cognition, as REC claims, are attempts at naturalising content. Or, worded differently, these programmes are concerned with what Hutto and Myin call the The Hard Problem of Content (HPC). The HPC is the question of how to get from noncontentful root forms of cognition to a theory of content using the assets of explanatory naturalism. REC believes that all of the rival accounts fail to adequately answer to the HPC. And so, not to repeat the mistakes of their rivals, REC's goal is to avoid the HPC. By avoiding here I mean that their move is to side step the HPC entirely. So, this is how they do it:

“RECCers think that whereas it is impossible to explain content using only the limited resources of restrictive naturalism, it is entirely possible to explain the origins of content using the expanded resources afforded by a relaxed naturalism.” (Hutto & Myin 2017, 124)

REC finds its way out of the HPC exactly through the dependance on Relaxed Naturalism. Firstly, proclaimed respect for methodological pluralism allows avoiding allegations of reductionism (as in Strict Naturalism). Secondly, proclaimed reliance on explanatory resources of humanistic disciplines allows REC to dispose of the need to deal with the naturalisation of content (the Hard Problem of Content) on the level of “basic minds”.

In the following discussion of REC, I concentrate on the parts of Hutto and Myin’s programme that I consider crucial to grasp REC’s assumption about non-human animals, or what the authors refer to as ‘basic minds’. In this chapter, I present the argument for the existence of the Hard Problem of Content, as formulated by Daniel Hutto and Erik Myin in *Radicalizing Enactivism* (2013) and *Evolving Enactivism* (2017), and their justification for it. Along the way, I emphasize some crucial upshots about “basic minds” and their nature that arise in the course of justification.

#### **4.1. The REC’s argument for the avoidance of the HPC**

This subsection aims to sketch the summary of Hutto and Myin’s argument for the problem of naturalising content, coined as the Hard Problem of Content.

REC’s main aim is to argue against the existence of content-involving cognition on the level of “basic minds”. The position that REC is arguing against is formulated by them as “Cognition necessarily Involves Content” (CIC), or “unrestricted CIC”. Existing theories of enactive and embodied cognition, according to Hutto and Myin, preserve the commitment to CIC in the form of viewing basic minds as contentful ‘but allowing that the vehicles that bear such contents extra-neural, stretching into the wider body or the environment’ (Hutto & Myin 2013, x). When talking about vehicles of content, REC assumes them as representational vehicles into which information is turned after being “distilled from the world”. As Hutto and Myin note, “the notion of a vehicle is logically dependent on the idea of contents that are carried or expressed by such vehicles” (2017, 37). In the authors’ terminology, such theories uphold Conservative Enactive or Embodied Cognition (CEC). REC’s claim is the complete opposite — basic cognition necessarily involves content. Moreover, Hutto and Myin distinguish ‘basic cognition’ and ‘basic mentality’ (2013, x), where the latter exhibits both intentional directedness and phenomenality, and the former doesn’t necessarily entail phenomenality. Phenomenality is understood as a qualitative character of experience, i.e. “what it is like”, and directedness stands for organisms’ non-contentful sensitivity to the features of the environment. In their discussion

of content-related issues of the HPC, REC focuses on 'basic cognition'. In other words, REC sidesteps the phenomenality and focuses only on cognition's non-contentful responsiveness.

In Hutto and Myin's reconstruction, conservative enactivists widely lean towards explicating mental contents in naturalistic terms. In other words, naturalistic explanations of content-involving cognition rely on the notion of information as embodied in the properties or relations of the features of the world. For Hutto and Myin, theories that involve a commitment to CIC make the mistake of construing mere informational covariance as content. For REC, the founding principle is that "*Covariance doesn't Constitute Content*" (Hutto & Myin 2013, 67): content does not exist independently in nature without the scaffolding of social and cultural practices. In other words, it is only possible to talk about content-involving cognition in circumstances where socio-cultural practice is present. Such a definition begs the question what precisely constitutes socio-cultural practice; Hutto & Myin say hardly anything, sidestepping the question to neo-pragmatism or other theories. Practically, however, this delimits content-involving cognition to the human species.

Let's reconstruct the thinking from the point of view of REC about the nature of content and the need to avoid the HPC:

P1: REC defines content as having special properties such as truth, reference, and implication (Hutto & Myin 2013, 67), which cannot be reduced to information-as-covariance.

P2: Theories that rival REC assert that content with special properties can be found in nature.

P3: According to REC, rival theories can only find information-as-covariance in nature, which does not have the special properties of content.

P4: REC holds that patterns of covariation can be described without reference to content.

C: Therefore, content with special properties, as REC understands it, cannot be found in nature.

Next, consider REC suggesting that information-as-content is conceived as having sociocultural origins:

R-1: Information-as-content does exist; [REC's assumption].

R0: If Information-as-content exists then it emerged somehow.

R1: Information-as-content emerged somehow.

R2: Information-as-content can only emerge in nature or elsewhere [conceived as having sociocultural origins.]

R3: Information-as-content cannot originate from nature.

R4 → Information-as-content does emerge elsewhere.

R5: If Information-as-content does emerge elsewhere then it is conceived as having sociocultural origin.

R6: → Information-as-content is conceived as having sociocultural origins.

RECs argue for (R-1 to R6) and therefore they find the origins of content [Q2] (See Hutto and Satne 2015).

REC holds that proponents of CIC uphold the assumption of explanatory naturalism and the need to satisfy the so-called Muggle Constraint. In turn, explanatory naturalism relies on a scientifically valid notion of information to explain natural phenomena. Yet, this “valid notion” in itself is information-as-covariance, not content: “Anything that deserves to be called content has special properties — e.g., truth, reference, implication – that make it logically distinct from, and not reducible to, mere covariance relations holding between states of affairs” (Hutto & Myin 2013, 67). And so the only scientifically valid notion of information that can serve the needs of explanatory naturalism is covariance. As follows, “If information is nothing but covariance then it is not any kind of content” (Ibid.). Covariance alone does not constitute informational content that is a necessary element for cognitive systems to traffic in information literally; Hutto and Myin call this the “Covariance Doesn’t Constitute Content Principle”. For REC, covariance is a scientifically respectable notion of information but is insufficient to explain content in explanatory naturalistic terms. Therefore, informational content does not exist in nature. That which has no truth-value, cannot be content: content is correct or incorrect; covariance does not involve truth value. For Hutto and Myin, it follows that proponents of CIC simply presuppose the existence of naturalised content without offering a proper explanation of how covariance comes to bear truth-conducive properties. And if informational content does not exist independently of sociocultural practices, then cognitive systems cannot be said to traffic in informational content, as posited by theories such as CIC. REC theorists come to claim that if the endeavour of naturalising content and the means of strict naturalism have failed, one ought to stay away from them. Not being eliminativists about content, they carry on:

Q1: If REC commits to Strict Naturalism then Strict Naturalism is not enough to explain the origins of content.

Q2: BUT, REC explains the origins of content.

Q3: REC does not commit to Strict Naturalism.

Q4: If REC does not commit to Strict Naturalism then REC commits to Relaxed Naturalism [under assumption that REC IS naturalism].

Q5: Strict Naturalism is incommensurable with Relaxed Naturalism.

Q6: so REC commits to Relaxed Naturalism.

For the resources of explanatory (strict) naturalism do not suffice to find the origins content. Relaxed Naturalism rejects foundational for Strict Naturalism thesis about the primacy of hard sciences in explanation of the world.; so REC commits to Relaxed Naturalism. For REC, thanks to the expanded resources of Relaxed Naturalism, content can be preserved and conceived as having sociocultural origins. The step of introducing the commitment to Relaxed Naturalism and benefitting from its expanded resources is the step that allows REC to solely avoid tackling the HPC. Criticising other theories for overly limited resources (limited to the resources of strict naturalism), REC resolves the problem by expanding the explanatory resources. By expanding resources, REC can issue the claim about sociocultural origins. Any strict naturalistic commitments hence would throw REC back to the problem of the emergence of content in nature, while REC's main motivation is to avoid it. This scheme of the thinking behind REC's attempt to avoid the HPC, I believe, would prove useful in the proceeding more detailed overview of the claims of REC that arise in the course of the discussion.

#### **4.2. REC's justification for avoiding the HPC**

This subsection aims to provide Hutto and Myin's justification for the premises and conclusions of the Hard Problem of Content, as scattered around the two programme texts of Radical Enactivism.

In Hutto and Myin's justification, the acceptance of explanatory naturalism is a given without going into much detail throughout the books. The silent assumption of the meaning of 'naturalism' and its goals as something that is interpreted univocally in the philosophy of mind is to be assumed. For Hutto and Myin, however, the HPC arises for restrictive naturalists who "seek to naturalize content by using only the resources of the hard, natural sciences (causation, informational covariance, biological functionality) and nothing more" (Hutto & Myin 2017, 125). For the sake of the concise reconstruction of justification, I am going to note that REC itself rests on the framework of Relaxed, instead of restrictive, Naturalism. Hutto and Myin consider accounting for contentful minds via resources of restricted naturalism impossibly hard and hence decide to rely on explanatory resources of sociocultural factors.

The foundation of the Hard Problem of Content in *Radicalizing Enactivism* (2013) and *Evolving Enactivism* (2017) is REC's understanding of content. As I have been emphasising, the notion of content REC equates with the availability of correctness or satisfactory conditions and truth-bearing (semantic or propositional) properties. Armed with this definition of content, REC embarks on a journey to prove naturalised contentful representations as explanatory redundant. When discussing what being representational implies, Hutto and Myin talk about utilising worldly indicators of external relations, which stand for a certain 'meaning' separate from one's intended ends. Put otherwise, an inner state is to be considered representational if it possesses "the function of saying or indicating that things stand thus and so, and to be consumed by other systems because it says or indicates in that way". (Hutto & Myin 2013, 62) For REC, the core problem of rival accounts of basic cognition is the notion of so-called 'information' and its understanding along the lines of 'informational content'.

The authors believe that 'information' needs to be distinguished into two subsequent notions, information-as-covariance and information-as-content, which lays the very foundation of their argument. *Information-as-covariance* is understood as follows: "[...] s's being F 'carries information about' t's being H iff the occurrence of these states of affairs covary lawfully, or reliably enough." (Ibid., 66). Some examples of covariation in nature are the way tree rings carry information about the tree's age or fossils provide information about the organism's past. For Hutto and Myin, there is nothing contentful or truth-conducive about the covariation of tree rings as the tree ages. Tree rings here do not hold any 'meaning' about how things stand in the world; they do not contentfully inform us about things being true or false. Allowing for the naturalisation of informational content would presuppose that environment and its features have contentful properties that exist by themselves; the features of the environment would stand for representations of themselves independently of an organism. REC's claim is straightforward: any signals received via one's sensory system might carry information-as-covariance only; such natural signals cannot be used to fit the definition of internal representations.

When explaining how information-as-covariance transforms into information-as-content, they link the acquisition of semantic properties by content to "the right supports, such as shared social practices" (Hutto & Myin 2013, 36). This is the fundamental commitment of Hutto and Myin: informational content doesn't occur in nature but occurs with the appearance of social and cultural scaffolding; the commitment is then named the "Scaffolded Mind Hypothesis" (Ibid., 153). Namely: "RECCers maintain that "the primary bearers of content are semantically articulated symbols, occurring in appropriate dynamic patterns" (Haugeland 1990, 412; (Hutto & Myin 2017, 124). Hutto and Myin hence believe that content-involving cognition

is brought about by “environmental scaffolding” *only*. To be more precise: “Contents and vehicles exist, but they are associated with linguistic symbols and forms of cognition that feature in and are logically and developmentally dependent upon shared, scaffolded practices” (Hutto & Myin 2013, 151–2). What kind of practices do Hutto and Myin have in mind? For them, it is the socially supported practices “that make use of external public resources, such as pen, paper, signs, and symbols” (Ibid., 152). Put otherwise, Hutto and Myin believe that content enters the picture of cognition through linguistic mediation — non-basic minds are linguistic minds.

Information-as-indication is briefly addressed by examining of the example that ‘smoke means fire’, where meaning arises in the virtue of the presence of its user. Being a three-place relation, indication also proves itself more complex than mere covariance for Hutto and Myin. Crucially, basic cognition doesn’t contentfully represent, yet, still targets, or indicates, chunks of the world. This kind of targeting of basic minds is defined by REC through the notion of ‘Ur-intentionality’. REC commits to regarding intentionality as a mark of cognition yet, construes its commitment carefully. As REC considers correctness conditions necessary for content, the notion of ‘nonrepresentational intentional content’ does not fit the foundation of the account. Accordingly, the absence of correctness for intentionality entails defining it as contentless intentionality.

Main rival theories of REC in this plain of discussion are Dretske and his telefunctionalism, as well as Millikan’s teleosemantics. Let’s consider an example of the stickleback fish provided by Dretske (1991, 103) that REC pays attention to. When breeding in spring, male sticklebacks develop a bright red colouration of their underside; the colouration is what males rely on to spot intruders, and females to spot males. The reliance on such an indicator would cause a piece of wood painted red to solicit the same reactions as the fellow sticklebacks. Analysing this scenario, REC upholds that telefunctionalism views red colouration as semantic content because it *actually* serves as an indicator for a stickleback. According to Hutto and Myin, Dretske here believes that red colouration has “the function to say how things stand with the world.” (2013, 72). In other words, what Dretske sees is content and a consumer of this content that is sensitive to it. Following this interpretation, REC reminds us that informational content is not present in nature, and so there is nothing to be picked out or *acquired* by sensory mechanisms (of the fish, for instance). Hutto and Myin, on the other hand, uphold that the sensitivity of stickleback to a particular kind of content (i.e. red colouration) does not bring anything new; it is just the old workings of information-as-covariance. To hinder Dretske-like interpretation, Hutto and Myin want to show that even if there are agents that are sensitive to information, it doesn’t tell us what they pick up is content. Hence, an introduction of another

principle – *the “No Acquired Content Principle”* (Ibid.). The principle just adds up to “Covariance Doesn’t Constitute Content Principle”: as there is no information-as-content in the world, there is nothing that is “*acquired*” by minds, whether basic or non-basic.

Let’s now contrast Dretske’s teleofunctionalism (that Hutto and Myin often bring up as a subject to their criticism) and REC. The first of these appeals to teleo-functions that are understood in terms of biological function with its historical conditions (when the function brought about what was expected to achieve a particular end). Importantly, Dretske sees the experience as representational, although nonconceptual in nature. Such construction of experience is made possible thanks to the introduction of information-exploiting organisms. REC, on the other hand, urges us to give up the representational bit and quit thinking that directed sensorimotor organismic responses to the environment ‘say’ anything about the world.

Teleofunctionalism and teleosemantics are unable to overcome the HPC, and so REC introduces its alternative theory – *teleosemiotics*. Teleosemiotics is defined as a “content-free and hence non-representational, naturalised version of the theory of organismic intentionally directed engagements with their environment” (Hutto & Myin 2017, 78)<sup>1</sup>. What REC sees in a basic cognition — is its intentional contentless directedness at the environment deprived of content and vehicle. The theories that want to prove this view of basic cognition wrong whilst preserving their commitment to explanatory naturalism must resolve the Hard Problem of Content. Taken together, REC frames the quest for naturalising content by the proponents of CIC and CEC as doomed to fail from the very beginning. Basic cognition is contentless because there is nothing but information-as-covariance provided for it by the environment and no content to be acquired hence. REC does not dismiss the notion of content altogether — content-involving cognition is embodied in non-basic minds. Non-basic encultured and

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<sup>1</sup> Teleosemiotics, as coined by Hutto and Myin, should not be confused with general semiotics and its subfield of biosemiotics, typically associated with, among others, Jesper Hoffmeyer, Kalevi Kull, and Claus Emmeche. The typical definition of biosemiotics is concerned with pre-linguistic meaning-making. ‘Pre-linguistic’ here stands for a subset of meaning-making processes that do not rely on the distinctly human faculty for symbolic representation and ‘semiosis’. Crucially, the majority of contemporary biosemiotics theories work within the Peircean triadic sign model, and biosemiotics’ notion of a symbol is defined in accordance with this model. Contemporary biosemiotics, following Terrence Deacon, fuses any meaningful action as involving relation to a ‘telos’ or end. The latter, understood as ‘intentionality’, stands for the property that includes “[...] functions that have satisfaction conditions, adaptations that have environmental correlates, thoughts that have contents, purposes that have goals, subjective experiences that have a self/other perspective, and values that have a self that benefits or gets harmed” (Deacon 2012, 27). The difference might not appear sharp at the first glance. Yet, teleosemiotics views the workings of basic minds in terms of the success or failure of biologically proper functions, deprived of anything contentful. Now, biosemiotics agrees to see the concept of a function as co-extensive with semiosis only when the former is conceived “as a process organized around an implicitly represented end”. Put otherwise, semiosis “may be considered only in conditions where there is an explicit or implicit representation of an end state or where a functional satisfaction condition can be identified as holding or not holding” (Emmeche & Kull 2011, 27). Whilst semiosis, under the provided definition, is co-extensive with life for biosemiotics, Hutto and Myin reserve representational content for ‘scaffolded’ minds; the sharp distinctiveness of convictions is now clear.

scaffolded minds can get by with contentful ways of thinking and reasoning; this is considered true for, at least, language users who operate in the mode of propositional content.

I urge readers to pay attention to the sharp distinction between basic contentless and non-basic contentful cognition, which arises as a consequence of their aim to avoid the HPC. Hutto and Myin's understanding of dis-/continuity is woven into the assumption of two essentially different kinds of cognitive activities. Basic, contentless minds are 'actively engaging with selective aspects of their environment in informationally sensitive, spatiotemporally extended ways' (Hutto & Myin 2017, xiv). While non-basic minds do this as well, what makes an organism's cognition 'basic' is that their way of engaging with the environment is independent of the representations of 'how things stand with the world'.

## **5. Radical Enactivism and 'autopoiesis'**

In the previous chapter, we have seen the core theoretical posits of Radical Enactivism about "basic minds" and how Hutto and Myin endorse denying content to basic cognition. Now, I shall discuss themes in Radical Enactivism that are fit to reveal exactly where the double standards about the nature of the naturalistic commitments of REC are to be found in their scholarship.

The goal of this chapter is to understand the commitments Radical Enactivism brings to the table in their treatment of basic cognition. I start by talking about how REC conceives of 'autopoiesis', the foundational concept for defining mind and cognition in enactive theories. I then show how REC's reading of autopoiesis is aligned with a strictly naturalistic one that in turn creates certain tension with REC's professed commitment to Relaxed Naturalism. Afterwards, I turn to core features of mentality that arise in relation to the autopoietic nature of minds. The first feature is that of normativity that REC develops and relies on with regard to "basic minds". The second feature is that of adaptivity. After attending to the notion of autopoiesis and its core features of 'basic minds', I argue for the explanatory tensions that arise in Radical Enactivism treatment of autopoiesis, normativity, and adaptivity.

. The term 'autopoiesis' refers to self-production/self-maintenance of a living system. In the 1970s, Maturana and Varela (Maturana & Varela 1980; Varela, et al. 1974) proposed autopoietic theory as a way of explaining the basic principles of self-organising minimal living systems. The theory attempted to describe how self-producing autonomy can occur at the molecular level. This theory's core is the axiom of structural determinism, which states that changes within a system result from its current structure, rather than external factors. An autopoietic system is, firstly, defined as a network of production processes that continuously

regenerate and sustain its components while, secondly, also creating a unique identity within its domain (Di Paolo 2005, 434; Weber & Varela 2002, 115). The endeavour to define ‘autopoiesis’ then turns into the endeavour of deciding what systems are autonomous systems, and what makes them so.

REC’s reading of ‘autopoiesis’ is concentrated in their discussions of what they label as autopoietic-adaptive enactivism theories (what we have been referring to as AE theories so far). It should be noted that although Hutto and Myin utilise the ‘AAE’ label to refer to the group of theories, which they associate with Varela, Thompson, Di Paolo, De Jaegher, et al., — the label is used by none of the individuals cited. Hutto and Myin utilise the ‘AAE’ label to refer to the group of theories, which they associate with Varela, Thompson, Di Paolo, De Jaegher, et al.; however, the label is used by none of the individuals cited. The respectful labelling of the authors should be considered carefully hence, taking into consideration their lack of definition for the term “enactive” and its loose usage. Now, let’s turn to ‘autopoiesis’.

Hutto and Myin’s understanding of autopoiesis is exhausted by self-sustenance as exemplified by such processes as the metabolic self-production of an organism. Consider the following statement of Hutto and Myin in their analysis of the rival theory, where they claim that both theories “agree that having a mind that can make sense of its world by referring to aspects of it and thinking about it in ways that can be correct or incorrect is not a basic biological endowment.” (Ibid., 79). While Hutto and Myin see autopoietic enactivist theories as agreeing with REC in ‘autopoiesis’ being insufficient for permitting any meaning, it would strike anyone who is familiar with the scholarship of AE as puzzling. For theorists of autopoietic enactivism the claim that life and mind are continuous is foundational. Namely, AE theorists view the process of constituting meaning as something that is found on all levels of life or cognition (say, even *E. coli* bacteria). Knowing that AE theorists view the simplest organism as capable of meaning-constitution, the remark of Hutto and Myin about the point of agreement between REC and AE is puzzling indeed. On the contrary, REC and AE have rather a deep disagreement on the nature of life and mind.

Accordingly, we should also be careful when relying on the ascription of the understanding of autopoiesis, as provided by Hutto and Myin, to AE. Because there are, actually, two influential directions of understanding autopoiesis. First, that of enactivism, represented by Di Paolo, Thompson, and Stapleton, among others whom Hutto and Myin consider to belong to AE theories. Second, that of the autopoietic theory (AT). associated with the names of Maturana, Luhmann, Mpodozis, Villalobos, and Ward. Although the theory of autopoiesis heavily influenced views of the enactivist stripe, they did part their ways in how they see the

basic nature of cognition. Both are postcognitivist theories for which autopoiesis is at the core of their views, and yet, their views on cognition are considered incommensurable (Villalobos & Palacios, 2019).

For AE, the autopoietic nature of organisms is derived from their ability to saturate the environment with ‘value’ by setting its features as ‘good’ or ‘bad’ for itself. Living beings’ normative engagement makes them autonomous and teleological in character. In contrast, Autopoietic Theory considers living beings to be non-autonomous systems in the enactive sense precisely because they are autopoietic. The opposite understanding of what autopoiesis implies is rooted in Autopoietic Theory’s methodological commitments to Strict Naturalism, which means seeing the constitution and actions of organisms as nothing more than biochemical or physiological processes. Autopoietic Theory’s core ontological assumptions are that natural phenomena “occur (1) without having any goals, purposes or intentions (i.e., without teleology), and (2) without being governed by any consideration of what may be good or bad, correct or incorrect, adequate or inadequate, beneficial or harmful (i.e., without normativity)” (Villalobos & Palacios 2019, 75). Autopoietic Theory strives to show organisms as “trivially natural systems”. The emphasis on triviality here should be understood where the natural system is nothing more than a physical system. By considering natural systems as displaying features of self-enablement, self-generation of norms, and teleology, enactivism places normative engagement at the core of autonomous systems; it makes AE incommensurable with the picture of AT.

Recall Hutto and Myin’s constant reiteration of the fact that “basic minds” do not “say” anything about their environment. Accordingly, REC’s reading of autopoiesis and its norms aligns with that of autopoietic theory, not AE. Regardless of Hutto and Myin pronouncing their “agreement” with AE, the reader should refer to Maturana instead of Di Paolo, Thompson and the others to clear up the commitments of Radical Enactivism. Hence, when dealing with REC’s discussion of ‘basic minds’ and their so-called ‘normativity’, I argue that its understanding is consistent not with that of Autopoietic Enactivism, as Hutto and Myin paint it, but with Autopoietic Theory and its stance of Strict Naturalism.

Now, we have established that Radical Enactivism’s understanding of autopoiesis is actually aligned with that of Autopoietic Theory (AT), and not Autopoietic Enactivism (AE). Crucially, the opposite understanding by AT and AE of what autopoiesis presupposes is rooted in Autopoietic Theory’s methodological commitments to Strict Naturalism. From the fact that “Strict Naturalism is a non-negotiable principle for AT” (Villalobos, Palacios 2019, 581), comes all the incompatibility of Autopoietic Theory’s commitment with the radical enactive conception

of cognition. Radical Enactivism commits to the same posits as does Autopoietic Theory, sharing the dissatisfaction with the same posits of Autopoietic Enactivism: with teleology (establishing any organismic goals, purposes, intentions) and normativity (establishing that organisms are able of considering features of environment as good or bad). Here we see how the strictly naturalistic in-character understanding of normativity is inherited in REC's understanding of autopoiesis. Moving on, Autopoietic Theory also comes to the same denial of "the possibility of finding a natural kind-based definition of cognition" (584) as Radical Enactivism when denying the natural origins of content. As follows, the Strict Naturalism that is endorsed by the Autopoietic Theory means seeing the constitution and actions of organisms as nothing more than biochemical or physiological processes, i.e. physical process in a similar way Radical Enactivism regards the actions of organisms, or "basic minds", as exhausted by the appeal to the biological explanation of natural selection. Among the two readings of autopoiesis available, the one of Autopoietic Enactivism and the one of Autopoietic Theory, Radical Enactivism picks out the one of AT, the one foundationally rooted in Strict Naturalism.

In the previous section, REC claimed, recall, that other theories failed to deal with the HPC because they limited themselves to the resources of explanatory or Strict Naturalism. And so, in the attempt to avoid the HPC, REC adopted Relaxed Naturalism precisely to benefit from its expanded resources. Now, as was shown above, after its promises to integrate the findings of wide ranges of sciences in order to avoid the HPC, REC arrived at the adoption of the view of autopoiesis along the lines of AT. REC's reliance on AT-aligned interpretation (that is non-negotiably strictly naturalistic) reveals itself as confusing.

## **6. Radical Enactivism and other characteristics of mind**

The way of understanding autopoiesis, what an autonomous system is, sets the chain reaction for how other features of mind and cognition are going to be defined. For AE, autopoiesis presupposes that organisms have needs and create values. When autonomy is defined this way, it proceeds to establish core characteristics of what makes a system cognitive accordingly. AE supporters believe that among these characteristics are normativity, goal-directedness, and adaptivity. In this subsection I will focus specifically on normativity. For AT, on the other hand, seeing systems as physical means seeing them as non-normative; allowing normativity would run counter to AT's Strict Naturalism that looks up to the practice of hard sciences. According to AT, hard sciences do not allow such "spooky stuff" as the ascription of normativity to trivially natural systems. As Maturana (2011) comments, normative activities "are not aspects of the dynamics of the molecular autopoiesis, they are commentaries or explanatory

propositions that an observer can make about what he or she may think that should occur in the flow of living of an organism in its relational domain” (150). What AE sees as properties of living beings, AT views as observer’s commentary.

## 6.1 Normativity in Radical Enactivism

The notion of ‘normativity’ is, again, discussed mainly in the course of REC’s interpretation of the AE stance. The discussion of AE by Hutto and Myin allows us to see how Radical Enactivism separates the two kinds of norms, biological norms and sociocultural norms, and recognises only one of them as properly normative. And this is why we are going to delve into this discussion deeper

Let’s first reconstruct the position of the AE approach. It regards an organism as self-sustaining and self-organising as responding to the environment on the basis of its need not to self-dissipate. Such activities provide an organism with “the all-or-nothing norm of self-continuation” (Thomson & Stapleton 2008, 25). Let’s turn back to how AE interprets a single-celled organism’s (*E. coli*) interaction with a glucose gradient. The sugar gradient is a feature of the environment that gains a degree of significance only in relation to an organism and its perspective. The world would be deprived of any valence if it was not for the organism’s need to persist and navigate ‘the precarious conditions’ it finds itself in. Adaptivity is what goes beyond mere autopoietic self-maintenance: an organism not only recognises something as a nutrient but prefers one direction to the other. The label ‘normative’ appears with a bacteria regarding a gradient as ‘worth’ moving towards it and improving its condition for self-maintenance. The organism is saturating the world with values, placing a normative status onto its features. The discussion of normativity occurs where there is better and worse, salience and insignificance, benefit and loss, etc. Such adaptive responding is labelled ‘sense-making’: an organism saturating the world with sense and acting in accordance with its value (Thompson & Stapleton 2008, 24-25). For the representatives of autopoietic enactivism, “sense-making is the basic mark of the cognitive” (Thompson 2011, 211), and being alive and being cognitive are intimately co-extensive (Di Paolo 2009, 13).

Now, to the REC’s interpretation of the AE position. In Hutto and Myin’s reading, AE views “the fact that organism-environment couplings can be more or less effective” as hinting at “a kind of biological normativity that goes beyond any norms that can be associated with mere autopoiesis” (Hutto & Myin 2017, 76). AE does actually see something more than “mere autopoiesis” in the actions of living beings, namely, adaptivity’. And from the adaptive capacity AE draws conclusions about autonomous systems as capable of ascribing meaning to their

environments. However, for REC, there is nothing beyond ‘mere autopoiesis’. What AE views as “a kind of biological normativity” for Radical Enactivism is exemplified by the failure or success of biological functions that are aimed at one and only maintenance of identity and non-self-dissipation. The “pre-scripted” nature of basic minds, as REC sees them, can not warrant the theoretical leap that AE attempts from mere avoidance of instabilities to goal-oriented discrimination. Accordingly, the discussion of ‘biological normativity’ does not hold for Hutto and Myin as normative practices are “well beyond the reach of simple organisms” (Ibid., 79). Placing certain organismic activities under ‘biological normativity’ would be simply false for Radical Enactivism hence.

“Content only arises when special sorts of sociocultural norms are in place. The norms in question depend on the development, maintenance, and stabilization of practices involving the use of public symbol systems through which the biologically inherited cognitive capacities can be scaffolded in particular ways.” (Ibid., 145)

In the realm of contentless basic minds, Hutto and Myin believe that evolutionary mechanisms exhaust anything that theorists might aspire to put under the label of ‘biological normativity’. In Radical Enactivism, the denial of content to “basic minds” organically brings about the fact that there is nothing normative about them.

Surprisingly, Hutto and Myin proceed to say that there is a point of agreement between REC and AE. As they see it, REC and AE view basic cognition as being exhausted by dynamic tracking and responding to the environment. Indeed, autopoietic enactivism offers a way of seeing organismic sense-making dynamics without invoking representationalism, which is aligned with REC. Autopoietic enactivism argues that normativity is the basis of cognition or that “normative engagement is the hallmark of cognition” (Di Paolo 2009, 15). Crucially, the hallmark of all cognition, which, again, turns it into a basic biological endowment. According to the autopoietic enactivists, the actions of autonomous organisms are intrinsically meaningful, purposive, and driven by “significance, valence, and norms that the system itself brings forth or enacts on the basis of its autonomy” (Thompson 2011, 211). In the meantime, in the picture of REC, *nothing* in the environment shows up for a “basic mind”. Although REC and AE see a somewhat similar picture of organisms as dynamic adaptive autonomous systems that interact with each other and their environment, they draw completely different conclusions from it. AE draws a conclusion that organisms “have goals or norms according to which they are acting”

from seeing them as adaptively autonomous. In contrast, REC draws an opposite conclusion of organisms as exhausted by dynamic tracking of the features of the environment and hence not exhibiting normativity. The difference in conclusions is rooted in how both theories define ‘autopoiesis’ and the ontology of minds.

So, Radical Enactivism posits normativity as something foundationally unreachable for “basic minds”. For Hutto and Myin, normativity can be only sociocultural and scaffolded in character, REC upholds; everything else is just a failure or success of contentless execution of biological functions. The basic minds in Radical Enactivism are approached through the lens of what is open to observation and validation. As Macarthur (2015) notes, the methodological approach of Strict Naturalism is founded on visible, testable, and validatable data. Consider the following words of Hutto and Satne, “Biology provides adequate tools for making sense of something more modest than content – it provides what is needed to understand and explain responses exhibiting a kind of Ur-intentionality that results from the targeted directedness of past organisms” (2015, 531). Recall as well that Relaxed Naturalists accept that content properties must supervene on the physical ones, being non-semantic, non-mental and non-normative. (Ibid., 530).

Looking at the dynamics of cognition as sketched by REC, one might wonder whether it is possible to argue with REC by introducing normativity through the discussion of phenomenal character of experience (relevant to the “point of view” bit of debate). For rival enactivists, the phenomenal character of experience arises as a consequence of organisms being responsive to and interacting with particular features of the environment, thus assuming that phenomenality is extensive in character (reaches beyond the bounds by required “extra-cranial” conditions). In contrast to the rival assumption, REC contends that such reading of phenomenal character is unacceptable for the purposes of avoiding the Hard Problem of Content. When REC imagines the scenarios of obtaining a phenomenal experience while having limited possibilities to engage with the environment, Hutto and Myin come to doubt the presence of ways to evaluate the evidence for the commonality of phenomenal experience and interpret such experience. The doubt comes from Hutto and Myin’s belief that “the fact that specific patterns of interaction between organisms and their environments were originally and non-accidentally responsible for there being something-it-is-like to have certain kinds of experience.” (2013, 165).

Accordingly, their thinking about phenomenality is based on a struggle to see how, being related to the environment in the same way, phenomenal character of two different experiences wouldn’t be the same. For REC, it is the representational assumptions that keep the experiences apart. Along the lines of Scientific Naturalism, Hutto and Myin, although pursuing a genealogical explanation of the origins of content, pursue it on the basis of the results that, in their view, must be open to observation and validation. The very phenomenon of normativity, and phenomenality, in Relaxed Naturalism, Macarthur (2015) writes, “is abstracted away from in the adoption of the essentially objectifying stance of scientific inquiry” because “it is not the part of

the objective realm of empirical objects and their causal patterns and laws studied by the sciences.” (575).

Unless Hutto and Myin make these phenomena to come to the accessible horizon, they would not exist for REC. And this is exactly what they do. Viewing phenomenality as conceptual and hence representational, Hutto and Myin hold that “anything that might answer to the name ‘phenomenal concept’ will be a public concept” (2013, 173), thus requiring public intersubjective space for admitting the discussion of phenomenality. Because normativity does not fall under the purview of science's objective domain, both Strict Naturalism and REC are unable to acknowledge the normativity of content on the level of ‘basic minds’. Cognitive and phenomenological, what-it-is-like properties of experience, for REC, are not necessarily connected, so any talk of “point of view” of an organism and proceeding norms is not relevant.

I will now address another core feature of autopoietic systems – namely, adaptivity.

## **6.2 Adaptivity in Radical Enactivism**

So far, we have seen how the notion of normativity is constructed through the observable data, and how the notion of ‘autopoiesis’ showcases the same faults; both exhibit intrinsic alignment with the spirit of Strict Naturalism. The attempt at equating normative practices in the sense of AE and REC’s own interpretation along the lines of evolutionary mechanisms does not appear to be as seamless as they claim it to be. The problems are tied to Radical Enactivism's way of seeing adaptive organismic attunement to its environment to which we shall attend now.

To start with, Radical Enactivism is committed to a “Strong Embodiment Thesis” and “Developmental Explanatory Thesis” (DET); the second thesis is of particular interest to us. It goes as follows: “[...] mentality-constituting interactions are grounded in, shaped by, and explained by nothing more, or other, than the history of an organism’s previous interactions” (Hutto & Myin 2013, 7). In other words, an explanation of every action of a ‘basic mind’ can be found in an organism’s history. In the development of his teleosemiotic explanation of how organisms non-intellectually but selectively detect and respond to worldly offerings, Hutto (2008) introduces “Action Coordination Routines” (ACRs). According to the definition, ACRs explicate such responsiveness of ‘basic minds’ via pre-scripted schemas of actions. As Hutto puts it, “Existing organisms are informationally sensitive to certain triggers because this benefited their forebears in coordinating their actions with respect to specific worldly offerings — and by implication, this enabled their perception-response systems to proliferate for the benefit of future generations” (Ibid., 51). As for the origin of Action Coordination Routines,

they are “hard-wired or learned”. The second part about “learned” requires further explanation. The capability of learning, as REC understands it, is tied to its commitment to the Developmental Explanatory Thesis (DET). Hutto and Myin stress, “For organisms capable of learning, it is this [DET], and nothing else, that determines which aspects of their worlds are significant to them” (2013, 8). In other words, ACRs pose as evolutionary built-in and programmed scenarios of “perception-response” that is handed down to every organism. All of the organisms’ actions and interactions, including learning, are exhausted by its prior history of engagement with the environment. The resulting picture is of every basic mind as deprived of anything but the built-it genetic program and its phylogenetic history.

What seems to be a missing ingredient in the REC’s explanation of basic minds’ exhaustion by their phylogenetic and ontogenetic histories is the topic of the adaptive activity of an organism. The discussion of Hutto and Myin’s vision of adaptive or flexible behaviour is scarce and often presented as self-explicating. For instance, the following quote is the only instance where Hutto and Myin mention the function of normativity:

The natural attunements between organisms and their environments in the past not only structure the profile of an organism’s current tendencies for response, they normatively fix what is intentionally targeted, in complicated ways across multiple spatial and temporal scales. (Hutto & Myin 2017, 116)

Moreover, they proceed to state that it is exactly this role of normativity in understanding adaptive behaviour that allows REC to be differentiated from the strictly naturalistic theories. One would expect that the aspect so crucial to differentiation of REC from its rival Strict Naturalism receives significant attention. However, no explanation is offered to justify such a crucial assumption. From here onwards, it is taken for granted, followed by the authors’ comment: “[...] REC’s silence on this score is a studied silence” (Hutto & Myin 2017, 117).

The Radical Enactivism’s framing of adaptive changes of “basic minds” as “inflexibly fixed or hardwired” through their ontogenetic and phylogenetic histories follows the same strategy as their handling of normativity and autopoiesis. In their discussion of AE, Hutto and Myin (2017) endorse seeing “the capacity of agents to adapt selectively to specific features of their environment” (77) through contentless responsiveness. To remind, this is exactly AE’s understanding of the world as the place of “salience” for an organism that is misaligned with REC’s holding “basic minds” as incapable of “normativity”. Hence REC continues to consistently rely on Strict Naturalism’s theoretical means.

Recall the ultimate disagreement of REC with Rosenberg’s Strict Naturalism. When considering Jerry Fodor’s argument against Darwinism, Rosenberg (2013) argues in favour of Darwin’s theory of natural selection and disentangles the appearance of purposiveness in biological regularities by claiming that they: “[...] obtain only in virtue of the operation of blind

variation and environmental filtration on local conditions.” (10). Accordingly, “The only way the first or any adaptation can arise is by blind variation: that is the only physically possible source of adaptation that the 2nd law will allow.” (13).

Now, consider that in one of their works Hutto and Satne (2015) voice worries about existing doubts with regard to the fact that biological explanations are enough to exhaust what some see as “purposiveness”. They worry hence that they may doubt the fact that adaptivity and purposiveness do not exist in the natural world. Natural selection, according to Hutto and Satne, tells us everything about the responsiveness of organisms to certain features of environment. At this point of discussion, they refer their readers to Rosenberg (2013), who, in their opinion, “easily defuses” any doubts about the functional biological explanations by natural selection (See Hutto & Satne 2015, 532). For them, it is biology that “can tell us what ancestors of a particular sort of device in fact did target and thus what fixed the range of things descendant devices now respond to” (2015, 531).

The refusal to naturalise content was caused by Radical Enactivism's aim to avoid dealing with the Hard Problem of Content. As REC puts it, instead of naturalising content, it claims to be seeking to explain “the natural origins of content”. How does it claim to achieve so? “To answer the origin question naturalistically, Hutto and Satne write, requires appealing only to mechanisms that do not introduce anything mysterious into the story” (530). “Explanatory naturalism” defined through mere avoidance of mysterious states, entities, and properties forms a rather weak definition of naturalism. On multiple occasions, REC indeed seems to rely on this weak definition that can be more than comfortably accommodated in the framework of Scientific Naturalism that endorses the authority of science in both ontology and methodology. For instance, when accounting for adaptation, Hutto and Myin go as far as to refer for help to Rosenberg in order to prove their point about the exhaustion of adaptation by pure biological explanations. The referral to Rosenberg, the very embodiment of Strict Naturalism, the assumptions of which must be completely rejected according to Relaxed Naturalism, strikes me as perplexing. Relaxed Naturalism, as authors themselves stress on multiple occasions, is not an expanded version of Strict Naturalism, precisely because it rejects the assumptions of the latter.

## **7. Concluding remarks**

The theory of Radical Enactivism (REC) is articulated by Daniel D. Hutto and Erik Myin in their co-authored books *Radicalizing Enactivism* (2013), *Evolving Enactivism* (2017), and adjacent publications. The authors claim to resolve a number of key philosophical issues

left unaddressed by contemporary theories of enactive cognition, the most prominent among them being that of Autopoietic Enactivism (AE). Hutto & Myin's central claim is that AE fails to adequately address the Hard Problem of Content (HPC); to ameliorate this circumstance, Hutto & Myin assert that information-as-covariance does not constitute information-as-content. By doing this, however, Hutto & Myin are now responsible to provide an account of the emergence of content. To provide this account, they claim that the philosophical/methodological 'toolkit' of Strict Naturalism is insufficient. Instead, they adopt the 'toolkit' of Relaxed Naturalism, which integrates the findings of humanistic sciences and is opposed to a central claim of strict naturalism. As Hutto and Myin uphold and emphasise, "RECCers are naturalists, albeit of a relaxed sort" (2017, 122). What makes them "radical" – the appeal to the role sociocultural scaffolding plays in the origins of content – is secured through the Radical Enactivism's commitment to Relaxed Naturalism:

*RECCers think that whereas it is impossible to explain content using only the limited resources of restrictive naturalism, it is entirely possible to explain the origins of content, at least in principle, using the expanded resources afforded by a relaxed naturalism. (Ibid., 124)*

Hutto and Myin believe they are now in an adequate position to provide a theory of the emergence of content. Content, they claim, emerges within given sociocultural practices. Yet, this account of the emergence of content is entirely reconcilable with a strict naturalist conception. It appears that they did not require Relaxed Naturalism in the first place to explain content or avoid the HPC. The reasons for committing to Relaxed Naturalism and avoiding the HPC loses its significance in the course of Hutto and Myin's construction of their definition of 'basic minds'. Hutto and Myin's view does not align with the reasons that led them to committing to Relaxed Naturalism.

For Radical Enactivism, the assumption of the origination of content and cognition independently from sociocultural context is impossible. In order to justify Relaxed Naturalism's expansion of its explanandum to humanistic disciplines, Radical Enactivism is required to disagree with all of the naturalistic commitments about the origins of content. The proclaimed commitment of REC to Relaxed Naturalism bounds it to be dissatisfied with any naturalistic account of content. The reliance on the "restricted resources of the hard sciences" would mean alignment with the reductionist explanations of Strict Naturalism. Nevertheless, REC on multiple occasions align with the strictly naturalistic readings and assumptions: firstly, in their interpretation of autopoiesis; secondly, in the denial of phenomenality and hence normativity; lastly, in the exhaustion of adaptive by natural selection, agreeing with Rosenberg. Seeing how REC's metaphysical commitments are on multiple occasions aligned with that of Strict Naturalism, then it is unclear how exactly they reject the assumptions of Strict Naturalism. REC

seems to have conflicting commitments. Recall that Relaxed Naturalism is not to be viewed merely as an expansion of Strict Naturalism due to the rebuttal of its assumptions by REC. If it is the case, then REC owes an explanation of how its explanatory alignment with Strict Naturalism fits the professed rebuttal. Lacking such an explanation, we therefore have grounds to question REC's justification for its treatment of 'basic minds' as nothing but autopoietic self-sustenance and its grounds for avoiding the Hard Problem of Content.

## Abstract

In developing REC, Hutto & Myin commit to 'Relaxed Naturalism', a philosophical position very broadly concerned with "thinking about the natural world and our place in it" (Hutto 2023, 2). The articulation of the philosophical program of Relaxed Naturalism was itself an endeavor initiated by Hutto in collaboration with philosopher Glenda L. Satne (2015, 2017, 2018a, 2018b). They define Relaxed Naturalism in opposition to both 'scientific/strict naturalism,' which they deem to be too strict in its dedication to hard sciences, and 'liberal naturalism,' which they deem to be too permissive in regards to 'supernatural' phenomena. Relaxed Naturalism aims to negotiate a moderate position between these two approaches to naturalism by "draw[ing] upon and harmoniously integrat[ing] the discoveries from a wide range of sciences and disciplines" (Hutto 2022, 165). I assert that a close examination of the treatment of 'basic minds' in radical enactivism undermines REC's proclaimed commitment to Relaxed naturalism. Moreover, I demonstrate how the three core notions utilized in REC's analysis of 'basic minds' — autopoiesis, adaptivity, and normativity — support REC's alignment with strict naturalism rather than relaxed naturalism, as they provide a comprehensive account of basic minds within the framework of natural sciences alone. Insofar as Hutto & Myin deem it unnecessary to employ the extended repertoire of concepts offered by relaxed naturalism, they betray their own argument for its methodological necessity. I demonstrate this by uncovering REC's double standards that can be found in its treatment of basic minds. REC criticises rival theories for their strictly naturalistic purview of the mind, yet, applies the same perspective in its own treatment of basic minds, thus applying its principles rather unfairly. In my thesis I aim to demonstrate how Radical Enactivism's unfair application of its own principles undermine its commitment to Relaxed Naturalism, particularly regarding its perspective on "basic minds."

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