

Inferentialism and Semantic Externalism

A Neglected Debate between Sellars and Putnam*

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[Abstract] In his 1975 paper “The Meaning of ‘Meaning,’” Hilary Putnam famously argued for semantic externalism. Little attention has been paid, however, to the fact that already in 1973, Putnam had presented the idea of the linguistic division of labor and the Twin Earth thought experiment in his comment on Wilfrid Sellars’s “Meaning as Functional Classification” at a conference, and Sellars had replied to Putnam from a broadly inferentialist perspective. The first half of this paper aims to trace the development of Putnam’s semantic externalism, situate his debate with Sellars in it, and reconstruct the two arguments he presented against Sellars. The second half of this paper aims to reconstruct how Sellars replied to Putnam. I argue that Sellars not only accepts the social character of language but also suggests how inferentialists can accommodate the contribution of the world. Sellars’s key idea is that substance terms have a “promissory note aspect” which is to be cashed out in a successor conceptual framework. I reconstruct Sellars’s position as ideal successor externalism, and compare it with temporal externalism.

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1. A Neglected Debate between Sellars and Putnam in 1973

In 1975, in his monumental paper “The Meaning of ‘Meaning,’” Hilary Putnam famously presented the idea of the linguistic division of labor and the Twin Earth thought experiment to argue for what is nowadays known as *semantic externalism*. According to this view, the meanings of linguistic expressions “ain’t in the head” in the sense that they are determined partly depending on the social and physical environment. His paper has generated much discussion in a wide range of areas of analytic philosophy. Some of the papers on the Twin Earth thought experiment and its implications are collected in the volume *Twin Earth Chronicles*, which was published in celebration of the twentieth anniversary of “The Meaning of ‘Meaning’” in 1995. Little attention has been paid, however, to the fact that already in 1973, Putnam had presented the idea of the linguistic division of labor and the Twin Earth thought experiment in his comment on a paper of Wilfrid Sellars’s, “Meaning as Functional Classification,” at a conference on language, intentionality, and translation-theory held at the University of Connecticut.¹ Moreover, although Sellars made a reply to Putnam from a broadly

¹ Although Putnam’s 1973 paper, “Meaning and Reference,” also contains the idea of the linguistic division of labor and the Twin Earth thought experiment, as we will see in section 3, his comment on Sellars predates it.

The other speakers at this conference are Donald Davidson, Michael Dummett, and Saul Kripke, and the other commentators are Daniel Dennett, Gilbert Harman, David Kaplan, David Lewis, Charles Parsons, Barbara Partee, and Willard van Orman Quine. The proceedings of this conference, published in *Synthese* in 1974, includes all the papers, comments, and general discussions except for Kripke’s paper “Vacuous Names and Fictional Entities” and the comments on it. According to the editors, Kripke’s paper was not included

inferentialist perspective, this fact has also been almost unnoticed.²

The aim of this paper is twofold: 1) to unearth the neglected debate between Sellars and Putnam on semantic externalism, and thereby to add to the *Twin-Earth Chronicles* a new chapter on its prehistory, and 2) to reconstruct how Sellars replied to Putnam, and thereby to show what conceptual resources inferentialists can use to accommodate insights of semantic externalism. As Scott Soames points out, since we have already achieved enough distance to be able to look back at the philosophical works done in the 1970s, and some of the works in this period, including Putnam's, still cast long shadows over current debates, critically reviewing them will be significant both historically and philosophically (see *Philosophical Analysis*, xiii). It may transform our understanding of where we are and where we should go. As Robert Brandom puts it, we may “find a way forward by reconstruing the path that brought us to our present situation” (*Tales of Mighty Dead*, 15). Reviewing the neglected debate between Sellars and Putnam on semantic externalism, I argue that Sellars provides us with rich conceptual resources to accommodate Putnam's externalist insights within a broadly inferentialist framework.

This paper proceeds as follows. After introducing some of the basic ideas of inferentialism (section 2), I trace the development of Putnam's externalism and situate his debate with Sellars in it (section 3). Section 4 summarizes Putnam's two externalist

in the proceedings “[f]or reasons beyond the editor's control” (Troyer and Wheeler, “Preface,” 307). It is now collected in Kripke, *Philosophical Troubles*.

² One exception is Scharp, “Sellars' Anti-Descriptivism.” But he does not discuss what I take to be of the most importance in Sellars's reply, that is, the idea that substance terms have a “promissory note aspect.” To elaborate this idea is the aim of the second half of this paper.

arguments against Sellars. Section 5 reviews Sellars's replies to Putnam, and reconstructs his key idea that substance terms have a "promissory note aspect." Then, I aim to elaborate this idea by comparing Sellars's position with temporal externalism (section 6) and by answering some questions some might ask about it (section 7).

It should be noted at the outset that although nowadays, many philosophers accept externalism not only about linguistic meanings but also about mental contents, this paper focuses on linguistic meanings, and leaves open the question about mental contents. This is because both Sellars and Putnam focus on linguistic meanings in their debate.³

2. The Basic Ideas of Inferentialism

Before looking at the debate between Sellars and Putnam, it will be useful to introduce some of the basic ideas of inferentialism. In this paper, I will use the term 'inferentialism' to refer to a theory in metasemantics according to which the meaning and reference of a linguistic expression are determined by the role it plays in inferences, or shortly, by its inferential role (see Murzi and Steinberger, "Inferentialism"). The inferential role of an expression, in turn, is determined by the rules governing its inferential use, i.e., the rules that specify the inferentially articulated conditions for

³ Externalism about mental contents was proposed and developed after the "Meaning of 'Meaning'" by McGinn's "Charity, Interpretation, and Belief" and Burge's "Individualism and the Mental." In chapter 1 of *Reason, Truth, and History*, Putnam also embraces externalism about mental contents, and explores its implications for scepticism about the external world. For a further discussion on externalism about mental contents, see Lau and Deutsch, "Externalism about Mental Content."

application of that expression and the rules that specify the inferential consequences of application of that expression. Let us make two comments.

First, inferentialism is a theory in *metasemantics* rather than semantics (see Chrisman, *The Meaning of 'Ought'*, chap. 1, and Murzi and Steinberger, “Inferentialism”). While semantics aims to specify, for a given expression, its meaning and reference, metasemantics aims to explain how the meaning and reference of a given expression are determined.⁴ According to inferentialism, then, the meaning and reference of an expression are determined *in virtue of* its place in the inferential network.⁵ It is important to note that to say that the meaning and reference of an expression are *determined* by its inferential role is not to say that that expression is involved in a certain inferential network. For instance, although ‘red’ is no doubt involved in an inferential network in which other color terms are involved, this does not itself show that the meaning and reference of ‘red’ are *determined* by its role in such a network. Thus, inferentialists must be able to explain not just *that* a given expression is involved in a certain inferential network but also *how* its meaning and reference are *determined* by its role in such a network.

Second, in order to accommodate observational terms within an inferentialist framework, inferentialists will have to look at so-called ‘language-entry’ rules, i.e., the

⁴ But semantics and metasemantics may not be sharply separated from each other. See Burgess and Sherman, “Introduction.”

⁵ As Murzi and Steinberger point out (“Inferentialism,” 218n2), Brandom’s distinction between formal and philosophical semantics seems to correspond to the distinction between semantics and metasemantics. See Brandom, *Making It Explicit*, 143–5, “Reply to Danielle Macbeth,” 340, and “Reply to Michael Dummett,” 342.

rules that specify the perceptual circumstances for application of observational terms (see SRLG, §§19–22). Further, as Sellars emphasizes at various places, these rules are not such that one must *obey* them when one applies an observational term, say, ‘red’, to red objects (ITSA 133–5; SRLG §§1–17; LTC, §§II–IV). Rather, it is enough that one’s applications of such a term *conform* to such rules, and this conformity with the rules is not just accidental but is a product of training and learning (see LTC, §§II–IV).

However, Putnam’s challenge is, as we will see in section 4, that in the case of natural kind terms, granting these points is still not enough. In sections 5 through 7, we will see and elaborate Sellars’s account of how the meaning and reference of natural kind terms such as ‘water’ might be determined by their inferential role. Since it is sometimes thought to be unclear how the inferentialist account could be applied to natural kind terms (Murzi and Steinberger, “Inferentialism,” 203), examining Sellars’s account will be an important task.

3. The Development of Putnam’s Semantic Externalism

In this section, we will trace the development of Putnam’s semantic externalism and situate his debate with Sellars in it. It is sometimes said that “The Meaning of ‘Meaning’” is “where it all began.”⁶ But in fact it has an interesting prehistory. Putnam reflects on the development of his semantic externalism in several places such as the introduction to the *Twin Earth Chronicles* (1995), a retrospective essay entitled “The Development of Externalist Semantics” (2013), and his intellectual autobiography

⁶ See the title of Part I of *Twin-Earth Chronicles*.

(2015). But he does not mention his debate with Sellars in any of these essays.⁷ Perhaps this is just because Putnam does not think this debate is worth mentioning, or perhaps this is because Putnam was not treated well by Sellars when he was at the Minnesota Center for the Philosophy of Science in the fall semester of 1957–58. In his autobiography, Putnam describes his relationship with Sellars at Minnesota as follows:

The two leading figures at the Center were Herbert Feigl and Wilfrid Sellars, and their behavior towards me could not have been more different. [...] Feigl was one of the most charming human beings I have ever known, warm, a fascinating conversationalist, and a philosopher who welcomed discussion and who, like Carnap, paid no attention to differences in academic status or in age; with me at least, Sellars was remote. In fact, I do not remember a single ‘one on one’ discussion with Sellars during my whole semester in Minnesota. (Putnam, “Intellectual Autobiography,” 43)⁸

In any case, as we will see, Putnam’s debate with Sellars has an interesting place in the development of his externalism.

Before tracing the development of Putnam’s externalism, it will be helpful to quickly review two famous arguments for semantic externalism presented in “The

⁷ It may also be worth noting here that in his *Meaning and the Moral Sciences*, Putnam appropriates Sellars’s terminology – ‘language entry rules’ and ‘language exit rules’ – without crediting it to Sellars (see Putnam, *Meaning and the Moral Sciences*, 110–1).

⁸ Putnam goes on to say “I frequently heard him [Sellars] speak in group discussions, however, and I soon realized that there were serious disagreements between my position and that of both Feigl and Sellars.” The disagreements Putnam has in mind here are concerned with the “analytic/synthetic dichotomy” and “Adolf Grünbaum’s views on physical geometry” (Putnam, “Intellectual Autobiography,” 43). It is beyond the scope of this paper to discuss these issues.

Meaning of ‘Meaning’”: the argument from the linguistic division of labor and the argument from the Twin Earth thought experiment.⁹ The argument from the linguistic division of labor is supposed to show that the meanings of at least some linguistic expressions are determined partly depending on the *social* environment. To show this, Putnam points out the fact that many of the ordinary English speakers cannot tell elm trees from beech trees, or aluminum from molybdenum, and yet they can count as users of the terms ‘elm’ and ‘beech,’ or ‘aluminum’ and ‘molybdenum.’ This is because, according to Putnam, in using these terms, we are *deferring* to the experts who belong to the same linguistic community and who are able to distinguish them. The argument from the Twin Earth thought experiment is supposed to show that the meanings of at least some expressions are determined partly depending on the *physical* environment. To illustrate this, Putnam asks us to imagine that there is a distant planet, Twin Earth, which is exactly like Earth except that on Twin Earth, the liquid called ‘water’ is composed of a chemical compound XYZ, the macro properties of which are exactly like H₂O. In this scenario, according to Putnam, while ‘water’ used by us Earthlings refers to H₂O, ‘water’ used by Twin Earthlings refers to XYZ. Moreover, even in 1750, when nobody on Earth or Twin Earth could distinguish H₂O and XYZ, Putnam argues, ‘water’ used by Earthlings referred to H₂O and ‘water’ used by Twin Earthlings referred to XYZ. Therefore, Putnam concludes, the meanings of linguistic expressions “ain’t in the head.” We will discuss these arguments in more detail in the next section. For now, this brief review is enough for the purpose of tracing the development of Putnam’s externalism.

⁹ For a recent review of Putnam’s arguments, see Haukioja “Internalism and Externalism.”

Seminal ideas of semantic externalism are found in Putnam's 1970 paper "Is Semantics Possible?" Indeed, Putnam himself later referred to it as the "predecessor" of "The Meaning of 'Meaning'" ("Introduction," xvi; "The Development," 195), or as "my first explicitly 'semantic externalist' paper" ("The Development," 194).¹⁰ Already in this paper, Putnam pointed out that the meaning of a natural kind term is determined not by the superficial characteristics or the stereotypes associated with it, but by the "essential nature" which "normal members" of that kind share with each other. He also suggested that experts play an important role in determining the meanings of such terms as 'aluminum' and 'molybdenum.' Moreover, he even used a thought experiment of a space craft for a distant planet to show the social character of the meaning determination. It should be noted, however, that this thought experiment is quite different from the familiar ones used in "The Meaning of 'Meaning'." Putnam asks us to

[s]uppose now that a colony of English-speaking Earthlings is leaving in a spaceship for a distant planet. When they arrive on their distant planet, they discover that no one remembers the atomic weight (or any other defining characteristic) of aluminum, nor the atomic weight (or other characteristic) of molybdenum. There is some aluminum in the spacecraft, and some

¹⁰ But according to his autobiography, Putnam first explained and defended semantic externalism at his lectures in the 1968 Summer Institute in Philosophy of Language in Seattle (Putnam, "Intellectual Autobiography," 105n97). Burge counts "Is Semantics Possible?" as one of "the great trio of articles" in which the core of Putnam's contributions to semantics emerged ("Putnam's Contributions," 235). The others are "Explanation and Reference" and "The Meaning of 'Meaning.'"

molybdenum. Let us suppose that they guess which is which, and they guess wrong. Henceforth, they use ‘aluminum’ as the name for molybdenum, and ‘molybdenum’ as the name for aluminum. It is clear that ‘aluminum’ has a different meaning in this community than in ours: in fact, it means *molybdenum*. (“Is Semantics Possible?” 199; *Mind, Language, and Reality*, 150–1)

In this “first explicitly ‘semantic externalist’ paper,” Putnam does not use a more famous example of ‘elm’ and ‘beech’ nor use the term ‘linguistic division of labor.’ Moreover, he neither names the distant planet ‘Twin Earth,’ nor makes its inhabitants appear in the story, nor use the example of H₂O and XYZ. Indeed, as Putnam later reported, “it was not until December 1972 that I wrote the first draft of ‘The Meaning of Meaning.’” And it was then that what became the best known argument for semantic externalism occurred to me. I refer to the Twin Earth argument” (“The Development,” 199).¹¹

The Twin Earth thought experiment and the term ‘linguistic division of labor’ were probably firstly presented in his comment on Sellars’s paper “Meaning as Functional Classification” at a conference in March 1973.¹² We will see the details of Putnam’s comment and Sellars’s reply in the following sections. For now, it suffices to note that the arguments presented in this comment are essentially the same as the main arguments in “The Meaning of Meaning.” The proceedings of this conference,

¹¹ In another retrospective essay, Putnam says that “I wrote at the end of 1972 [a paper] entitled ‘The Meaning of Meaning’” (“A Half Century,” 196).

¹² In “Explanation and Meaning” (1973), Putnam uses the ‘elm’ and ‘beech’ example but does not use the term ‘the linguistic division of labor.’

published as a special issue of *Synthese*, include not only the papers and comments but also a transcription of the general discussion sessions. Thus, it was not until July or August 1974 that Putnam's comment as well as Sellars's original paper and reply were published.¹³ Meanwhile, Putnam published another paper, "Meaning and Reference," in the *Journal of Philosophy* in November 1973, where Putnam uses both the term 'division of linguistic labor' and the Twin Earth thought experiment. This is probably the first publication thereof. Putnam read this paper at a symposium on reference at the American Philosophical Association in December 1973. It is after all these that "The Meaning of 'Meaning'" was finally published.

4. Putnam's Arguments against Sellars's Inferentialism

In this and following sections, we will look closely at the Sellars-Putnam debate. This section aims to summarize Putnam's externalist arguments against Sellars. Before turning to these arguments, however, it will be useful to look at how Putnam understands Sellars's conception of meaning. According to Putnam, Sellars's view is that "meaning is determined by a battery of rules", and the rules at issue are "[t]he battery of rules that the individual speaker must internalize" (Putnam, "Comment," 447, 454). Thus, according to Putnam, Sellars is committed to explaining the meanings of expressions in terms of "individual competence." As Putnam puts it, "[w]hat Wilfrid is talking about, I think, is the characterization of individual competence" (Putnam, "Comment," 454).

¹³ After the conference, Michael Dummett wrote a paper on Putnam's comment on Sellars, which was first published as "Postscript" in the proceedings and reprinted as "The Social Character of Meaning" in his *Truth and Other Enigma* (1978).

Putnam agrees with Sellars that we should not think of meanings as objects. He also praises Sellars for focusing not on sentence meanings, as Donald Davidson does, nor on intentions of speakers, as Paul Grice does, but rather on the word-meanings. Moreover, Putnam even admits that Sellars's conception of meaning, as he understands it, is not unattractive. Indeed, as Putnam confesses, he once endorsed a similar view in one of his earlier papers, "How not to Talk about Meaning."¹⁴

Nevertheless, Putnam still thinks that Sellars's view is wrong. Putnam does not directly attack Sellars's conception of meaning. Rather, he aims to undermine it by attributing to Sellars two assumptions which he thinks Sellars shares with traditional theories of meaning, and then showing that these assumptions are not jointly true.

Putnam explains the two assumptions as follows:

The first assumption is that the meaning of a speaker's words does not extend beyond what he [...] believes, or possibly beyond what he [...] believes and is disposed to do. In other words, it is not possible on this view, for two speakers to [...] believe and be disposed to do and say the same things and yet mean something different by a word.

The second assumption is that meaning determines extension, where the extension of a word is what it is true of. (Putnam, "Comment," 447)

The first assumption implies that if there is a difference in the meaning of a term spoken by two speakers, there must be a certain difference in their psychological states.¹⁵ The

¹⁴ This paper was originally presented at a Boston Colloquium in the Philosophy of Science in December 1963, where Sellars also presented a paper entitled "Scientific Realism or Irenic Instrumentalism."

¹⁵ Here, psychological states are to be understood as "narrow" psychological states (see Putnam, "Meaning of 'Meaning,'" 137; *Mind, Language, Reality*, 221). McDowell rejects this view

second assumption implies that if there is a difference in the extension of a term spoken by two speakers, there must be a certain difference in its meaning. Thus, these two assumptions jointly imply that if there is a difference in the extension of a term spoken by two speakers, there must be a certain difference in their psychological states. As Putnam emphasizes, he does not mean to deny the possibility of a language that satisfies both of the two assumptions. “There may be a possible world in which there is a language which would satisfy both assumptions” (Putnam, “Comment,” 447). His point is rather that it would not be the language we are *actually* using. As he puts it, “it ain’t this one” (Putnam, “Comment,” 447). As should be clear to readers of “The Meaning of ‘Meaning,’” the assumptions Putnam attributes to Sellars are essentially the same as the “traditional assumptions” he would later identify in it (Putnam, “Meaning of ‘Meaning,’” 135–6; *Mind, Language, and Reality*, 219).¹⁶

Putnam aims to show that those who accept both of the two assumptions must leave out two important aspects of our language, “the social character of language and the contribution of the world” (Putnam, “Comment,” 452). Since both of these aspects are essential to our language, Putnam argues, at least one of the two assumptions has to be abandoned. And according to Putnam, since the second assumption is plausible, the first assumption must be abandoned. Putnam’s strategy is to present several scenarios in which the psychological states of two speakers are the same and yet the extensions of a

of the mind, and argues that not only the meaning but also the mind should be understood as world-involving (see McDowell, “Putnam on Mind and Meaning”).

¹⁶ I should note, however, that I omitted the word “knows” in the above quotation. In his comment on Sellars, Putnam includes so-called wide mental states such as “knowing” in the first assumption.

term spoken by them are different. Among those are scenarios involving ‘elm’ and ‘beech’ and involving ‘water.’ Thus, the scenarios Putnam uses in his comment are also essentially the same, if not so sophisticated, as the famous ones presented in “The Meaning of ‘Meaning’.”

To illustrate the social character of language, Putnam first points out the fact that although he cannot tell elm trees from beech trees, he still can use the terms ‘elm’ and ‘beech.’ Thus, to be a user of these terms, we do not have to be able to tell elms from beeches on our own. This is because, according to Putnam, we are engaged in the “linguistic division of labor”: when using those terms, we are deferring to the experts who belong to the same linguistic community and who can distinguish elms and beeches. Then, Putnam goes on to ask us to “imagine a possible planet, Twin Earth, which is just like Earth except in one respect. [...] they [the experts on Twin Earth] call elms ‘beeches’ and beeches ‘elms’” (Putnam, “Comment,” 450). In this case, according to Putnam, his Doppelgänger on Twin Earth refers to elms by ‘beeches’ and beeches by ‘elms’ because his Doppelgänger uses these terms depending on the experts on Twin Earth. However, by hypothesis, there is no psychological difference between Putnam and his Doppelgänger. So, this is a case in which the psychological states of two speakers are the same and yet the extensions of a term spoken by them are different. Therefore, either of the two assumptions above has to be abandoned.

Further, Putnam presents another scenario involving ‘water’ to show the importance of the contribution of the world. He asks us to

suppose that we are now taking Earth and Twin Earth prior to the knowledge that water is H₂O. We will suppose there is a chemical compound, XYZ, which can substitute for water. People can drink it, it quenches thirst, it is tasteless, colorless, people can’t tell it from water. For some strange reason on Twin Earth the clouds are clouds of XYZ, it rains XYZ, not H₂O, Lake Michigan is full of polluted XYZ,

and so on. Chlorinated swimming pools are full of chlorinated XYZ. And they call XYZ “water.” In 1700 there is no one, neither the individual nor the entire community, who has any [...] beliefs with respect to ‘water’ on Twin Earth different from our [...] beliefs with respect to water here. Yet the extension is different. “Water” on Twin Earth means XYZ. “Water” here means H₂O; I don’t mean ‘water’ is synonymous with “H₂O,” of course. But the extension of the term ‘water’ as used here is different from the extension of the term ‘water’ as used on Twin Earth. (Putnam, “Comment,” 450–1)

In this scenario, not only the psychological states of two speakers but also those of the community as a whole are the same and yet the extensions are different. Therefore, Putnam concludes, we must take into account not only “the social character of language” but also “the contribution of the world.”

5. Sellars’s Reply to Putnam

In this section, we will review and clarify how Sellars responds to Putnam’s two externalist arguments.

The first thing to note is that Sellars expresses his agreement with Putnam’s idea of the linguistic division of labor. “I was very impressed with Hilary [Putnam]’s remarks about language as a social institution. I quite agree that there is the kind of division of linguistic labor to which he refers” (Sellars “Reply,” 458). Sellars goes on to note, however, that he had also always emphasized the social character of language:

I must point out that Hilary is quite mistaken when he construes my theorizing about meaning as a theorizing about “individual competence.” I have always stressed that language is a social institution, and that meaning is to be construed in social terms. Thus I certainly would not subscribe to the first of the above two assumptions. What a speaker’s words mean [...] is no more to be defined in terms of his beliefs and purposes than is, for example, the legal significance of his actions. Any adequate philosophy of mind must, indeed, be concerned with the relation of an individual’s propensities for rule-governed behavior and the practices

of his community. But this relation must be construed in such a way as to preserve, in a less metaphysical mode, something like Hegel's distinction between individual minds and "objective spirit." (Sellars "Reply," 460)

Indeed, nothing theoretically prevents inferentialists from rejecting the first assumption that the meaning of a term spoken by a speaker is solely determined by their psychological states. Inferentialism can be developed as a thesis about a particular speaker's idiolect, but it can also be developed as a thesis about a public language (see Murzi and Steinberger, "Inferentialism," 202–3). In fact, many inferentialists, including Sellars ("Language as Thought and as Communication"), Brandom (*Making It Explicit*), and Peregrin (*Inferentialism*), endorse inferentialism as a thesis about a public language, and emphasize its social character. Hence, the argument from the linguistic division of labor does not work against inferentialism as such nor against Sellarsian inferentialism in particular.

Let us then move on to the 'water' case. In this case, it must be admitted that it is much more difficult for inferentialists to accept Putnam's claim that even in 1700, while 'water' used by Earthlings referred to H₂O, 'water' used by Twin Earthlings referred to XYZ. For, since no Earthlings could discriminate H₂O from XYZ and no Twin Earthlings could discriminate XYZ from H₂O in 1700, Earthlings and Twin Earthlings seemed to be following the same rules in using 'water'. Of course, inferentialists need not accept Putnam's claim that Earthlings and Twin Earthlings referred to different things even in 1700. Inferentialists could reject it and insist that both Earthlings and Twin Earthlings referred to the same thing: things that are *either*

H₂O or XYZ. For instance, Tim Crane, who is not an inferentialist, argues against Putnam along this “‘common concept’ strategy” (Crane, “All the Difference,” 12).¹⁷

Whether this common concept strategy may be successful or not, however, Sellars suggests another strategy – a strategy inferentialists can use to accept Putnam’s claim that even in 1700, while ‘water’ used by Earthlings referred to H₂O, ‘water’ used by Twin Earthlings referred to XYZ. Sellars’s key idea is suggested in the following passage in his reply:

I would stress what I have called the promissory note aspect of substance sortals.
(Sellars, “Reply,” 461)¹⁸

Here Sellars refers to his 1958 paper, “Counterfactuals, Dispositions, and the Causal Modalities,” where he had already suggested that “thing-kind expressions” have “the promissory note dimension” (CDCM 263). But the idea of the promissory note aspect is not so clearly articulated in the 1958 paper nor in the reply to Putnam.¹⁹ To unpack and elaborate this idea is the aim of the remainder of this paper.

¹⁷ It should be noted that Crane’s interest is not in linguistic meaning but only in mental contents (Crane, “All the Difference,” 9, 11, 15). But the common concept strategy itself could also be applied to linguistic meaning.

¹⁸ Strictly speaking, this statement is made about ‘gold’ rather than about ‘water.’ But as Sellars goes on to discuss ‘water’ on the next page, he seems to think that the same applies to ‘water.’

¹⁹ In “A Semantical Solution of the Mind-Body Problem,” Sellars suggests that he has borrowed the expression ‘promissory note’ from Feigl (SSMB 196). Although Sellars does not refer to any particular paper of Feigl’s, see, for instance, “Operationism and Scientific Method.”

The first thing to note is that although ‘sortal’ is usually understood as referring to something countable (see Grandy, “Sortals”), what Sellars calls ‘substance sortals’ or ‘thing-kind expressions’ include ‘gold’ and ‘water.’²⁰ To avoid confusion, I shall use ‘substance term’ rather than ‘substance sortal.’²¹

Although Sellars does not say explicitly so, he seems to suggest that substance terms (or perhaps more broadly, natural kind terms in general) have the reference, or the semantic *value*, which is to be *cached out* in a “successor framework” (Sellars, “Reply,” 462). I take it that on his view, the reference of a substance term is determined by a successor conceptual framework.²² (Note that this is a view about the *reference* of

²⁰ John Locke, who introduced the term ‘sortal,’ uses this term in a general way which does not restrict it to countable nouns (see *Essay*, III.iii.15), and some analytic philosophers use ‘sortal’ as including mass nouns (see Lowe, *More Kinds of Being*, 14). Sellars seems to be following Locke in calling ‘gold’ and ‘water’ *sortals*, as he refers to Locke in his “Reply” (462).

²¹ Thing-kind expressions may include terms that are not substance terms. But I shall set aside this possibility and focus on substance terms.

²² Sellars himself seems to say that the referent of a substance term *is* the successor term (Sellars, “Reply,” 462). But I take it that while the view that the referent *is determined by* the successor term is a consequence of his idea of the promissory note aspect, the view that the referent *is* the successor term is derived from the *conjunction* of the idea of the promissory note aspect *with his nominalism*, which claims that “qualities, relations, classes, propositions and the like [...] are linguistic entities. They are linguistic expressions” (AE 627). Indeed, in his reply to Putnam, Sellars goes on to compare our temptation to reify what the ideal substance term would stand for with our temptation to construe what ‘triangular’ stands for

substance terms. Sellars's view about the *meaning* of substance terms is quite complex and thus will not be discussed until Section 7.)

Let us now consider the case of 'water' used in 1700. Although Sellars himself does not discuss this case, his idea of the promissory note aspect can be fruitfully applied to it. On his view, as I interpret it, 'water' used by Earthlings in 1700 referred to H₂O as far as in using 'water' as a substance term, they were deferring to a successor conceptual framework in which their successors could infer from "X is water" to 'X is H₂O' and from 'X is H₂O' to 'X is water.' In the same way, 'water' used by Twin-Earthlings in 1700 referred to XYZ as far as in using 'water' as a substance term, they were deferring to a successor conceptual framework in which their successors could infer from 'X is water' to 'X is XYZ' and from 'X is XYZ' to 'X is water.' It should be noted that this account does not imply that people in 1700 *explicitly intended* to defer to a successor conceptual framework. Nor does it imply that whenever they used 'water,' they *had in mind* such a successor framework. They did not have to do so in order to defer to a successor conceptual framework, just as we do not have to do so in order to defer to our contemporary experts in using, say, 'elm.' For them to defer to a successor conceptual framework, it is enough that they *would* have said that they did not know the nature of water *yet*, or that they were *ready* to be informed or corrected by new scientific findings.

Let us summarize Sellars's responses to Putnam's two externalist arguments at this point. Sellars suggests how inferentialists can accommodate both "the social character of language and the contribution of the world." As for the social character,

as an abstract extra-linguistic object ("Reply," 462). In this paper, I will focus on the question of how the referent of a substance term is determined, and set aside his nominalism.

inferentialists can and Sellars does straightforwardly accept it. As for the contribution of the world, Sellars's idea of the promissory note aspect suggests how inferentialists can even accommodate it, though not directly, but through a successor conceptual framework. In the following sections, I will try to elaborate the idea of the promissory note aspect by comparing Sellars's position with temporal externalism (section 6) and by answering some questions one might ask about it (section 7).

6. Sellarsian Ideal Successor Externalism

The view I ascribed to Sellars in the last section may sound like temporal externalism. Indeed, there are some similarities between them. The temporal externalist thinks it important to see ourselves as “taking part in a shared, temporally extended, and ongoing [linguistic] practice” (Jackman, “We Live Forward,” 158). According to the temporal externalist, we engage not only in “the synchronic division of labor” but also in “the diachronic division of labor” (Jackman, “We Live Forward,” 161). The reference of a term used at time t is, on this view, partly determined by what happens after t . Similarly, Sellars also thinks it important to “view language diachronically” (“Reply,” 461), and I have ascribed to Sellars the view that the reference of a substance term (used at t) is determined by a *successor* conceptual framework. Nevertheless, to properly understand Sellars's position, it is important to see how it is different from temporal externalism. I shall note two important differences.

First, while temporal externalism is usually understood as a *global* thesis, i.e., a thesis about a language as a whole, Sellars's view that the reference is determined by a successor conceptual framework is a *local* thesis specific to substance terms (or perhaps

to natural kind terms in general).²³ As a global thesis, temporal externalism is based on a view about our words *in general*. Our words are said to be open-textured in that the reference of a word used at *t* may be *indeterminate* at *t* and be affected by what happens after *t*. Sellars's view, as a local thesis, is not based upon such a view about our words in general but upon a view on the specific function of substance terms. According to Sellars, "[w]ords for natural substances [e.g., 'water'] have as part of their function a classificatory role in the ongoing enterprise of physico-chemical explanation" (Sellars, "Reply," 462). And "the successor substance sortal [e.g., 'H₂O'] [...] would inherit, in developed form" this classificatory role (Sellars, "Reply," 462). The inheritance of the classificatory role of a substance term by the successor one occurs by so-called theoretical identification, which, for Sellars, amounts to formulating a correspondence rule which correlates the two terms, e.g. 'H₂O' with 'water.'²⁴ We will discuss theoretical identification in more detail in the next section when we discuss the meaning of substance terms. For now, it is enough to note that while temporal externalism is a global thesis based on a view about our words in general, Sellars's view is a local thesis based on a view on the specific function of substance terms.

Another important difference between Sellars's position and temporal externalism is concerned with the matasemantic base in virtue of which the reference of

²³ This is not to say that Sellars is not a global temporal externalist. I leave the question open whether he is or not. My point is only that the above discussion is specific to substance terms.

²⁴ Sellars discusses correspondence rules in a series of papers (LT, TE, SRII, SRT). See also O'Shea, *Wilfrid Sellars*, 32–47, 158–63, and Christias, "The Manifest-Scientific Image Distinction."

a term is determined. The temporal externalist argues that the reference of a term is determined by “‘accidental’ developments in [its] subsequent usage” (Jackman, “We Live Forwards,” 158). On this view, ‘water’ used by Earthlings in 1700 referred to H₂O because the same term used by us Earthlings *now* refers to H₂O. But if Earthlings had been extinct before they discovered that water is H₂O, the reference of ‘water’ would have been indeterminate between H₂O and XYZ (see Jackman, “We Live Forward,” 168). Sellars’s position does not imply this. According to his view, the reference of a substance term is determined not by accidental developments, but by “an ideally explanatory framework” (Sellars, “Reply,” 462). Sellars thus characterizes the “successor framework” that determines the reference of a substance term, in counterfactual terms, as the framework “which, *if* it came to be realized, *would* satisfy the as yet ill-defined criteria” (Sellars, “Reply,” 462; emphasis added).²⁵ Let us call Sellars’s view *ideal successor externalism* distinguishing it from temporal externalism. On ideal successor externalism, the successor framework that determines the reference of a substance term needs not to be realized in future. Rather, it is a “regulative idea” (Sellars, “Reply,” 462), which our scientific inquiry should be aiming at. Indicating Peirce’s view on the end of inquiry, Sellars sometimes calls such an ideal language *Peirceisch* (SM, V, §69, 140), and makes it clear that he is not requiring that “there ever be a Peirceish community” (SM, V, §72, 142).²⁶ One important consequence of this

²⁵ In his “Abstract Entities,” Sellars distinguishes two sorts of criteria: immediate and ultimate (AE 645–6). Immediate criteria are those we are actually using and ultimate criteria are those we are to adopt in the end.

²⁶ Although Brandom’s inferentialism can be seen as developing some of Sellars’s master-ideas, Brandom diverges from Sellars in refusing to appeal to such a “privileged perspective”

view is that, unlike the temporal externalist, Sellars can claim that even if Earthlings had been extinct before they discovered that water is H₂O, the reference of ‘water’ used by them would have been H₂O rather than indeterminate between H₂O and XYZ. For what determines the reference of a substance term is, on this view, not accidental developments of our linguistic practice but the ideal successor framework.

7. Further Discussions

Before concluding this paper, I want to answer three questions one might ask about Sellarsian ideal successor externalism.

(*Making It Explicit*, 599) and stressing the importance of the I-thou relation in determining the meaning and reference. In his recent book on Sellars, Brandom objects to “Sellars’s commitments to a Peircean end-of-inquiry science” by insisting that “it is very difficult to make sense of this notion” (*From Empiricism to Expressivism*, 79n43). Further, in his recent Book on Hegel, instead of appealing to the ideal perspective, Brandom provides a Hegelian historical account of the content of a concept in terms of a “process of determining” it (Brandom, *A Spirit of Trust*, 6). According to this account, in rationally reconstructing the prior applications of a term and thereby making them a progressive history, the present applications of that term both acknowledge the authority of that history and are authorized by that history, and similarly, the present applications of that term both petition its future users to acknowledge the authority of its present applications, and authorize its future applications. Brandom often elaborates this account by using an analogy with the evolution of legal terms in the common law tradition (see Brandom, *Reason in Philosophy*, chap. 3, and *A Spirit of Trust*, chaps. 12, 16, and Conclusion). In the next section, I will suggest how the ideal framework might work as the regulative ideal in our inquiry.

First, some might notice that Sellars's response to Putnam's Twin Earth thought experiment, as I have reconstructed it above, rests on the assumption that in 1700, people were using 'water' as a substance term. For Sellars's account, as I have reconstructed it, was that 'water' used by Earthlings in 1700 referred to H₂O as far as *in using 'water' as a substance term*, they were deferring to a successor conceptual framework. But if Sellars's account relies on that assumption, some might ask, isn't it too weak a reply to Putnam?

It is true that Sellars's response to Putnam's Twin Earth argument, as reconstructed above, relies on the assumption that in 1700, people were using the term 'water' as a substance term. To make this assumption explicit, Sellars's claim turns out to be conditional: *if* Earthlings were using the term 'water' as a natural kind term in 1700, *then* what it referred to was H₂O. But it is worth pointing out that Putnam's argument also relies on the same assumption. Indeed, Putnam himself seems to be admitting this point when he discusses 'gold' in "The Meaning of 'Meaning'."

But someone might disagree with us about the empirical facts concerning the intentions of speakers. This would be the case if, for instance, someone thought that Archimedes (in the *Gedankenexperiment* described above) would have said: "it doesn't matter if X does act differently from other pieces of gold; X is a piece of gold, because X has such-and-such [superficial] properties and that's all it takes to be gold." [...] indeed, we cannot be certain that natural-kind words in ancient Greek had the properties of the corresponding words in present-day English [...]. (238)

In the same way, in the case of 'water,' we cannot be certain that 'water' was used as a natural kind term in 1700 as it is in present-day English. People in 1700 might have said that "the liquid in Twin Earth is water because it has such-and-such superficial properties and that's all it takes to be water." Thus, Putnam's claim, too, turns out to be conditional: *if* 'water' was used as a natural kind term in 1700, *then* what it referred to

was H₂O even at that time. If Sellars's claim is weak, it is as weak as Putnam's.

The second question I want to answer here concerns the notion of *using 'water' as a substance term*. Sellars's account, as I have reconstructed it, relies on this notion. But some might ask how inferentialists could use this notion. For as I said in section 2, inferentialists must be able to explain how the meaning and reference of a given expression are determined by its inferential role, and thus, cannot simply say that to use 'water' as a substance term is to use it *as referring to* a certain sort of substance, i.e., water. But then how can inferentialists explain what it is to use 'water' as a substance term? Although Sellars does not attempt to give such an explanation in his reply, the following explanation would be available to him: one uses the term 'water' as a substance term if one is committed to the form of *inference* 'if *x* is water and *y*'s structure is different from *x*'s, then even if *y* is perceptually indiscernible from *x*, *y* is not water.'²⁷ Commitment to such an inference is sufficient for using 'water' as a substance term because such a commitment precludes entitlement to the claim that both H₂O and XXZ can be water. Of course, to use 'water' as a substance term, one need not explicitly have in mind such an inference. Being implicitly committed to such an inference is enough. In this way, inferentialists can avail themselves of the notion of using 'water' as a substance term.²⁸

²⁷ The matter will be more complicated if we consider the existence of isotopes. But the issues it raises are not specific to Sellars and hence set aside here.

²⁸ This explanation can be seen as applying to the case of substance terms the basic strategy of Brandom's inferentialist account of what we are doing when we use singular terms, demonstratives, or semantic terms (see Part Two of his *Making It Explicit*).

The third question I want to consider here concerns the *meaning* of substance terms. So far, we have only considered Sellars's view on the *reference* of substance terms and left untouched the question about the meaning. Does Sellarsian ideal successor externalism imply that the meaning is also determined by the ideal successor framework?

Sellars seems to think that 'water' used by Earthlings in 1700 *meant different things* from what it means today, or from what it would mean if it were used by their ideal successors. This is a consequence of his view of theoretical identification. According to Sellars, in theoretical identification, we formulate a correspondence rule which correlates two terms. A correspondence rule may correlate a theoretical term with an observational one, or it may correlate two theoretical terms, i.e., a term in one theoretical framework with a term in another. In either case, Sellars emphasizes, a correspondence rule does *not* correlate those two terms which *have already had the same meaning before theoretical identification*. As he puts it, "the role of [...] correspondence rules [which correlate theoretical terms with observational terms] is "not to tie theoretical propositions to *antecedently established observational counterparts* [...]" (SRII §64; emphasis added), and "the correspondence rules which connect theory with theory are not true by virtue of the *antecedent* meanings of the two sets of theoretical expressions" (TE §25; emphasis original). On his view, in formulating a correspondence rule, the meaning of a term is rather subject to *correction* and *refinement*, or as James O'Shea puts it, subject to "reconceptualization" (O'Shea, *Wilfrid Sellars*, 160). Thus, in the case of 'water,' what it meant in 1700 was different from what it means today because the meaning of 'water' was corrected and refined when a correspondence rule which correlates 'H₂O' with it was established.

Thus, on Sellarsian ideal successor externalism, while the *meaning* of ‘water’ used by Earthlings in 1700 was *different* from that of ‘water’ used by us now, the *reference* of ‘water’ used by Earthlings in 1700 can be the *same* as that of ‘water’ used by us now (as far as they were deferring to the ideal successor framework, and we have come closer to it). As our scientific inquiry proceeds and new correspondence rules are established, the meaning of substance terms is corrected and refined. For new correspondence rules enable us to make new inferences. But this does not imply that a meaning change necessarily involves a reference change. The ideal successor framework, which determines the reference of substance terms, is the regulative ideal. As such, it is what we are (at least) implicitly aiming at when we introduce theoretical terms, formulate correspondence rules, and thereby correct and refine a given conceptual framework. As the reference of substance terms is determined by such an ideal framework, it can be preserved through such a process of theoretical identification and reconceptualization.²⁹ And through such a process of theoretical identification, we come to know, at least approximately, what we were really referring to when we were deferring to the ideal successor framework.³⁰

²⁹ Dionysis Christias calls such a process the process of “preservation through transformation” (“The Manifest-Scientific Image Distinction,” 1312n15).

³⁰ Of course, Sellars also famously claims that “the objects of the observational framework do not really exist—there are really no such things. They [correspondence rules] envisage the *abandonment of a sense and its denotation* [of observational terms]” (LT, §52, 126; emphasis added). But I take it that what he is claiming not to really exist is the objects of the observational framework *as they had been originally conceived, before that framework was corrected and refined*, and, in the same way, what he is claiming to be abandoned is the

8. Conclusion

In the first half of this paper, I have traced the development of Putnam's semantic externalism, situated his debate with Sellars in it, and reconstructed the two arguments he presented against Sellars. In the second half of this paper, I have reconstructed how Sellars replied to Putnam, and argued that Sellars suggests how inferentialists can accommodate both "the social character of language and the contribution of the world." As for the social character, inferentialists can and Sellars does accept it without any difficulty. As for the contribution of the world, I have argued that Sellars's idea that substance terms have a promissory note aspect suggests how inferentialists can accommodate it, though not directly, but through a successor conceptual framework. Then, I have elaborated his idea as ideal successor externalism, according to which the reference of a substance term is determined by the ideal successor framework to which users of that term are implicitly deferring. Further, I have also suggested how this is compatible with Sellars's view about the meaning of substance terms that it is corrected and refined through a process of theoretical identification, and how the ideal successor framework might work as the regulative ideal in our inquiry. Although I did not argue that Sellars's account explains the contribution of the world better than Putnam's more standard one, nor did I argue that it is the best inferentialist account to accommodate the contribution of the world, I hope I have shown that Sellars provides inferentialists with rich conceptual resources to address issues concerning semantic externalism.

sense and denotation of observational terms *as they had been originally conceived, before these terms were corrected and refined.*

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