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# Revisiting the Intentionality All-Stars

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**Abstract:**
Eliminativism is a position most readily associated with the eliminative materialism of the Churchlands, denying that there are such things as propositional states. This position has created much controversy, despite the fact that intentionality has long been seen as perhaps *the* core problem for naturalistic philosophy. There is a more radical interpretation of eliminativism, however, denying not only mental states, such as beliefs and desires, but also intentionality (i.e., aboutness) on a global level. This position traces its contemporary origin back to Quine, but has generally been assumed to undermine naturalism or, worse, to be incoherent by the majority of philosophers who maintain that there clearly are things or mental states that are *about* others. In a recent paper, Hutto and Satne (2015a) offer an update that tries to revive John Haugeland's baseball analogy from his influential 1990 review paper *The Intentionality All-Stars* on the state of the game to argue that the failure of Neo-Cartesians, Neo-Behaviorists, and Neo-Pragmatists should urge us to make them work together to naturalize content and "win the game." But Hutto and Satne misunderstand what the game is ultimately about. The goal of the Intentionality All-Stars is not to naturalize content against eliminativism but to defend a naturalist "third-person" view of the problem against first-person phenomenalists. For this goal, a naturalist defense of global content eliminativism would equally enable them to emerge victorious. Revisiting Haugeland, I will offer my own analysis of the current state of play to argue that global content eliminativism has not received sufficient attention and deserves a more prominent place in the debate than it currently occupies.

**Keywords:**
Haugeland, Eliminativism, Content, Mental representation, Quine, Churchland

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## 1. Introduction

The two major problems in the philosophy of mind are the infamous problem of consciousness and the problem of intentionality. The latter problem, though far less known among the public, has received considerable philosophical attention. If you were to ask anyone walking by in the street whether they have thoughts about things, one might wonder how insane someone must be to respond with "no," that is, if the person being asked does not instantly hold the questioner to be mad himself. Non-philosophers would be very surprised that anyone might suggest that people did not have thoughts about things. How to make sense of intentionality in a naturalist view of the world, however, is a problem that has occupied philosophers at least since the 5th century B.C.E. when Parmenides of Elea wrote *On Nature*.[1] Alex Rosenberg gives a succinct analysis of the problem:

> The basic problem that intentionality raises for naturalism has been obvious enough since Descartes or even Plato [*Meno*, 99]: how can a clump of matter, for example, the brain or some proper part of it, have propositional content, be *about* some other thing in the universe. What naturalism requires is a purely physical, causal account of intentionality that itself makes no overt or covert appeal to semantical concepts. (Rosenberg, 2013, p. 3)

Although Plato grappled with the problem of intentionality, it is Descartes (1641) who is most readily associated with the problem of intentionality. After he (in)famously inferred mind–body dualism–-the conclusion that minds are separate from bodies—from the "undoubtable" fact that we have thoughts, how thoughts could relate to the material world became a much-discussed problem. While certainly a popular view among the public, Descartes' conclusion of mind–body dualism has become unfavorable among philosophers of mind. For many naturalist philosophers, the mind simply *is* the brain or, for that matter, the entire nervous system. Yet, the underlying problem is not unique to dualism, but also applies to materialist views of the mind, i.e., how could a materialist mind have thoughts about things?

In this paper, I attempt to convince the reader that Descartes' argument that we have thoughts about things is on more shaky ground than we might have imagined. I argue that *content eliminativism*, i.e., the flat-out denial of Descartes' original premise of an "undoubtable fact" that we have intentional thoughts, is to be taken seriously.[2] In doing so, I will draw upon

1 See Caston (2008).

2 But even if Descartes is not committed to this position, intentionality is often viewed as a necessary ingredient any theory of the mind needs to satisfy (see Dennett, 1987; Searle, 1983). As I shall argue

a target article in the journal *Philosophia* by Hutto and Satne (2015a) as an excellent argumentative scaffold, since they updated and tried to revive John Haugeland's baseball metaphor from his influential 1990 article *The Intentionality All-Stars*, which reviewed the state of play in the literature on intentionality. Borrowing Haugeland's distinction between Neo-Cartesians, Neo-Behaviorists, and Neo-Pragmatists, Hutto and Satne argue that these strategies to naturalize intentionality have failed in the last quarter of a century and must be combined in order to achieve victory. Cooperation appears to be a laudable goal, but why should we believe that the failure of three different strategies will turn to success when we combine them? Worse, as Hutto and Satne (2015a) state in their introduction to the special issue, they continue to hold that there is a "Hard Problem of Content" akin to the "Hard Problem of Consciousness" articulated by Chalmers (1995). When Hutto and Myin (2013) made this comparison, they maintained that naturalism and informational content are incompatible, but why that should lead us to pursue a new strategy to bridge this explanatory gap rather than embrace eliminativism is unfortunately given comparatively little attention.

While Hutto and Satne have received fifteen replies to their target article (see Hutto and Satne (2015b) for an introduction to the issue), only three responses expressed skepticism that the naturalization of content will succeed (see Abramova & Villalobos, 2015; Alksnis, 2015; Rosenberg, 2015). Despite their inclinations towards eliminativism, however, none of them have criticized Hutto and Satne's characterization of Haugeland's baseball metaphor. By revisiting Haugeland here, I will demonstrate that Hutto and Satne mistake what the game is ultimately about. The goal of the *Intentionality All-Stars* is not to naturalize content against eliminativism but to defend a naturalist "third-person" view of the problem against first-person phenomenalists, and for this goal a naturalist defense of *global content eliminativism* would equally enable them to win the game. All bases are on the same team! Rosenberg rightly notes that "consciousness is screaming at us almost from the cradle to the grave that thought is about stuff" (2014, p. 27), but that should only make us all the more careful not to succumb to the Cartesian temptation of treating this intuition as an a priori matter of fact. Unfortunately, even fervent critics of Descartes, such as Dennett (1987) and Searle (1983), despite their frequent complaints about the influence of Descartes on neuroscience and the philosophy of mind, commit this mistake themselves, arguing that intentionality is a requirement any theory of mind has to satisfy. Far from being a radically implausible and incoherent position, I argue that *content eliminativism* deserves to be taken more seriously, without thereby threatening to

in the remainder of this paper, this is a mistake committed by many thinkers, even if Descartes is not one of them. See Simmons (1999) and De Rosa (2010) for two forceful defenses of Descartes' commitment to intentionality.

undermine naturalism itself. With this throat-clearing out of the way, let me give an overview of this paper.

The paper is structured as follows: in Section 2, I explain the intentionality problem for naturalism and take a close look at Haugeland's description of the game and Hutto and Satne's update of it. In Section 3, I gather support for content eliminativism from a variety of arguments provided by Neo-Cartesians, Neo-Behaviorists, and Neo-Pragmatists at the outfield. In Section 4, I draw support for content eliminativism from neuroscience, arguing that eliminativism need not undermine neuroscience nor naturalistic philosophy. In Section 5, I conclude that content eliminativism has not received sufficient attention and deserves a more prominent place in the debate than it currently occupies.

## 2. Naturalism and the Problem of Intentionality

The problem of intentionality is as much of a philosophical puzzle as it is an empirical puzzle. Naturalists have tried for more than forty years to explain how mental representations can have semantic properties. This has led some philosophers of neuroscience to become *anti-representationalists*, suggesting alternative accounts for how the mind works.[3] However, here, it is important to note that anti-representationalism does not necessarily involve content eliminativism, as illustrated by Hutto and Satne (2015a) who oppose representationalism but nevertheless try to naturalize content. Furthermore, neither is it the case that content eliminativism requires anti-representationalism. At most, it is mental representations with semantic content that must go. Some will undoubtedly resist this notion, arguing that the very concept of mental representation implies semantic content. But I will argue in Section 4 that this is a mistake. If we look at neuroscience, the term "representation" is typically used in a much looser sense, based on mere correlations or similarity relations. It is therefore important to distinguish content eliminativism from anti-representationalism—two views that are often confused. Williams (2018), for example, mistakenly asserts that Rosenberg (2011, 2015) defends the view that "the concept of representation is so mired in folk superstition and ways of thinking that it deserves no place in mature science" (p. 144). But the fact of the matter is that Rosenberg does not even use the word representation once in his 2015 paper on naturalism, suggesting that "maps store information nonsententially and so perhaps nonpropositionally, and these may provide a model for how the brain does it" (p. 36). The problem is only one of representations with semantic content—or for that matter, anything with semantic content—

3 See Hutto and Myin (2013, 2014, 2017).

since deflationary views of representation tend to give up much of what made aboutness so challenging for naturalism to begin with.[4]

As just alluded to, perhaps the most outspoken defender of *content eliminativism* has been Rosenberg (2011, 2013, 2014, 2015). While most naturalists attempt to naturalize content, Rosenberg thinks that these attempts are doomed to fail and that a serious commitment to naturalism should make us eliminativists about content. Abramova and Villalobos (2015) in their reply to Hutto and Satne also view the strategies pursued so far as hopeless and call for a strict naturalism, but then go on to argue that the autopoietic framework of Maturana (1981) can offer us a new alternative. But the failure of decades of work on naturalizing intentionality should make us inclined to see an eliminativist stance as the default: that a new strategy for the naturalization of intentionality is worth betting on needs to be demonstrated, not merely asserted. Alksnis (2015) is closer to my own view here, offering a pessimistic response to the failure of naturalizing content, by suggesting a break with this literature as a whole. Instead of assuming that all-intelligent behavior requires intentionality, Alksnis suggests that we can take a global anti-content approach such as in the work of Beer (1990, 2000) on dynamical systems theory and robotics.

Importantly, I should note that such a global content eliminativism position should not be confused with the closely related *eliminative materialism* espoused by Paul and Patricia Churchland.[5] While the Churchlands deny that we have intentional mental states, this need not entail that there is, for instance, no propositional content at the level of linguistic communities. Therefore, it is an unfortunate fact of history that eliminative materialism has come to be abbreviated as eliminativism. To differentiate the two positions, one may call the position I defend in this paper *global content eliminativism*. Eliminativism as it is most frequently used today would then be a sort of *local content eliminativism* about mental content. I shall here stick with content eliminativism, but the reader should keep in mind that it is the stronger *global* thesis that is defended here.

The difference between these two easily confused positions can be nicely illustrated by the three main strategies for the naturalization of content that Haugeland (1990) illustrates using the metaphor of baseball to explain the "state of the game." Haugeland argues that there are three distinct strategies for naturalizing content, corresponding to the three bases in baseball,

4 Nevertheless, anti-representationalists such as Hutto have offered many supporting arguments for content eliminativism, some of which will be elaborated in Section 4.

5 See, for instance, Churchland (1981).

which he identifies as Neo-Cartesianism, Neo-Behaviorism, and Neo-Pragmatism.[6] In the following, I will take a closer look at Haugeland's description of the state of play and how Hutto and Satne see it now.

Neo-Cartesians are best understood by referring back to Descartes. For Descartes, there was something undoubtable about the content of our thoughts. Neo-Cartesians argue that intentionality has its source in the mind. Written words, sign language, spoken language, etc., get their intentionality from us. Here, John Searle (1983) is an important figure, having introduced the distinction between intrinsic and derived intentionality. While Searle does not give an account of how intrinsic intentionality could emerge, he thinks that scientists will eventually figure it out. In order to offer a good alternative to *content eliminativism*, however, an explanation is required of how intentionality can emerge in the brain. If one takes *content eliminativism* to be incoherent, one may not be much concerned with the question, being satisfied with the assumption that there must be an explanation, even if it has not been discovered (yet). Though many hold content eliminativism to be incoherent, most naturalists have not been satisfied with Searle's explanation, some calling it *explanatorily hollow*.[7] If Neo-Cartesianism is to be an alternative to the proposals by Neo-Behaviorists and Neo-Pragmatists, a more developed proposal is in order.

At the time of Haugeland (1990), such accounts were offered by the likes of Fodor (1975, 1981), Field (1978), and Pylyshyn (1984). What distinguishes intrinsic intentional content in the mind from the observer-relative (i.e., derived) content is *semantic activity*: a "global property of 'systems' of interacting tokens, together with the processes or primitive operations through which they interact" (Haugeland, 1990, p. 393). Hence, written words or traffic signs have only observer-relative content derived from intentional mind states. How can such semantic activity be instantiated? What is needed is a naturalistic theory of mental representation. The received view in cognitive science treats semantic activity as occurring on a syntactical level lending itself to a digital interpretation. Many continue to treat the mind as a computer with a *language of thought*, an attractive view for anyone working on artificial intelligence. There are problems with this view, however, as Fodor himself recognized.[8]

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6 While keeping baseball analogies to a bare minimum, I cannot (and do not want to) eliminate their use in this paper completely due to a misinterpretation of Haugeland's (1990) "intentionality game" by Hutto and Satne (2015a) that shall be remedied here. No more than a cursory understanding of baseball will be needed to understand the arguments here (or for that matter, in Haugeland).

7 See Hutto and Myin (2013, ch. 7).

8 See Fodor (2013).

Neo-Behaviorists, such as Quine (1960), Dennett (1987), and Stalnaker (1987) are, similarly to the Churchlands, "suspicious of determinate (concrete) mental states" (Haugeland 1990, p. 395). Unlike Neo-Cartesians, Neo-Behaviorists see the ascription of content as the crucial move in understanding intentionality. The problem of intentionality is transformed into a question of when a system's behavior can be usefully described as intentional. The ascription of desires and beliefs becomes appropriate if it serves explanatory and predictive purposes. Organisms seem to have goals that they pursue and can thus be usefully described as agents by postulating mental states (Veit, 2021). However, these accounts seem to go too far when they are then used to make ontological claims. If usefulness becomes the sole desiderata, non-living entities may well be described to possess intentional content. This is a problem for Dennett's (1987) intentional stance, with no limit for the ascription of intentionality. As Haugeland (1990) notes, a mousetrap may be ascribed to (i) the desire to kill a mouse, (ii) the belief that snapping kills it, and (iii) the belief that a mouse is in reach to be killed. Although this way of thinking might be useful here—at least predictively but perhaps also explanatorily—something seems to have gone wrong. But as Hutto and Satne (2015a) rightly point out, this does not much concern Neo-Behaviorists. Dennett (2009) puts this succinctly: there is "no theoretically motivated threshold distinguishing the 'literal' from the 'metaphorical' or merely 'as if' cases" (p. 343). Unsurprisingly, this view has been seen as too deflationary by many:

> The idea that defenders of second base are committed to an utterly deflationary or mere ascriptionist strategy is inspired by Dennett's "all there is" remarks – such as, when he writes "all there is to being a true believer is being a system whose behaviour is reliably predictable via the intentional strategy, and hence all there is to really believing that p (for any proposition p) is being an intentional system for which p occurs as a belief in the best (most predictive) interpretation". (Dennett, 1987, p. 29)
>
> The charge of mere ascriptionism is also licensed by his definition of intentional systems, which he insists, "does not say that intentional systems *really* have beliefs and desires, but that one can explain and predict their behavior by ascribing beliefs and desires to them". (Dennett, 1985, p. 7, emphasis added) (Hutto and Satne, 2015a, p. 525)

If intentionality can be ascribed to anything, we may doubt that the naturalization has succeeded. The intentional stance forcefully shows how quickly we ascribe intentional content

to entities that do not share our cognitive architecture.[9] All of this may suggest a deep evolutionary rationale for the usefulness of the intentional stance (Dennett, 1987, 2017; Rosenberg, 2011), but such an instrumentalist justification falls short of vindicating intentionality. We may equally interpret this strategy as undermining the efforts made by Neo-Cartesians and Neo-Behaviorists to naturalize content, instead supporting a much more eliminativist stance. Rosenberg (2015) is therefore right to warn us that naturalism may force us to realize that the seemingly "undoubtable fact" that we have intentional content is itself an illusion foisted upon us by the apparent intentional content of language. We are making a mistake similar to the ascription children make towards a ventriloquist's puppet. Let us therefore now turn to third base: Neo-Pragmatism.

Neo-Pragmatists[10] seek to ground "original intentionality essentiality [as] a social institution—part of a way of life engendered and maintained by communal conformism" (Haugeland, 1990, p. 414). In a way, Neo-Pragmatists turn Neo-Cartesianism on its head. Original intentionality is no longer found in "minds" but in the language of social communities, maintained and strengthened through social mechanisms and institutions. Content is "scaffolded" through interaction in linguistic communities. While content eliminativism implies eliminative materialism, the inverse need not be true if Neo-Pragmatists are to be believed.[11] The problem for Neo-Pragmatism largely stems from its exclusion of "any animals, (asocial) robots, or even isolated (unsocialized) human beings" (Haugeland 1990, p. 414). While Neo-Behaviorism seems too permissive, Neo-Pragmatism appears too restrictive for content ascriptions.[12] Hutto and Satne (2015a) suggest that this problem raises an "essential tension" responsible for the unpopularity of Neo-Pragmatism that so far has not been resolved:

9 Rather than providing a naturalized account of content, the content eliminativist sees the work of second-base Neo-Behaviorists as undermining first- and third-base strategies, i.e., Neo-Cartesianism and Neo-Pragmatism, respectively. Michael Graziano (2016) offers perhaps the most forceful argument for content eliminativism via the Neo-Behaviorist route. If one is lucky enough to attend a talk by him, it is likely that he will start using his ventriloquist skills to make a puppet speak. Despite our knowledge that it is only a puppet, we are unable to shake the feeling, the seeming, or however else one might describe our automatic ascription of intentional content to the puppet. Similarly, we are able to enjoy and ascribe contents to the "minds" of animated characters in, say, a Disney movie.

10 Haugeland mentions Heidegger (1927), Sellars (1954, 1969), Brandom (1979, 1983), and himself (1990).

11 Rosenberg, however, argues that content eliminativism follows straightforwardly from eliminative materialism.

12 As Neo-Cartesians would be eager to point out, the cognitive architecture that is deemed necessary for the development and participation in linguistic communities needs to exist prior to such an engagement. But if that is the case, intentionality should not be located in the social institution but

1. Participating in and mastery of socio cultural practices requires intelligence;
2. Intelligence requires intentionality;
3. Intentionality requires content. (Hutto and Satne, 2015a, p. 528)

A similar *essential tension* is found between the base strategies: whereas Neo-Cartesians locate original intentionality in the mind, i.e., the brain, Neo-Pragmatists locate it in social institutions, and Neo-Behaviorists deny that there is such a thing as original intentionality. Hence, it is unsurprising that many take these three strategies to be mutually exclusive, with proponents of each promising with great confidence that their program will eventually prevail over the others. This optimistic tone has shifted, however, as this analysis by Peter Godfrey-Smith illustrates:

> The decade or so from the early 1980s to the early 1990s was the heyday of the program of giving naturalistic theories of mental representation. The work was pervaded by a sense of optimism; here was a philosophical problem that seemed both fundamental and solvable. […] On some days it seemed that a full solution might just be around the corner. […] Fodor who once had detailed solutions to offer on a regular basis now seems to express only a vague hope that some form of informational semantics will succeed. […] I think that many people have been quietly wondering for a few years whether the naysayers might have been right all along. (Godfrey-Smith, 2006, pp. 42–43)

The program seems to have lost even more momentum now. Almost a quarter of a century after Haugeland's original paper, Hutto and Satne (2015a) sought to revive his baseball metaphor and write an updated analysis of the current state of the "game."[13] They argue that though each of the strategies has unilaterally failed, the problem of naturalizing content may be solved by combining the efforts on all three bases.[14] Many of their arguments will prove

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in the brain. The force of the intentional stance becomes apparent here: we cannot shake off the impression that, say, our dog or cat has intentional states, desires, and beliefs. Humans brought up in the wild and unable to communicate with others are still deemed to have desires and beliefs despite their lack of language. Discarding such content descriptions appears to have a significant cost.

13 In reference to the Intentionality All-Stars (see Haugeland, 1990).

14 This requires qualification because they argue that a central assumption of the debate needs to be dropped, i.e., the assumption that intentionality necessarily implies semantic content. This assumption they argue "causes first basers to try to account for content at the wrong level; it causes second basers to presuppose content without explaining it; and it commits third basers to an essential

helpful in defending content eliminativism, a position they deem "too radical." In outlining their new collaborative research program, they state two conditions: "[a]ny proposed explanations must (i) not presuppose content and (ii) have recognized scientific credentials" (p. 521). These points are well taken. Any naturalist explanation must rely on well-established processes studied by science and explain content without already assuming its existence.

Though naturalism is a widespread meta-philosophical position among philosophers, proponents vary greatly in the commitment with which they defend the position. In their edited volume on contemporary naturalism, Muller and Bashour (2014) draw a continuum from fairly weak versions of naturalism, such as Paul Horwich's "anti-supernaturalism," which merely denies the existence of supernatural entities such as spirits, to radical positions such as Alex Rosenberg's "scientism." Instead of thinking of naturalism as a binary category that a philosopher either belongs to or does not, we should think of naturalism on a continuum, with the crucial question being where one draws a line in the sand for the epistemic limits of science to naturalize—or for that matter eliminate–our manifest image. As Fig. 1 nicely illustrates, one can readily be a more committed naturalist without resorting to the merely semantic dispute on what should be called naturalistic philosophy.

While Horwich (2014) holds that "within the domain of phenomena that bear spatial, temporal, causal, and explanatory relations to one another, science rules" (p. 38), Rosenberg (2014) holds that "the tools we should use in answering philosophical problems are the methods and findings of the mature sciences—from physics across to biology and increasingly neuroscience" (p. 17), effectively denying that there is a limit to what science can tell us about the "nature of reality." Whereas Rosenberg should be placed far on the left-hand side, Horwich is firmly placed at the right end of the continuum. According to this characterization, one may treat Rosenberg's naturalism as quite optimistic about science. Nevertheless, he calls his naturalism "disenchanted":

> Most radical of all is the divergence between disenchanted naturalism and optimistic naturalism about the mind. The latter holds out the hope of a causal account of at least some human propositional knowledge, perhaps a teleosemantic account, perhaps some other theory of "real (intentional) patterns" in the brain. Disenchanted naturalism holds that all the neural facts (including conscious introspection) underdetermine unique propositional content, and there is no fact of the matter even about which finite set of propositions a neural state "contains." (Rosenberg, 2014, p. 35)

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tension" (2015a, p. 529). Hutto and Satne in effect agree with content eliminativism to a large extent.

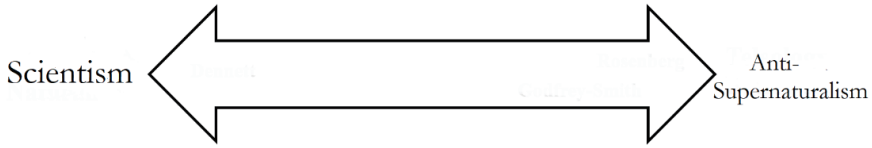


Fig. 1. Naturalist continuum from scientism to anti-supernaturalism.

While Rosenberg is optimistic regarding the power of science to push the boundaries of scientific inquiry, he is critical of an optimistic naturalism in the style of Dennett, which naturalizes rather than eliminates many of our ordinary folk concepts, even when current scientific evidence does not speak in favor of a naturalization view. Rosenberg gives primacy here to science, trusting in current science, rather than future science, which may or may not be able to naturalize folk concepts that do not fit with current science. In this sense, one may even describe Rosenberg's naturalism as pessimistic. Given this broad range, Horwich thinks that the "term [']naturalism[']  is used in such a wide diversity of ways—often with no definite sense in mind—that it probably does more harm than good and is best avoided" (p. 38). Rosenberg agrees to the extent that *naturalism* should not be a meaningless term. In response to this weakening of the position, Rosenberg reclaims the word *scientism*, historically a term of abuse against those with an allegedly "unwarranted and exaggerated respect for science" that does not respect the limits of science (p. 17). Rosenberg does not accept this negative definition: for him, a *scientistic* attitude is simply the only position that takes science seriously, implicitly accusing those who oppose scientism of embracing some version of supernaturalism. Horwich's and Rosenberg's disagreement lies simply in the extent to which some concepts qualify as *supernatural*. For Rosenberg and many others,[15] this includes *aboutness*: propositional content is a defective, in some sense *magical*, notion that cannot be accounted for in the scientific image, and has no role to play in cognitive science. In the following section, I analyze the arguments against the idea that content can be naturalized—that there is something inherently "spooky" about content.

15 These other thinkers are known as 'outfielders' in Haugeland's terminology and will offer various support for eliminativism in Section 3.

## 3. Winning the Game from the Outfield

As Rosenberg (2015) rightly notes, there is an alternative to Neo-Cartesian, Neo-Behaviorist, or Neo-Pragmatist attempts to naturalize content, i.e., *content eliminativism*.[16] It is a position that unifies parts of each of the three strategies, though, unlike Hutto and Satne, seeks to eliminate content rather than look for a new way of naturalizing it:

1. Rosenberg (2015) agrees with Neo-Cartesians to the extent that "if there is intentional content it must originally be mental" (p. 538).
2. Rosenberg agrees with Neo-Behaviorism to the extent that "attribution of intentional content is basically a heuristic device for predicting the behavior of higher vertebrates" (p. 538).
3. Finally, Rosenberg agrees with Neo-Pragmatism to the extent that "the illusion of intentionality in language is the source of the illusion of intentionality in thought" (p. 538).

These three lessons from the various fields in the game provide an alternative picture for the game of naturalizing content, resulting in an entirely different strategy to win the game. While I attempt to minimize the use of these metaphors here (despite their usefulness; see Veit & Ney, 2021), Haugeland's distinction offers a useful way of highlighting the diversity within supporters of eliminativism, instead of lumping them together with those trying to offer a scientific account of content. Unfortunately, Rosenberg misses the chance to draw on Haugeland's (1990) original paper. As Rosenberg only responds to Hutto and Satne (2015a), who given their interest in the naturalization of content only talk about infielders, i.e., those with "spelled-out proposals" who "offer positive accounts of whatever 'larger pattern' makes original intentionality possible" (Haugeland 1990, p. 387), he does not draw support from the outfielders.[17] Outfielders do not just fail to offer concrete theories, but "dismiss the issue" by, as Haugeland notes, "blaming Descartes for philosophy's misplaced presumptions, and remanding any remainder to biology" (p. 387). Part of the problem here is that Hutto and Satne

16 First-person phenomenalists such as Nagel offer a further alternative, but this gives up on naturalism altogether and is the real opponent for the *Intentionality All-Stars* in the intentionality game.

17 The baseball field is divided into three defensive zones: first base, second base, and third base. Outfielders, while in one of these three zones, stand far away from the infielder in order to catch the ball if it goes far enough (as it usually does in professional baseball). I follow Haugeland's definition of outfielders as those offering negative accounts on the naturalization of content or dismissing the issue altogether. While Dennett (1987) as an infielder attempts to naturalize intentionality, Skinner (1971) as an outfielder dismisses mental states as something science should never try to explain. As (neo-)behaviorists, however, both agree that intentional ascription is scientifically useful.

only mention the outfielders in a footnote interpreting Haugeland's placement as "closest to the action are those with the more developed and well worked out naturalistic theories of content" (2015a, p. 522). This is unfair, however, given that some of the outfielders are not even interested in providing a naturalist account of content. Alksnis (2015) does a better job here, recognizing that the further one moves outside, the less is "being explained by contentful states" (p. 683). Some, as I shall show shortly, even deny that it can be done without thereby questioning the viability of naturalism. But Alksnis, despite paying closer attention to Haugeland, also misunderstands the purpose of Haugeland's game by proposing that "we should abandon the game" to instead develop anti-content theories of cognition (p. 682). He is mistaken because this strategy is already part and parcel of the strategy of the Intentionality All-Stars. This omission of a serious engagement with the outfielders is especially startling in Rosenberg, as the outfielders for each position Haugeland discusses agree with him on the various merits of Neo-Cartesianism, Neo-Behaviorism, and Neo-Pragmatism.

First (and the only outfielder Rosenberg discusses) is John Searle, placed on the outfield of Neo-Cartesianism. He maintains that "there really are mental brain-states, and that intentionality is what distinguishes them" (Haugeland 1990, p. 387). As an outfielder, however, he does not offer any account for how such a "mysterious causal property" or rather "occult power" (p. 387) could be instantiated, putting trust into the future work of science to unravel this mystery. Though somewhat "spooky," Searle is sure that intentionality is so obviously real that there must be some biological explanation, even if it currently seems "supernatural." Rosenberg's argument for content eliminativism just turns this on its head. The scientific and philosophical work on intentionality has shown that content is deeply problematic. Instead of hoping for some future resolution, Rosenberg bites the bullet: content must go.

Though Rosenberg is mistaken in attributing the distinction between original and derived intentionality to Searle, one may doubt that there is a relevant difference between Haugeland's distinction (1990) and Searle's (1980, 1983, 1992) distinction between intrinsic and derived or "observer-relative" intentionality. Haugeland, however, insists that the two should not be confused. Importantly, he argues that his *original intentionality* does not entail any substantive assumptions about the ways it could be realized. He is open to all three of the strategies for the origin of intentionality offered in his paper, simply defining original intentionality as intentionality that is not derivative. For Searle, on the other hand, "mental structures or states have intentionality 'intrinsically,' as a causal consequence of the physical/chemical properties of the brain," which as Haugeland notes is a "substantive metaphysical claim" (p. 420). What matters for the Neo-Cartesian is that intentionality is derived from the mind. Searle characterizes his distinction as follows:

> The actual performance in which the speech act is made will involve the production (or use of presentation) of some physical entity, such as noises made through the mouth or marks on paper. Beliefs, fears, hopes, and desires on the other hand are intrinsically Intentional. To characterize them as beliefs, fears, hopes, and desires is already to ascribe Intentionality to them. But speech acts have a physical level of realization, qua speech acts, that is not intrinsically Intentional. There is nothing intrinsically Intentional about the products of the utterance act, that is, the noises that come out of my mouth or the marks that I make on paper. (Searle, 1983, p. 27)

Content eliminativists can grant all this, but they deny that there is any *original intentionality* to be had. Without original intentionality, of course, there is also no *derived intentionality* to be had. As the quote of Godfrey-Smith (2006) in Section 2 illustrated, the optimism that infielders, such as Fodor, used to have about the prospect of naturalizing content has diminished drastically. Even worse, Hutto and Satne (2015a) point out that some of the star players at the Neo-Cartesian base seem to have become outfielders, dropping the strategy[18] altogether.

> In what might be regarded as a remarkable shift of views, Fodor and Pylyshyn (2015) now hold that "Quine was right: … meaning should be viewed as a suspect notion for purposes of serious theory construction" (p. 50). By their lights, "Like the Loch Ness Monster, meaning is a myth" (p. 58). At first glance, these statements might lead to some confusion about which base Fodor and Pylyshyn are now really covering. In fact they are still seeking to naturalize content in a neo-Cartesian way, it is just that they now conceive of content in thoroughly non-Fregean terms. (Hutto and Satne, 2015a, p. 523)

Owing to the scope of this paper, I unfortunately cannot explore their new account much further, but Hutto and Satne (2015a) raise doubts that Fodor and Pylyshyn (2015) can satisfy their conditions for naturalizing content. Without an explanation of how semantic content can arise from non-semantic physical events, it must be treated similarly to Searle's position, i.e., as explanatorily hollow.

Rosenberg agrees with the Neo-Behaviorists in seeing intentional ascriptions as a sort of useful fiction. Here, it is a startling omission not to mention B.F. Skinner, who comes quite close to content eliminativism, largely agreeing with Fodor and Pylyshyn (2015). Haugeland writes:

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18 Or rather "ball" if one intends to keep the baseball analogy.

> Finally, way out on the warning track in center field, B.F. Skinner is up against the wall defending the view that science can explain behaviour without reference to intentionality, and that therefore there is no reason to posit intentional states or entities. Hence, their status is like that of the crystal spheres or the luminiferous aether: unnecessary inventions of a naive and false scientific theory. (Haugeland, 1990, p. 388)

Two interesting allies for *content eliminativism* wait on the outfield of Neo-Pragmatism: Rorty and, perhaps more surprisingly, Derrida. Haugeland points out that:

> Richard Rorty and Jacques Derrida are out in the left field. They both play pretty deep, Derrida perhaps closer to the foul line. The position in a nutshell: talk about mentality and intentionality is just that: *talk*. "Intentional idioms" may, as a way of talking, sometimes be useful or entertaining; but that gives them no more claim on our allegiance than talk of sakes or goblins. What's worse, they're out of date; now that the intellectual high culture is over its infatuation with transcendence and the a priori, intentionality can slip quietly into the social-history curriculum, alongside transubstantiation, noumenal selves, and the divine right of kings. (Haugeland, 1990, p. 387)

Unlike infielders, who have gone to great lengths to undermine each other's attempts at naturalizing content, outfielders have an odd convergence: a convergence upon content eliminativism. Whether they treat intentionality as fortune-telling or the aether (Skinner), fairy tales of goblins (Rorty and Derrida), or myths akin to the Loch Ness Monster (Fodor, Pylyshyn, and Quine), content seems to be something we can do without. Far from treating outfielders as lackluster defenders of their positions, if anything merely providing sketches (i.e., "under-developed" theories) of how content could be naturalized, the inverse might be true: they have recognized that any serious work on each base will result in the conclusion that intentionality cannot be saved. Rather than solving the problem of naturalizing content, outfielders from various fields have gone to great lengths to show that the problem is far less severe than we might have thought. More importantly, it is not a real problem for naturalism. This of course leaves open the question of how the mind works. How can our brains produce apparent content and intentionality? The content eliminativist owes an alternative explanation, perhaps even an alternative paradigm to the received views in cognitive science, one unlike the Cartesian folk conception of our minds. It is here that recent developments in neuroscience make content eliminativism a far more attractive position.

## 4. Content Eliminativism

Why is *content eliminativism* commonly disregarded as a serious contender even among naturalists? Here, a cutting remark Daniel Dennett made about Rosenberg's position will serve to illustrate the main line of attack. He suggests an analogy to Antoine Magnan (1934)—famously known for arguing that it is impossible for bees to fly, given the laws of air resistance. Rosenberg, according to this analogy, is convinced of the arguments for eliminativism, even though content is as obvious as the fact that bees can fly.[19] This analogy is interesting for several reasons and allows for two contrasting interpretations.

First of all, this analogy appears similar to some objections naturalists make against their non-naturalist adversaries—those who practice philosophy from an armchair, supposedly largely ignoring science and solely relying on a priori arguments and assumptions. Perhaps the most obvious recent example here is Nagel's (2012) heavily criticized book *Mind and Cosmos*. Both scientists and philosophers were quick to condemn the book, it serving as an example for philosophy gone wrong, showing the flaws of mere a priori armchair philosophizing.[20]

One of several spurious arguments that Nagel provides is that "moral realism is incompatible with a Darwinian account of the evolutionary influence on our faculties of moral and evaluative judgment," concluding that "since moral realism is true, a Darwinian account of the motives underlying moral judgment must be false, in spite of the scientific consensus in its favour" (p. 105). No naturalist, in fact, no one should accept this argument. On the first reading, Rosenberg might appear as someone who—similar to the argument by Nagel—holds that because of conceptual a priori arguments, a naturalization of content is impossible.[21] Instead, I suggest an alternative reading with a far less fortunate outcome for Dennett. Here, Rosenberg is depicted as someone who follows science, even when *common sense* screams that the theory is wrong. Such a reading would put Dennett in the same boat as Thomas Nagel and Rene Descartes, arguing that since we obviously have intentional content, *content eliminativism* must be false, in spite of the scientific consensus.[22]

Dennett, of course, would be quick to deny this: there is no scientific consensus on content eliminativism. That is correct. However, there are two conclusions to draw from this, one in

19 From personal conversation at the Generalized Theory of Evolution Conference in Düsseldorf, 2018.

20 Examples include Dupré (2012), Godfrey-Smith (2013), Leiter and Weisberg (2012), Kitcher (2013), McGinn (2013), and William (2015).

21 Similar views may be attributed to various outfielders explored above.

22 Notice the same argumentative style to Nagel's argument above.

favor of content eliminativism and the other requiring plenty of work. Firstly, no serious naturalist should ever argue that because something *seems* obviously true, there must be a way to naturalize it, i.e., make it safe for science. As optimistic as the program of naturalizing content was in the 1980s and 90s, alternative views are currently blossoming. Some outfielders such as Searle, who hold that intentionality is not a problem because it obviously exists, need to reconsider their positions. Why? Because, the second conclusion to draw from this argument is that content eliminativists need to provide a scientific explanation of how the mind works, giving rise to the illusion of intentionality without thereby naturalizing content. If no such alternatives to the received representationalist view of the mind are available, Dennett may be justified to draw this analogy. But this is not the case.

Rosenberg importantly reveals that even if intentional ascriptions work considerably well at the moment, there are already areas of neuroscience that are "better at explaining and predicting behaviour," which should lead us to expect that "advances in neuroscience will eventually reveal the wrongness of intentional content attribution, as science has revealed the wrongness of color attributions, folk physics, and other adaptively useful fictions" (2015, p. 453). This is far from an a priori conceptual argument; instead, it considers the current advances in neuroscience as a serious attack on the traditional philosophy of mind.

Recent advances in neuroscience make content eliminativism far more attractive and plausible than has been assumed. Much of the opposition to content eliminativism may stem from the fact that the Cartesian foundations of neuroscience have only recently been questioned.[23] Terms such as cognition, memory, information storage, etc., are related to and are defined in terms of the very paradigm that is being questioned here. However, some philosophers such as Jacobson (2015) argue that actual neuroscientists are already not committed to the "philosopher's fancy" of representation and intentionality. She argues that much of neuroscience does perfectly well without requiring content. Content eliminativism, rather than undermining naturalism and neuroscience, might actually have barely any impact as current neuroscience is already closer to the eliminativist position outlined here than traditional computationalist approaches.

> It seemed to me quite clear by the late 1990s that "mental representation" as used in the cognitive sciences had just about nothing to do with the mental representations that are dominant in standard philosophy of mind (Jacobson, 2007, 2008, 2009, 2013). As we will see below, with the rise of representational similarity theories and their elaboration of what representation in neuroscience amounts to, there seems no doubt now that

23 See Wheeler (2013), Jacobson (2003, 2015), and Hutto and Myin (2013, 2014, 2017).

> cognitive neuroscientists have in mind a very different notion of representation. (Jacobson, 2015, p. 627)

Unless philosophers want to criticize neuroscientists for the use of representational terms by vague and context-sensitive similarity relations, without the presence of intentional content *via* a priori armchair theorizing, I suggest that representations without intentional content are not incoherent. Neuroscience "marches on" by uncovering the workings of the "mind" in decidedly non-Cartesian terms. The terminology, however, may be here to stay. Perhaps we should take the naturalist route seriously and let neuroscientists be the ultimate arbiters on how terms such as representation, cognition, memory, and information storage are to be understood. As Rosenberg's analysis of Kandel's (2009) Nobel Prize-winning work on the neuroscience of memory suggests:

> [information storage] turns out to be just a matter of either organizing extant synaptic circuits in new wiring patterns or switching on genes in neurons that produce new synapses. […] The brain does everything without thinking *about* anything at all. (Rosenberg, 2014, pp. 26–27)

If Jacobson and Rosenberg are right about the state of neuroscience, then the adoption of an alternative framework, such as radical enactivism proposed and developed by Hutto and Myin (2013, 2017), would have far less of a radical impact on the neurosciences than imagined, since content already plays a much smaller role in the sciences than philosophers have assumed. Rather than tying ourselves here to any particular anti-representationalist view of the brain, I suggest that there are plenty of alternatives to the received view in cognitive science, and the best path may well be an embrace of pluralism. A detailed analysis of *content eliminativism* in the cognitive sciences would require its own paper, perhaps even the tools of experimental philosophy, and due to considerations of space, cannot be offered here. However, the arguments presented in this paper should serve to illustrate the idea that neuroscience can work well in a framework of content eliminativism.

One further line of criticism against the viability of content eliminativism—perhaps the strongest possible objection—comes in the charge of incoherence, i.e., that anyone who accepts the view cannot consistently acknowledge that they accept it.[24] That is because the acceptance of the view entails that one believes it, but eliminativism denies that we have beliefs in the form of intentional content. This fear of the incoherence of the position has, I

24 I thank an anonymous reviewer for urging me to respond to this criticism of content eliminativism.

suspect, made the view appear absurd—a literal non-contender that is only to be shown wrong, not proven right. This is not just the worry that intentional content is "intuitively obvious," but rather that anyone offering an argument for content eliminativism is already dealing with intentional content and thus undermining their own position. In the conclusion of his response to Hutto and Satne, Rosenberg (2015) admits that this is a major challenge: "once we turn our backs on intentionality, eliminativists will need to find a way of avoiding the critique that we can't express the truth of our theory, or even that it has meaning," though he nevertheless thinks that "we can do it, but it will require another few pages" (p. 547). One way of responding to this challenge is thus likewise to maintain that no good reason has been provided for thinking that this problem cannot be overcome, but this is beyond the scope of this paper. Nevertheless, one option that I suspect has great promise is a suggestion by Alksnis (2015) that I briefly describe below.

Note, however, that my goal was not to provide an extended philosophical argument and defense of eliminativism, but rather to revisit Haugeland's original playing field to show that the view already stands on much better feet than it is often given credit for; that it is a mistake to discard the view out of hand without acknowledging that it is part of the strategy of the *Intentionality All-Stars*. Furthermore, it is worth noting that this argument against eliminativism relies upon a content-based concept of truth, and since the philosophical status of truth has remained elusive, we ought not to demand that eliminativists must solve this problem prior to eliminativism being taken seriously as a contender. Indeed, we might only be able to develop serious contenders for a concept of truth compatible with eliminativism once we try to develop an eliminativist epistemology. Too little effort has been spent on seriously developing such alternatives, so we should not reject eliminativism out of hand. Perhaps an autopoietic account could provide another alternative worth exploring, as suggested by Abramova and Villalobos (2015). Though I have some reservations against this account, I will not go into any detail here (though see Veit & Browning forthcoming). One avenue, however, that I find especially encouraging has been suggested by Alksnis (2015), who argues that J. J. Gibson's (1977, 1979) notion of affordances could provide us with a useful ecological alternative that is similar to content in some regards but ultimately rejecting aboutness. This makes it an ideal contender for eliminativists to explain the workings of the mind. To develop this notion into an alternative epistemology, however, would take us far beyond the goals of this paper. It is sufficient for me to maintain that I see the affordance approach as one plausible contender towards an eliminativist epistemology. Let me therefore now turn to the conclusion of this paper.

## 5. Conclusion: Game Over?

Hutto and Satne (2015a) conclude their "game analysis" with the observation that the star players have failed by trying to win the game alone, "undermining the efforts of their team in the process" (p. 535). They use the baseball analogy to argue that the game can only be won through teamwork and requires a new management that gives the "players on each base […] new direction, demarcating their specific roles in the larger game. Only then will the All-Stars start to function effectively as a team – only then is it likely that they will finally get their innings and maybe, just maybe, win the game." (2015a, p. 535). However, it should now be apparent why I argued in the beginning that Hutto and Satne misunderstand what the game is about. Notably, they criticize Quine for operating "within a third personal, theoretical and observational framework" (p. 526), leading to inherent problems in the naturalization of meaning, aboutness, and content. Instead, they want us to relax our naturalist stances. Now, there might very well be good reasons to adopt such a relaxed stance, but is there any need of doing so in the face of the problem of intentionality? To win, the Intentionality All-Stars only have to beat the opposing team. The "other team" are of course first-person phenomenalists, who deny that intentionality can be understood by the naturalist, i.e., third-person, scientific framework. This does not exclude the eliminativist position, for naturalism would prevail if it was to show that content was an illusion.

As this paper hoped to show, much of the effort put into the naturalization program may have been due to a fear that naturalism may be undermined, or perhaps even worse, the return of mind–body dualism. Failure to naturalize content does not entail a loss to the likes of Thomas Nagel (2012) who deny that science can give us an understanding of intentionality or consciousness, instead asserting that they can only be understood from first-person experience. But as Haugeland elegantly replied at the end of his essay, we can leave the question "What is it like to be *at* bat?" for another day (1990, p. 419). Once the outfielders are taken seriously as defending a naturalistically tenable view, naturalist infielders need no longer despair that their failure to provide naturalist accounts of content undermines naturalism itself. Hutto and Satne (2015a) have provided a good analogy for teamwork, but the common goal of the players is not naturalizing content but a defense of naturalism against first-person phenomenalists.

To conclude this revisit of Haugeland's baseball analogy for the intentionality challenge to naturalism: the game cannot be won without outfielders. The work of outfielders suggests that we need not be afraid of first-person phenomenalists; they are unable to strike the ball far anyway. Global content eliminativism is a serious contender and deserves a more prominent

role in the debate, strengthening naturalism rather than undermining it. On the other hand, what we can really relax about is the apparent "problem of intentionality." Naturalism is safe.

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