Intentionality and Dualism: Does the Idea that Intentionality Is the MOM Necessarily Entail Dualism?

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abstract

It is well known that Franz Brentano was the first to suggest intentionality, the property of being about something, as a criterion for demarcating the domain of the mental. He suggested that intentionality is a necessary and sufficient condition for something to qualify as a mental event. It is important, for the purposes of this paper, to pay attention to the fact that Brentano's theory came from within a broader philosophical outlook that was thoroughly dualistic. He sought a total separation of the mental from the physical, and his appeal to intentionality as a defining criterion for the mental is in the service of producing such a separation. In Brentano's view, only mental events have intentionality, and it is in virtue of this feature that they differ from the events of the physical world. The aim of this paper is to explore whether Brentano's intentionality criterion for defining the domain of the mental is committed to the broader dualism from which it originated.

Recent years have seen a resurgence of interest in ancient questions concerning the grounding and criteria for mental events, properties and states as specifically mental phenomena. This resurgence is largely due to the considerable overlap between such questions and multiple other fields of philosophy. Conclusions about the nature of mental states have wide ranging impacts on issues such as animal rights and artificial intelligence. Contemporary analytic philosophy generally seeks to solve these questions with reference to one of two different mental properties: intentionality or consciousness.

It is well known that Franz Brentano was the first to answer such questions by suggesting intentionality, the property of being about something, to be directed toward, to focus on something or to have a semantically evaluable content, as a criterion for demarcating the domain of the mental. He suggested that intentionality is a necessary and sufficient condition for something to qualify as a mental event. It is crucial, for the aims of this paper, to pay attention to the fact that Brentano's theory came from within a dualistic philosophical outlook. He was firmly convinced that there is a radical separation of the mental from the physical, and his appeal to intentionality as a defining criterion for the mental is in the service of reinforcing such a separation. In Brentano's view, only mental events have intentionality, and it is in virtue of this feature that they differ from the events of the physical world.

1. Naturalizing Intentionality

The essence of Brentano's thesis is that mental events are differentiated from physical events by the fact that all mental phenomena exhibit intentionality as a form of directedness, a property which no physical phenomenon exhibits (Brentano, 1874/1995, pp. 88-89). Brentano's criterion has been subject to various kinds of criticisms. A particularly well-known example of such criticism came from Crane (actually remarking a suggestion formulated by Dennett before) who objected that intentionality is not sufficient for mentality. Crane therefore proposed to 'weaken' Brentano's criterion, suggesting that while all mental states are intentional, some things can be intentional without thereby being mental states (Crane, 2001). Thus, Crane saw intentionality as a necessary, but not sufficient, condition on something's qualifying as a mental state. Crane's objection is supported by the observation that many things, such as technological devices, seem to have some kind of intentionality, even if they are eminently nonmental. Crane's approach to the problem of demarcating the mental domain is connected to a specific metaphysical conception of intentionality, namely, the idea that intentionality is a naturalized property (Dretske, 1981; Millikan, 1984; Fodor 1987; 1990). This is a metaphysical conception that treats intentionality as a property which can be studied by the natural sciences.

Fodor gives a clear explication of this position:

> I suppose that sooner or later the physicists will complete the catalogue they've been compiling of the ultimate and irreducible properties of things. When they do, the likes of spin, charm, and charge, will perhaps appear upon their list. But *aboutness* surely won't; intentionality simply doesn't go that deep. It's hard to see, in face of this consideration, how one can be a Realist about intentionality without also being, to some extent or other, a Reductionist. If the semantic and the intentional are real properties of things, it must be in virtue of their identity with (or maybe of their supervenience on?) properties that are themselves neither intentional nor semantic. If aboutness is real, it must really be something else (Fodor, 1987, p. 97).

Such a materialistic theory of intentionality must be able to explain how a brain state can represent some content. One promising explanatory strategy comes through what is sometimes called the co-variational theory of mental representation. This theory considers intentionality a tracking relation with the external world. This might thus make sense of the possibility of brain states representing things in the world. The best-known version of the co-variational approach is Fodor's account of "asymmetric dependence" (Fodor, 1990). Fodor has two conditions for a mental state M to represent some content:

1) It is a law that Xs cause the tokening of Ms (information condition).
2) If it is a law that any Ys (that are not Xs) cause Ms, then that law is dependent on the law that Xs cause Ms, but not the other way around (asymmetric dependence condition) (Fodor, 1990, pp. 97-121).

This asymmetric dependence theory is a causal theory intended to deepen a primitive version of the causal theory, the *crude causal theory*, whose basic idea is that a representation represents whatever reliably causes it.[1]
A different account in the same direction is Dretske's informational semantic theory (Dretske, 1981). This theory gives two criteria for genuine representation. M represents X iff either

1) M is nomically determined by X

or

2) The natural laws are such that M is not tokened unless X is instantiated.[2]

Both theories broadly consider intentionality as a co-variation relationship, one that is justifiable on a naturalistic basis. It is worth noting two features of these two competing attempts to naturalize intentionality. Both accounts involve a traditional relational conception of intentionality. That is, they both seek to explain intentionality on the basis of the causal relationship between the representational content of a mental state and the object to which it refers.[3]
Another attempt to naturalize intentionality can be found in what is often called 'biosemantics' or 'teleosemantics'. This is a theory of mental content that relies on a

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1 To be precise, this theory provides Fodor's solution to the disjunction problem. Specifically, the two conditions implement Fodor's basic notion that of all the properties that are nomically related to (the property of causing occurrences of) a symbol, the symbol's reference is the property that figures in the nomic relation on which all the other nomic relations depend. For a critical review of Fodor's theory see Loewer & Rey (1991).
2 For this definition see Kriegel (2014, p. 166).
3 See Voltolini & Calabi (2009, pp. 240-249).

teleological notion of biological function (Millikan, 1993; Papineau, 1993). Such theories aim to identify the content-fixing circumstances responsible for a mental state's representational content. Thus, biosemantics agrees with the idea that an appeal to function is necessary for a naturalistic account of representational contents. According to Millikan, "proper functions" are determined by the histories of the items possessing them: paradigm cases are functions that were "selected for" and preserved by natural selection. For instance, perhaps fingers were originally selected because of their capability to hold tree branches, but they may have acquired new functions later, such as the function of handling very small things, in which case these new roles will become part of their function.

Millikan suggests that intentional systems can be conceptually divided into two parts: one aspect produces representations, while the other uses these representations. Suppose we have some element in a system which generates natural information in Dretske's sense. That information will be useless unless it is understood by the system. But, presuming that the beliefs of the bearers are systematically related to the structures of the signs taken to carry some specific piece of information, we can obtain a set of rules defining the meanings of each of those signs. According to Millikan, the representation and the represented must be paired, so it is a normal condition for proper functioning of the "user" aspect as it reacts to the representation. Then, represented conditions are conditions that vary, depending on the form of the representation, in accordance with specifiable correspondence rules that give the semantics for the relevant system of representation.

This view shares with the biosemantics theory, Dretske's account and Brentano's thesis, the idea of distinguishing the intentionality of our mental states from other kinds of directedness by the fact that our mental states can misrepresent things. As Millikan points out, the same sort of representational state may represent different things in different systems. To a frog, a black dot in the retina may represent food, but to a bug that same black point may signify a potential partner. Likewise, many different things may represent the same thing for a single system.

This theory therefore understands that a given representation means a certain thing, and the corresponding intentional state has a specific propositional content, because that representation occurs when the thing appears, and this occurrence is the ground of the evolution of the bearer of the intentional state.

All the theories here examined consider intentionality as a naturalistic and not conscious property and they all have a strategy to address the problems arising from the possibility of the non-existence of intentional objects. Certainly, the possibility of the non-existence of the intentional object raises the most pressing issue for intentionality theory, but there is another aspect of intentionality in need of consideration: its modality. A range of problems result from the fact that intentionality is related to beliefs and desires and not only to perceptions. Naturalistic theories of intentionality tend to respond to the problem of modality by considering the modality of a mental state as coinciding with that state's general functional role. However, this answer amounts to the claim that modality is not a contingent property of a mental state. This claim threatens to raise a contradiction. It is hard to understand how modality could be non-contingent with respect to a mental state, as opposed to intentionality which is contingent, if both modality and intentionality are naturalized properties.[4]

Such naturalization projects finally collide with a certain kind of dilemma, one that is best understood through the conception of intentionality developed by Searle (1983; 1992). Searle suggests that intentionality is something like a biological property, while at the same time

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4 See Voltolini & Calabi (2009, p. 260).

denying that it is a property which supervenes on materialistic states. In order to reconcile these two strands of his thought, Searle appeals to the complex notion of emergence, which ultimately takes him away from naturalism in the strict sense.

We must therefore turn to the question of whether the entire project of naturalizing intentionality ought to be abandoned. In fact, there are a multitude of other important objections to the naturalization of intentionality. I'll try to quickly recall the main ones, considering that most of them are well-known and probably the main objection has to do with the notorious disjunction problem that gives most clearly rise to the so-called *crude causal theory*. The crude causal theory, as I partially said, declares that a representation represents whatever reliably causes it. Suppose that horses reliably cause the representation we normally apply when we think about horses, HORSE, but so do cows on a dark night too. Then, agreeing to the crude causal theory, HORSE represents either a horse or a cow on a dark night, since this is what reliably causes it[5]. But this is not the correct answer; HORSE represents the non-disjunctive content horse. This "inability to distinguish cases of misrepresentation from the representation of genuinely disjunctive contents is the disjunction problem" (Mendelovici & Bourget, 2014, p. 327). The problem is not merely that the crude causal theory ascribes contents that are disjunctive. Some representations might actually be disjunctive; for instance, someone might have a concept with the content "mouse or rat". The problem, instead, is that the theory ascribes disjunctive contents when it should not. Based on our pre-theoretic understanding of intentionality, we know that the concept we use when we think about horses does not just represent a horse or cow on a dark night. Any theory that asserts otherwise obviously gets things wrong.

But that is not all. Another critical point is highlighted by the swamp-person thought experiment. The possible case of swamp-people is a powerful counterexample to teleological tracking theories, theories on which evolutionarily-determined biological functions play a role in securing content like for instance in Dretske or Millikan theories. It seems possible, in theory, that a molecule-for-molecule duplicate of you could emerge from a swamp due to perhaps a random quantum event. On Millikan and Dretske's views, this swamp-person would not have any representational states since it would not have an evolutionary history (Brown, 1993; Baker, 2007). A variant of the quantum-person argument could be expanded also to non-teleological tracking theories. Suppose that a single duplicate of your brain spontaneously appears in something like a Putnam's vat in space. This brain in a box has no possibility to interact with the world outside. Naturally, this brain seems to initially have many of the same mental states as you, though your mental histories will instantly diverge, since it receives no input from the outside whilst you do. The problem, here, is that this brain in a vat does not reasonably track anything, so tracking theories guess that it does not represent at all, not even a possible virtual world in case it were connected to a mysterious software[6].

It seems then that the only plausible alternative to Brentano's dualism is strong reductionism. However, both of the naturalistic theories described, show many complications and have faced objections and developed more or less convincing answers. Thus, I would like to suggest that the project of attempting to naturalize intentionality ultimately seems untenable (Lycan, 2009). In what follows, I seek to show that there is a strong alternative to naturalism, one which in some sense returns to Wittgenstein's linguistic normativism and to a Sellarsian version of inferentialism. Propositions, or, strictly speaking, semantic contents, can be about their

2. Normative Intentionality

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5 This example is taken from Mendelovici & Bourget (2014).
6 For these kinds of objections see Horgan, Tienson, & Graham (2003).

own objects without being mental states. This entails that intentionality cannot always be considered a strictly natural property. Hence, this observation opens up an opportunity to consider intentionality as a *normative* property (Brandom, 2000). To understand this idea, it would be helpful to recall Wittgenstein's considerations about expectations .

In the *Philosophische Untersuchungen* (§444), Wittgenstein describes an actual situation in which we might talk of expecting something:

> But it might now be asked: what's it like for him to come? – The door opens, someone walks in, and so on. – What's it like for me to expect him to come? – I walk up and down the room, look at the clock now and then, and so on. – But the one set of events has not the smallest similarity to the other! So how can one use the same words in describing them? – But perhaps I say as I walk up and down: "I expect he'll come in" – Now there is a similarity somewhere. But of what kind?! (Wittgenstein, 1953/1955, §444).

Wittgenstein's account of the intentionality of expectations denies the need to invoke any kind of relationship between expectation and some extra-linguistic reality. The link between expectation and satisfaction is in the fact that we use the same words to express what we expect and to describe what satisfies our expectation. Our puzzlement over the nature of expectation can be resolved by looking at the grammar we use to express expectations. The agreement or similarity between an expectation and the state which satisfies it cannot be understood as some strange relationship between a mental state and some external entity; nor can it be understood as an internal relation between the proposition describing the expectation and the event that fulfills it. This agreement simply consists in the fact that we use the same sentence, *P,* in the description of the expectation that *P* as we do in the description of what is expected: *P.*

Wittgenstein's way to consider intentionality generalizes from such examples of expectation, thereby denying any metaphysical relationship between thoughts and the world. This account ultimately sees intentionality as an internal, grammatical relation within the intentional state. This linguistic account of intentionality grounds a normative view. This line of thought is developed by Sellars, whose view I shall briefly discuss. Sellars claims that concepts pertaining to the intentionality of language do not refer to relations between language and reality. Instead, these concepts are used to classify linguistic manifestations with reference to one's background language. It follows that the notion of meaning is not a relational notion. For Sellars, statements are endowed with meaning not through a relation with the world, but rather through something that functions like a copula. Therefore, when we assign a meaning to a linguistic expression, we merely assign that expression a functional role within the rules of language (Sellars, 1980).

Sellars uses the formalism of "dot-quotes" to draw out the functional role of linguistic expressions. Dot-quotes are a device of logical notation by which he indicates a sortal predicate. A sortal predicate is a predicate that, in a distributive way, refers to all expressions of all possible languages which bear the same specific functional role within their respective languages. Sellars illustrates dot-quotes with the example:

"und" (in German) means *and*

This expression, written with dot quotes, becomes

"und"s (in German) are •and•s

The regimented version replaces "means" with the copula and uses dot-quotes to convert *and* into a sortal expression. This idea clarifies that, on Sellars' view, meaning cannot be understood relationally. This is because "means" is structured as a specialized form of the copula and, as Sellars puts it, "the copula is not a relation word."

The linguistic expression *and* is revealed, through its dot-quotes formalization, to be an item which *functions* in any language in a way that is relevantly similar to the ways in which it functions in English. With this precise theory of meaning in mind, Sellars establishes a functional relationship between the role of an expression within any language, and the role of an internal state in a system of representations. Consequently, he believes that one may come to know the contents of internal states by inferring them from the functional roles played by expressions describing verbal behavior. This inference is possible because when we learn the rules of a language, we acquire proximate propensities to verbal behaviors grounded in these internal states. Thus, for Sellars, the meaning of intentionalist vocabulary can be clarified to the extent that the functional role of verbal behavior is clear. Sellars summarizes:

> our meaning statement gives the meaning of "und" (in German) by presenting us with an exemplar in our background language and telling us that if we understand how "und"s function in German we should rehearse in imagination the cluster of functions characteristic of "and". (Sellars, 2007, p. 286)

Thus, attributing to a person a thought that *p* (or any other mental state with an analogous mental content) is ultimately revealed to be a rather complex ascription. In the first instance, such an attribution locates the person in the *logical space of reasons*. That is, we first situate the intentional state of the subject within a vast network of possible intentional states related to each other by normative relations. This network is a system of dispositions and rules of inference governing the verbal behavior of all the participants in the space of reasons. The core of Sellars' analysis rests upon the notion of a community of speakers with a shared heritage of behaviors, participating in the use of expressions governed by inferential linguistic rules. Indeed, from an inferentialist point of view, it is a mistake to understand beliefs, desires and other kinds of intentional states merely as explanatory posits. They are also thoughts possessing propositional content which coincides with their inferential, and therefore public, roles. Consequently, the propositional content of a thought always has a normative dimension, a dimension possessed in virtue of the possible socially recognized good inferences which may derive from that content.

Sellars, in a strategy later revived by Brandom (1994), develops an idea originated by Carnap, according to which the language of modalities is interpreted as a *transposed* language of norms. That is, a formal metalinguistic perspective on discussion *per se* is transposed onto a material mode in which we directly talk. The basic idea behind this theory of transposition is that when we approve the claim 'A necessitates B' we are really approving the propriety of the inference from A to B. Naturally, the claim 'A necessitates B' is not the claim that an inference from A to B is good. Rather, the point is that understanding the former claim requires an awareness of the different kinds of inferences to which it commits its adherents.

Such inferential normative consequences are, in some sense, implicit in the concept of necessary consequence. Making them explicit (in the Brandomian sense of the transposition from the material to the formal mode) requires concepts pertaining to the use of expressions that are not made explicit by that use, concepts such as expression, inference, and (most importantly for our purposes) normative concepts like propriety, commitment and entitlement, obligation and permission. Hence,

> Mastering the use of ordinary empirical descriptive predicates, which is in practice understanding their content or the meaning they express, requires being able to distinguish some uses and inferences as correct, and others as incorrect.

In other words,

> it requires knowing (in the practical sense of being able to distinguish, a kind of *know-how*) at least something about what one is committing oneself to by applying the concept, and what would entitle one to do that. (Brandom, 2001, p. 604)

Treating one descriptive predicate as appropriate in a particular case requires one to consider the range of predicates to which it is inferentially related, treating some as valid and normatively precluding others. Brandom summarizes:

> Since this essential dimension of the use of even ordinary, descriptive, nonnormative concepts (in belief and judgment no less than in linguistic assertion) is what is made explicit by normative vocabulary, it cannot be that ordinary empirical descriptive concepts are coherent and intelligible in principle, but normative concepts are incoherent and unintelligible in principle. (Brandom, 2001, p. 605)

The distinctions that are made explicit by normative vocabulary are already implicit in our ability to use and understand non-normative vocabulary.

This picture understands the propositional content of a thought as given by its inferential role. Since this role is constituted by the range of good inferences derivable from that content, intentionality is an intrinsically normative property.

This position is a direct derivation of the Wittgensteinian principle (Wittgenstein, 1953/1955, p. 244), adopted by Sellars, that mental states are the *reasons* for and not the *causes* of external behavior. This raises an alternate conception of dualism. That is, it grounds a kind of *epistemic* dualism, as opposed to the familiar Cartesian and Brentanian ontological substance dualism.

3. Sellarsian Internal States

From this point of view, Sellars' position is particularly interesting because it does not derive from an a-priori anti-naturalistic choice. Sellars just thinks that, in order to avoid the problems of naturalism, and in absence of clear evidence in favor of a naturalistic account, it is better to turn to a behaviorist strategy, at least from a purely methodological point of view. Sellars, in fact, believes that behaviourism is a useful methodological strategy that can provide an analysis of the concepts of intentional states. This does not entail that behaviourism is free from errors, or that it is ontologically flawed. Sellars is committed to the existence of internal states, but he also believes it is possible to think of mentalistic concepts in an analogous way, with respect to the concepts pertaining to verbal behaviour. From this perspective, verbal behaviourism can be used to examine and reconstruct concepts relating to intentional states. In essence, he believes it is possible to clarify the nature of internal states through the idea that they are dependent on the most primitive intersubjective discourse, hence on manifest behaviours. Like all mentalistic concepts, the concept of intentionality derives from the logic that underpins the primitive public verbal events. It is thus a theory that transposes into the dimension of interiority the archaic *speaking-out-loud*, as is clearly shown in the famous *Myth of Jones* thought experiment, the central part of *Empiricism and the Philosophy of Mind* (1997, §§ 12-16).

The philosophical fable hypothesizes a community of «Rylean ancestors» who possess a complex language for describing objects and events in the world, but lack any conception of mental states. This community possesses semantic instruments to explain manifest human behavior as well as metalinguistic abilities. However, such instruments are limited to a set of dispositional terms and do not include the conceptual resources for more complex explanations, which would appeal to internal states. It is at this stage that Sellars introduces

Jones, a theoretical genius who postulates the existence of internal speech-like episodes that he calls *thoughts*. These new episodes are closely modeled on publicly discernable declaratory utterances and play an internal role similar to the argumentative role performed by overt speech. In this way, Sellars claims that the Rylean community can sensibly increase its explanatory resources by positing unobservable mental states that regulate people's reactions to the world.

The Myth of Jones is clearly a critique of the traditional mentalistic framework. The same critique that Sellars develops in *Behaviorism, Language and Meaning* (1980b). According to Sellars, the classical theory of mental activity highlights analogies between properties of conceptual states and properties of the linguistic utterances which express them. This means that both have subjects and predicates, logical form and quantificational structure. Accordingly, classical mentalism regards the syntax and semantics of conceptual episodes as primary, as compared to linguistic episodes, which is tantamount to saying that thinking is equivalent to being in direct relation to the intersubjective domain of *thinkables*. This relation of utterances to *thinkables* is the logical product, on the one hand of a relation between utterances and thoughts, and, on the other, of the relation between thoughts and *thinkables*. From this point of view, according to classic mentalism, thought is inherently non-linguistic and, accordingly, a linguistic expression has *aboutness* only in a derivative way, since it is only the thought expressed by it that has direct *aboutness* in relation to a *thinkable*.

This reconstruction allows Sellars to show that, in the mentalist perspective, the only way to formulate an adequate theory of linguistic expressions is to primarily refer to the intentionality of thought. This is precisely the point that is criticized with the methodological adherence to behaviorism that means not the way of conceiving mental acts, but rather the epistemological primacy of thought conceived as something intentionally directed towards *thinkables*. In other words, according to Sellars, instead of using an intentionalist vocabulary to analyze the aboutness of verbal behaviour as an expression of thoughts intentionally directed to the intersubjective universe of *thinkables*, it is necessary to look at verbal behaviour directly in terms of thinking itself.

Thought episodes are, in the first instance, candid linguistic utterances made by a speaker who possesses knowledge of the language in question. As shown in the Myth of Jones philosophical experiment, Sellars calls that kind of linguistic utterances *thinkings-out-loud*. In this analysis, *thinking-out-loud* is the primary concept pertaining to conceptual activity, and consequently intentionality is a notion that, in the first instance, concerns not thought but language.

The idea that the relationship between thought and language should be reversed relative to the position found in classical mentalism implies also a more specific, and well-founded, characterization of what classical mentalists call the domain of *thinkables*. In fact, in Sellars' understanding, this becomes the intersubjective domain of linguistic behaviour that is publicly and communally accessible.

Sellarsian treatment of intentionality, opposite to classical mentalism, is useful to show that there is no need to commit directly to a naturalist position. For this reason, I believe that this path is still fruitful and needs to be followed and further developed. The naturalization of intentionality, as an alternative to ontological dualism, is not strictly convincing. Ultimately, I tried to show that if one believes in the naturalization of intentionality, then she is forced to admit, like Crane, that being intentional is not a sufficient condition for being mental. But, perhaps, there is no need to choose between all the issues that this idea entails and dualism: propositions, or semantic contents, can focus on their objects without being directly conceived as mental states, so it is plausible to find a third way between a radical metaphysical dualism and an absolute naturalism.

The suggestion that mental states are reasons for behavior amounts to the position that desires and beliefs are useful concepts in rationally explaining human actions. This, however, is equivalent to the claim that human behavior properly belongs to a logical space rather than to a causal space. That is, behavioral phenomena ought to be analyzed in terms of reasons for action, logic and normativity, rather than empirical phenomena through the scientific approach of causation.

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