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On the Dangers of Over-Inferring

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Perhaps no modern theory in the field of analytic philosophy is more polemical, more constantly

derided by the discipline's most eminent scholars, than Robert Brandom's Inferentialism. By reversing the

traditional order of semantic explanation, Brandom's theory broadly redefines many of analytic philosophy's

most central concepts. While some of these radical refinements may make valid contributions to the relevant

philosophical sphere, others are riddled with inconsistencies, causing opponents to question the purpose of

Brandom's departing so radically from traditional semantic theory. A clear contradiction, paradigmatic of

those that plague Inferentialism, can be found in Brandom's treatment of singular terms, as presented in his

synoptic work *Articulating Reasons*. His definitional process seems to make sense at first, using simple

substitutional notions to break down sentences – which he takes to be explanatorily fundamental – into sub-

sentential components, before providing a pair of necessary conditions that jointly pick out singular terms. A

more comprehensive questioning of exactly which expressions have definitional priority in this system,

however, reveals that Brandom has built his explanation on an illusory foundation. He derives one of his

characterizing conditions from preconceived inferences, before using properties of the terms he just defined

to justify the validity of these inferences. This logical aberration in the Inferentialist account of singular terms,

derived from its circular definition of inferential justification, demonstrates the degree to which Inferentialism

is plagued by problems concerning theoretical priority.

Essentially, Inferentialism is a doctrine that explains the meaning of a given semantic expression

through its inferential relations with other expressions. It can best be compared with referentialism, which is a

name that can generally be applied to semantic theories that define expressions by their relations with the

world.[1] Some of the most important semantic theories of the twentieth century, including those of Frege,

Carnap, and Russell, could broadly be described as referentialist.[2] Roughly speaking, a referentialist explains

the validity of various inferences in terms of previously defined meanings for the expressions involved, while

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[1] Graham, Peter J.. "Brandom on Singular Terms." *Philosophical Studies* 93, no. 3 (1997): 247
[2] This is not to say that the entire western semantic tradition is opposed to Inferentialism. Indeed, it could be argued that Brandom's Inferentialism is a theoretical predecessor of the pragmatic theories of both Michael Dummet and Ludwig Wittegenstein.

an Inferentialist reverses the explanatory process to employ a set of permitted inferences to determine the meanings of expressions. Exactly how Inferentialists achieve this task is best illustrated by an example. The expression in question is the logical "and," which correlates very closely, though not exactly, with the natural English "and." Suppose we are committed to two sentences, call one P and the other Q. From this, we are allowed to infer "P and Q." Correspondingly, if we are committed to "P and Q," then we are allowed to infer P in isolation, as well as Q (in isolation). An Inferentialist would say that these two valid patterns of inference jointly confer content upon, and thus give the definition of, the logical "and." Those well versed in logic will recognize these joint definitional patterns as the introduction and elimination rules of the logical "and." This is no coincidence. Inferentialist definitions are essentially made up of an elucidation of (1) what conditions must hold in order for one to be vindicated in using the given expression, and (2) the consequences of committing oneself to the use of that expression.[3] Thus, Inferentialists, essentially, define expressions based upon their roles as premises and conclusions in patterns of inference.[4]

With this process of content ascription in place, Brandom is thus able to go on to provide explanations of specific linguistic expressions. As with any comprehensive definitional process, he must take certain elements as basic, and then go on to build further definitions from these. Keeping in line with his complete reversal of the traditional semantic pattern of explanation, Brandom takes sentences as linguistically primary. The reasoning behind this choice can be understood easily with reference to the example above. A proper Inferentialist definition of the logical "and" can only be provided by employing sentences containing the expression. Without a prior understanding of both basic and logically complex sentences, as well as the inferential relations that hold between them, this definition would make no sense. Indeed, only sentences, rather than words or phrases, can serve as the premises and conclusions of inferences. Brandom points out that sentences alone have pragmatic force, in so far as they can be used to perform speech acts in isolation from other types of linguistic expressions.[5] "Without expressions of this kind," he says, "there can be no …

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[3] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 66

[4] It should be noted that, while in this example the inferences employed in the definitional process are purely logical, expressions that are not distinctly logical by nature are many times defined using material patterns of inferences, known to be good only upon examination of the surrounding world.

[5] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 125

specifically linguistic practice."[6] Thus, it is from sentences, and the inferential relations between them, that other types of linguistic expressions must be derived.

So, an Inferentialist will take sentences as basic, and must, if they wish to discuss sub-sentential expressions, derive them from their notions about sentences. But the question then remains as to why sub-sentential expressions should be defined at all. Brandom answers this question by appealing to the infinitude of language. Brandom asserts that "the whole linguistic community … has only produced (as correct) or responded to (as correct) a set of sentences that is small relative to the set of sentences one who attributes to them a language is thereby obliged to take it they have somehow determined correct uses for."[7] Because language has the property that an infinite number of potential sentences would make sense to speakers, despite the fact that only a finite number of sentences have actually ever been spoken, there must be some way for speakers to knowingly craft novel, linguistically correct sentences. Sub-sentential expressions offer a solution to this problem. By determining the correctness of a certain set of sentences, a linguistic community implicitly determines the manner through which the sub-sentential expressions that make up these sentences are correctly used, and thus create a set of tools for crafting myriad neoteric sentences.[8] Thus, though Brandom's Inferentialist doctrine treats sentences as semantically primary, there is legitimate reason to take semantic analysis beyond these first principles, and distinguish sub-sentential expressions.

Brandom distinguishes singular terms as a special sort of sub-sentential expression in two complementary senses: syntactically and semantically. He starts with an examination of syntax. To do this, he employs (what he calls) the Fregean notion of substitution, which assimilates sentences based on shared internal properties. When two sentences are internally similar enough for one to be substitutionally accessible from the other, i.e. one can be formed from the other through the replacement of unshared content, these two sentences are known as substitutional variants of one another.[9] For example, the sentences "George W. Bush was president" and "Jimmy Carter was president" are substitutional variants of one another because the second can be formed by substituting "Jimmy Carter" for "George W. Bush" in the first. It is this

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[6] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001.125
[7] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 127
[8] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 128
[9] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 128

substitutional potential that distinguishes the various sub-sentential components of a given sentence. Because "George W. Bush" can be substituted to form a substitutional variant sentence, it is a distinct sub-sentential expression from "was president." Brandom then asserts that "two sub-sentential expressions belong to the same syntactic or grammatical category just in case no well-formed sentence … in which one occurs can be turned into something that is not a sentence merely substituting it for the other."[10] Going back to our example sentences, "George W. Bush" and "Jimmy Carter" belong to the same syntactic category because in any sentence containing the expression "Jimmy Carter," replacing that expression with the expression "George W. Bush" will not ruin the sentence's status as well-formed. "George W. Bush" and "was president," however, are not in the same syntactic category, as replacing "George W. Bush" with "was president" in the well-formed sentence "George W. Bush likes waffles" yields the grammatically incorrect sentence "was president likes waffles."

To be able to ascribe to singular terms status as members of a certain syntactic category, Brandom distinguishes three roles played by expressions in the substitutional process. Expressions can be substituted for, substituted in, or be a substitutional frame. An expression that is substituted for is replaced by another expression in the process of forming a substitutional variant sentence, while an expression that is substituted in has one of its various components replaced in this process.[11] Being a substitutional frame is a derivative role determined in relation to the other two. If the expression "Bob likes cake" is substituted in, with the expression "Bob" being substituted for, to form the expressions "Dan likes cake," then the expression "α likes cake," where α is a variable, will be called the substitutional frame. With these potential roles thus illuminated, Brandom is then able to ascribe them to both singular terms and their complementary sub-sentential expression: predicates. While sentences are substituted in, and thus can form substitutional variations of one another, singular terms are substituted for. Predicates, on the other hand, are substitutional frames.[12] It should be noted that this characterization is consistent with the traditionally grammatical designations of the terms in the example above; elementary English grammar classifies "Bob" as a singular

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[10] Brandom,Robert B.. *Articulating Reasons.* 1st ed. Cambridge, MA: Harvard University Press, 2001. 130

[11] Brandom,Robert B.. *Articulating Reasons.* 1st ed. Cambridge, MA: Harvard University Press, 2001. 130

[12] Brandom,Robert B.. *Articulating Reasons.* 1st ed. Cambridge, MA: Harvard University Press, 2001. 131

term and "… likes cake" as a predicate. By defining syntactic roles for these two types of sub-sentential expressions – singular terms and predicates – Brandom has provided his first necessary condition for distinguishing these expressions.

With the syntactic roles of singular terms and predicates thus defined, Brandom is left with the task of defining the semantic role of each type of expression. This characterization is made using "substitution inferences," inferences in which the premise is substituted in to form the conclusion. In this type of inference, it is possible either to substitute for an expression explicitly, or to replace a substitutional frame.[13] Thus, an inference can be made from "Bob Dylan played the guitar" to either "Robert Zimmerman played the guitar," explicitly substituting for the expression "Bob Dylan," or to "Bob Dylan was a musician," replacing the substitutional frame. When an implementation of this process preserves the semantic status of the original sentence, it is said that a good inference has been made. What Brandom points out as significant is that the formal structure of substitution inferences involving singular terms is fundamentally different from that of those involving predicates; inferences in which singular terms are substituted for are always symmetric, while inferences in which substitutional frames are replaced can be asymmetric.[14] For example, while the inference from "Bob Dylan played the guitar" to "Robert Zimmerman played the guitar" is good just in case the inference in the other direction is also good, the inference from "Bob Dylan played the guitar" to "Bob Dylan was a musician," though good, is not reversible; commitment to someone's being a musician is in no way a commitment to their having played the guitar. Thus, predicates are capable of standing in one-way inferential relations while singular terms simply cannot.

Noting that the goodness of each substitution inference is determined by material properties of the expressions involved, Brandom then asserts that "singular terms are grouped into equivalence classes by the good substitution inferences in which they are materially involved, while predicates are grouped into reflexive, transitive, asymmetric structures or families."[15] So, all of the terms that yield good substitution inferences when substituted for "Bob Dylan" – including "Robert Zimmerman," "The man who wrote 'Like a Rolling

[13] Brandom,Robert B.. *Articulating Reasons.* 1st ed. Cambridge, MA: Harvard University Press, 2001. 134
[14] Brandom,Robert B.. *Articulating Reasons.* 1st ed. Cambridge, MA: Harvard University Press, 2001. 135
[15] Brandom,Robert B.. *Articulating Reasons.* 1st ed. Cambridge, MA: Harvard University Press, 2001. 135

Stone,'" etc. – make up the contents of a single equivalence class. It is due to the fact that these terms form such an equivalence class that, according to Brandom, they can be said to pick out a particular object, in this case a particular folk rock legend.[16] Relating groups of singular terms to each other is what confers upon each term the material content that it ultimately comes to possess. When two singular terms are grouped into the same equivalence class, then a linguistic community has made a commitment, known to Brandom as a simple material substitution-inferential commitment (SMSIC), to the goodness of all inferences in which one is substituted for the other.[17] According to Brandom, almost all inferences to and from sentences containing a given singular term are determined by these SMSICs.[18] The SMSICs related to singular terms are always symmetric, in so far as they always determine the goodness of material inferences in either direction.

Predicates, on the other hand, have the inherent quality that some are inferentially weaker than others. Whenever the predicate "… plays the guitar" is applied to a singular term, the predicate "… is a musician" can be as well. Thus, predicates can be grouped based on superset/subset relations. It should be noted, of course, that predicates can also be involved in symmetric substitution inferences.[19] This is why Brandom says that predicates are sorted into asymmetrically related families; predicates in the same family stand in symmetric relations to one another, while standing in the same asymmetric relations to all other predicates outside the family. For example, "… is a musician" is in the same family as the predicate "… plays music." As would be expected, linguistic communities form SMSICs concerning predicates as well. While SMSICs between predicates can be symmetric, in so far as commitments to the goodness of inferences between expressions such as "A plays music" and "A is a musician" are reversible, the theoretically interesting ones are asymmetric. Asymmetric SMSICs differ from symmetric ones in so far as they link two expressions in only one direction. When a linguistic community makes an asymmetric SMSIC between "… walks" and "… moves," they are committed only to applying the second predicate to everything for which the first applies. They make no such commitment concerning the extension of the second predicate, except perhaps

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[16] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 140
[17] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 137
[18] Brandom actually distinguishes certain situations in which this is not the case. In such cases, however, he asserts that the given singular term does not have a primary occurrence. Thus, the cited sentence can be revised to say: all inferences to and from sentences containing a primary occurrence of a given singular term are determined by these commitments.
[19] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 135

that it contains the extension of the first as a subset.[20] This commitment both confers material content upon the two phrases involved and licenses myriad substitution inferences, but it is clearly distinct from symmetric SMSICs in that it applies in only one direction. By discerning that such asymmetric commitments can be applied only to predicates, Brandom has thereby crafted his second, semantic necessary condition for the characterization of sub-sentential expressions. Considering this necessary condition in concert with the syntactic condition explained above provides, according to Brandom, sufficient criteria for the precise identification of various sub-sentential expressions as either singular terms or predicates. Singular terms are sub-sentential expressions that are syntactically substituted for and semantically involved only in symmetric SMSICs, while predicates are those that serve as substitutional frames, and are capable of standing in asymmetric SMSICs.

Brandom's attempt at reconciling his philosophical revolution with basic grammatical concepts turns out to be fatally flawed in so far as it confers content upon linguistic expressions in a circular manner. To elucidate this analytical error, one should start by examining the import Brandom places upon SMSICs in determining inferential goodness. Brandom explicitly asserts that "one simple material substitution-inferential commitment regarding two expressions determines the correctness of a great many substitution inferences materially involving those expressions."[21] Thus, Brandom commits himself to the assertion that SMSICs are what determines inferential goodness. There is no inherent fallaciousness in such an assertion. Indeed, it makes perfect sense that an inference from "Bob likes coffee" to "Steve's dad likes coffee" is correct for the very reason that Bob is Steve's dad. The problem lies in the fact that Brandom's overall program is based on a directly contradictory claim. As was noted above, Inferentialism gives explanatory priority to sentences – and the patterns of inference that hold between them – over sub-sentential expressions. Thus, an Inferentialist is only allowed to discuss singular terms, let alone the commitments that hold between them, once they have derived them from a set of valid material inferences between sentences. Indeed, Brandom himself asserts that "singular terms are grouped into equivalence classes by the good substitution inferences in which they are

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[20] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 145
[21] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 137

materially involved."[22] SMSICs are just the commitments that hold between two expressions due to their being members of the same equivalence class. Thus, it seems as though Brandom has defined singular terms, and thus the relations that hold between them, using patterns of valid inference, while at the same time attributing validity to those patterns of inference using the very relations between singular terms that these inferences were supposed to define. Thus, the semantic component of Brandom's definition of singular terms is useless; what good is it to know that an expression has symmetric SMSICs when we have no basis for forming SMSICs to begin with?

While this objection to Brandom's account of singular terms seems to be patently fatal, there exists for it a forceful reply to which Brandom could resort if confronted with his system's difficulty. While his complementary justifications for inferential validity and the existence of SMSICs may seem to be circular, they actually form two stages of a definitional process. The entire rationale behind Brandom's decision to distinguish sub-sentential components in the first place was to discover the tools through which language can craft infinitely many grammatically correct sentences. Brandom himself explicitly says that when a linguistic community is in possession of a set of sentences already determined to be correct, "what is settled by the properties of use governing the smaller, sample set of sentences, which is projected, is the correct use of sub-sentential components into which they can be analyzed or decomposed. The correct use of these components is then to be understood as determining the correct use of further combinations of them into novel sentences."[23] Thus, the supposed circularity can easily be explained. It is from a small set of sample sentences, and the inferences that are known to hold between them, that singular terms and the SMSICs that govern their inferential significance are determined. Once this has been done, then these SMSICs can be used to determine the validity of any number of novel inferences. The inferences that defined the SMSICs were already known to be materially correct, and so their validity is not dependent on the SMSICs. Thus, singular terms, the commitments held between them, and the inferences that they define are all built up from a perfectly consistent and logical definitional process, and there is no circularity underlying Brandom's semantic definition.

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[22] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 135
[23] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 127-128

Though such a characterization of Brandom's circular reasoning certainly has merit, it ultimately turns out to be too hypothetical to actually save Brandom's account of singular terms. It is certainly true that at any given point in time a linguistic community is in possession of a relatively small subset of the grand set of potential sentences and inferences they ultimately would take as correct. And it is also true that they determine as correct novel sentences and inferences by deducing patterns within the known set of sentences and inferences, such as SMSICs, that can be used in the compositional process. But now consider the implications of Brandom's argument. If the argument is to hold, then at a given point in time, call it t, a given linguistic community, call it C, will know that a certain set of inferences are valid. From these inferences, they deduce some SMSICs. Suppose one of these SMSICs links the expression "Bob Dylan" to the expression "Robert Zimmerman." The community uses this SMSIC to determine the validity of the inference, call it I, from "Bob Dylan has four dogs" to "Robert Zimmerman has four dogs." Then, at time t+1, this is a known inference. So if at time t+1, C uses their known inferences to determine the SMSICs necessary to make novel inferences, they will be using I to determine the SMSIC linking "Bob Dylan" and "Robert Zimmerman." But if this is so, then I is defining the very SMSIC that is used to classify it as valid, and the circularity reemerges. The only way to get around it would be to assert that I cannot be used to form SMSICs at time t+1 because it was formed at time t from the same SMSIC it would be employed to form at time t+1. This fact could generalize, so that all the SMSICs formed at time t will generate inferences that cannot be used in future SMSIC formation processes. But in that case, it would seem that time t is a seminal point in linguistic history, the point at which the SMSICs that grant validity to all future inferences are formed. But what makes time t so special? There is no reason why the seminal linguistic moment should not be at time t-8, or time t+53. In order for Brandom's reply to the circularity objection to work, there must exist one moment in time where known inferences form the SMSICs that will from then on justify all future inferences. Proposing the existence of such a moment would be patently absurd, and thus, Brandom's potential reply fails, and the circularity objection holds.

So, Brandom's definition of singular terms is circular, and thus ultimately fails. But, where does that leave the Inferentialist program? It seems at this point that a reader sympathetic to Inferentialism could

propose that the doctrine simply not endorse the existence of singular terms. There are certainly other ways to explain the infinitude of language. Is any grand philosophical importance possessed by these vestiges of conventional grammar? As it turns out, there is; Brandom imparts momentous metaphysical value upon singular terms. Brandom notes that singular terms are traditionally defined as "linguistic expressions that refer to, denote, or designate particular objects."[24] He, however, is wary of such a definition, due to the widespread and longstanding philosophical debate over what exactly an object is, and as such initially refines it to state that singular terms simply "purport" to reference individual objects. Such a definition still does not satisfy Brandom, who asserts that the notion of referential purport is nothing more than an explanation of the special linguistic role of singular terms.[25] Thus, if that grammatical role can be illuminated, then it can explain what exactly we are talking about when we are talking about objects. Through the process of characterizing this role, Brandom is actually providing Inferentialist input into the longstanding ontological debate over the nature of objects.[26] Therefore, the failure of his characterization implies a failure to explain the momentously important metaphysical concept of objects.

Robert Brandom's Inferentialism is a revolutionary philosophical doctrine. By giving priority to inference, rather than truth and reference, its acceptance inherently compels a reformulation of many of the most important problems of analytic philosophy. In at least one case –its redefinition of singular terms –it fails miserably at this task. Brandom attempts to define singular terms by providing joint necessary syntactic and semantic conditions for their characterization among sub-sentential expressions. His derivation of the semantic condition, however, imparts upon sub-sentential expressions the power to determine the validity of the very inferences that the grand Inferentialist doctrine takes as fundamentally prior to all other linguistic expressions. This leads to a vicious circle, as these sub-sentential expressions are used to justify the patterns of inference that distinguish them, thereby leaving Brandom's semantic condition of characterization in shambles. Because Brandom places such ontological significance on a grammatical characterization of

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[24] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 123
[25] Brandom,Robert B.. *Articulating Reasons*. 1st ed. Cambridge, MA: Harvard University Press, 2001. 124
[26] In truth, Brandom's account of singular terms is even more powerful than what is presented here. What this paper has omitted is Brandom's proof that a fully expressive language must include singular terms. By providing this proof, Brandom not only is able to characterize objects, but more importantly is able to prove their existence. Of course, because his characterization is at heart fallacious, it turns out that this proof has little ultimate value.

singular terms, this analytical failure demonstrates that Inferentialism is at times incapable of providing a sufficient explanation for many of analytic philosophy's most important questions, and thus its value as a revolutionary theory should be roundly questioned. Of course, with Brandom's entire problem coming from a faulty semantic characterization, one is then confronted with the possibility of his defining singular terms purely syntactically. How exactly he would craft such a definition is in no way apparent, but if Brandom were capable of carrying out such an intricate and onerous task, perhaps there would be hope for Inferentialism yet.