

Chapter 4

Linguistic Cognition, Understanding, and Millian Modes of Presentation

In chapters 2 and 3, I discussed four forms of cognition that may be incorporated into singular propositions as the means by which one identifies targets of direct predication. They are: entertaining a proposition that is itself a predication target (or a constituent of such a target), first-person cognition, present-tense cognition, and cognition of the actual world-state as *this very state*. Each involves identifying a propositional constituent by performing a sub act which involves a special way of cognizing it. Each is, therefore, what philosophers of language since Frege have called “a mode of presentation.” However, these are *not* Fregean modes of presentation because (i) many propositions are entirely free of such modes of presentation, and (ii) these new modes of presentation do not affect representational content. For these reasons, I call them “Millian modes of presentation.” The presence of a particular Millian mode M does, of course, distinguish a proposition p_M incorporating M from an otherwise identical proposition p_{M^*} in which a different Millian mode M^* is swapped for M ; the presence of M also distinguishes p_M from an otherwise identical proposition p that does not incorporate any mode of presentation for what M presents. The upshot is that these three propositions are cognitively distinct, despite being representationally identical.

There are other, related, differences between Millian and Fregean modes of presentation. On the classical picture, a Fregean mode of presentation is epistemically prior to what it represents in the sense of being something that is directly before one’s mind, which, when it occurs as a constituent in a proposition, has the function of uniquely

determining something else that itself counts as cognized in a related sense (despite not being a constituent of the proposition). The Fregean determination relation is held to be objective in the sense that what, if anything, a mode of presentation determines depends only on it, not on who is cognizing it or whether it is cognized at all. Thus, it is impossible for the same mode of presentation to determine different things relative to the same circumstance of evaluation. If nothing is uniquely determined, the proposition containing the mode of presentation continues to exist unaffected, and to hence be available as an object of the attitudes, despite perhaps failing to be true or false. When Fregean propositions are replaced by cognitive propositions, the nearest analogues of Fregean modes of presentation are the function-argument complexes identified in chapter 2 as the semantic contents of complex singular terms. Their role as constituents of propositions and determinants of representational content is to present indirect predication targets, which, though not themselves constituents of propositions, are crucial to evaluating their truth or falsity.

Millian modes of presentation are different. Since they are neither constituents of a proposition nor what those constituents represent, they are neither cognized in entertaining a proposition nor relevant to determining its truth conditions or truth value. Rather, they are the means which what is both cognized and constitutive of representational content is brought to mind. Consider again first-person cognition. The complex cognitive act that is the proposition expressed by (1a) differs from the corresponding act that is the proposition I alone can express using (1b).

- 1a. SS is in danger.
- b. I am in danger.

The former is the act of predicating *being in danger* of the predication target SS (with no restriction on how SS is brought to mind); the latter is an otherwise identical act except that

SS is brought to mind *in the first person way*. In the second case, the sub act of identifying the predication target in the first-person way is one of several possible methods of doing so. For a proposition *p* to incorporate this first-person Millian mode of presentation is for it to occur as a sub act of *p*. Since the predication target is determined by the first-personal sub act performed *plus* the identity of the agent performing it, the same first-person mode occurs in the first-person propositions expressed by different agents. Thus it is quite different from any Fregean mode of presentation.

Analogous remarks apply to *present-tense* cognition of *t* and *this-very-world-state* cognition of *w*. The Millian modes of presentation for these cases are, respectively, the sub act of cognizing a moment of time *t* at *t* in the present-tense way and the sub act of cognizing a world-state *w* at a world-state *w* in the this-very-world-state way. Finally consider again propositions (2a) and (2b).

- 2a. Russell attempted to establish logicism.
- b. Russell attempted to establish that arithmetic is reducible to logic.

The former proposition is the act of predicating *attempting to establish* of Russell (however identified) and the proposition logicism (however identified); the latter is the same except that the proposition logicism must be identified by entertaining it. Having clarified the notion of a Millian mode of presentation and illustrated the role it plays in generating cognitively distinct but representationally identical propositions, I will argue in this chapter that *linguistic modes of presentation* are included among the Millian modes.

It is a feature of language not only that it allows us to share our antecedent non-linguistic cognitions with others, but also that it is the means by which we perform many cognitions in the first place. For example, many names and natural kind terms we employ designate items with whom or with which we have had little or no perceptual contact. When

we identify these items as targets of predication or other cognitive operations, we do so linguistically. The same is true even of things with which we have had some perceptual contact; many of our thoughts about them are linguistically mediated -- as are some of our thoughts about those with whom, or with which, we are very familiar. Learning a language is, at bottom, learning to use its sentences to entertain the propositions they express, which is to *perform* those propositions. One who understands the sentence 'Plato was human', has learned to use it to predicate humanity of Plato. We use the name 'Plato' to pick out the man; the noun 'human' to pick out the kind, and the phrase 'is human' to predicate *being human* of the man.

Now notice an interesting fact. Let *S* express *p*, which is a certain cognitive act. The act *using S to perform p* is itself a cognitive act that is representationally identical to *p*. If this new representational act is itself a proposition *p**, then it is cognitively distinct from, but representationally identical to, *p*. Is it a proposition? Not all representational acts are. For example, the acts of *predicating humanity of Plato*, (i) *on Thursday*, (ii) *in Peru*, (iii) *while dancing*, (iv) *in giving a lecture*, or (v) *when speaking in a whisper* all represent Plato as being human, even though we would not be happy thinking of them as propositions. We can exclude them by insisting that propositions be *purely representational* acts, while observing that these unwanted examples all involve something further that is representationally irrelevant. Principle (3) is a corollary of this idea.

3. If *A* is a cognitive act that is a proposition, and *B* is a special way of performing *A* that is representationally identical to *A* (so that every conceivable performance of *B* is a performance of *A*, but not conversely), then *B* is a proposition only if it differs from *A* solely by containing one or more cognitive sub acts the performance of which are *the means* by which one or more of the essential sub acts of *A* is performed – e.g. by containing sub acts the performance of which are the means by which one or more of the constituents of *A* are identified, so that one identifies the relevant constituents *by* performing those sub acts.

This criterion excludes the unwanted proposition candidates just cited. For example, let A be the act of predicating humanity (however cognized) of Plato (however cognized), and let B be the act of doing this while dancing. Any agent who performs either one of these acts represents Plato as being human, and nothing more; so the two acts are representationally identical. However, since dancing is not a cognitive means by which one identifies Plato as predication target, B is not a proposition, even though A is. Not being a proposition, B is not the object of propositional attitudes. Although whether or not one is dancing at t may causally influence what one is thinking at t, the mere fact that one is dancing isn't a constitutive determinant of either the representational or the cognitive content of one's beliefs or other cognitive attitudes. By contrast, principle (3) does not disqualify predicating *being in danger* of me cognized in the first-person way from counting as a proposition; nor does it disqualify (i) predicating *starting now* of the meeting and the present time, identifying the latter in the present-tense way, or (ii) predicating *trying to prove* of Russell and logicism, identifying the latter by entertaining it. Principle (3) also accommodates predicating *being human* of Plato by using the name 'Plato' to identify the man, the noun 'human' to identify the property, and the phrase 'is human' to predicate the property of the man. Since this act of using the sentence "Plato is human" to predicate humanity of Plato also satisfies the conditions given in chapter 2 that are necessary for representational acts to be propositions, it *is* a proposition that is cognitively distinct from but representationally identical to the bare proposition that Plato is human.

The point is general. Whenever the conditions in (3) are satisfied and we adopt a special purely representational means of entertaining a proposition p, we generate a new proposition p* representationally identical to p. In the first-person case we noticed that one

means of identifying SS as the predication target of *being in danger* involves cognizing SS in the first-person way. Since this second act is purely representational it is also a proposition. Since not all performances of the first act are performances of the second, they are *different* but representationally identical. Since every performance of the second act is a performance of the first act, entertaining the second proposition counts as entertaining the first, but not conversely. The same is true with linguistic cognition. Here, we start with the act *predicating humanity (however it is cognized) of Plato (however he is cognized)*. One way of performing this act is to use the words ‘is human’ to predicate humanity of the man picked out using his name. Since both acts are purely representational, both are propositions. Since not all performances of the first are performances of the second, they are *different* but representationally identical. Still, every performance of the second is a performance of the first; so entertaining the second, linguistically enhanced, proposition counts as entertaining the first, but not conversely.

It will be noticed that this account generates a great many previously unrecognized linguistically enhanced propositions. This vast domain includes not only propositions incorporating complete sentences as ways of entertaining otherwise bare propositions, but all sorts of hybrids as well – e.g. the partially enhanced proposition that predicates humanity (however cognized) of the individual Plato one cognizes using by his name. Although the possibilities are virtually endless, I am not multiplying entities. The acts are real. One *can* predicate humanity of Plato; one can also do so by cognizing humanity in this or that way, and cognizing Plato using these or those words. The acts are cognitively different, though representationally identical. Calling them ‘propositions’ doesn’t inflate one’s ontology.

The real question is whether the species of representational cognitive acts I have identified can do the work traditionally reserved for propositions. In chapter 2, I argued that they can. I then expanded the case to include several kinds of *propositions of limited access* cognitively distinct from, but representationally identical to *propositions of unlimited access*. As I argued earlier, the case for recognizing these propositions of limited access is not diminished by the fact that some of them – e.g. the “degenerate” proposition that Martha believes a proposition that only I can entertain – may be of little use to us. The same can be said about some “degenerate” propositions concerning times and world-states. Thus, it should be no surprise that many in the vast domain of possible *linguistically enhanced propositions* may be at most marginally useful to us in constructing theories of language and mind. But this hardly shows that none are. In what follows, I will argue that linguistically enhanced propositions play an important role in solving long-standing problems.

Names, Frege’s Puzzle, and Linguistic Modes of Presentation

I begin with puzzle cases involving names. For each name (or set of such), there are purely representational acts, *propositions*, distinguishable from their representationally identical counterparts by the fact that performing/entertaining them requires agents to identify predication targets using that name. All these propositions are purely representational acts, all are assigned truth conditions in the usual way, and all are potential objects of attitudes like entertaining, judging, and believing. With this in mind, consider (4).

- 4a. Carl Hempel was a famous philosopher.
- b. Peter Hempel was a famous philosopher.
- c. x was a famous philosopher (relative to an assignment of Mr. Hempel as value of ‘x’)

Let p be expressed by (4c). P_C is a proposition representationally identical to p which requires one who entertains it to identify Mr. Hempel via the name ‘Carl Hempel’. P_p

requires identification via the name 'Peter Hempel'. Utterances of (4a) assert both P_C and p ; utterances of (4b) assert P_p and p . With these elementary observations we reconcile a pair of heretofore hard-to-combine insights: one who accepts (4a) may, as Frege noted, believe something different from what one believes in accepting (4b), even though the propositions believed are representationally identical, as intimated by Kripke.

The difference between the two propositions -- p_C and p_p -- is a difference in how Mr. Hempel is presented, or, as Frege would put it, in "modes of presentation" of Mr. Hempel. What Frege missed, because of his other-worldly conception of propositions, is that these modes are *ways doing things*, e.g. identifying predication targets, which need not be constituents of the representational content of the thing done, the proposition, and so need not affect its truth conditions. Just as structured propositions open up needed analyses of attitudes that are artificially foreclosed when propositions are taken to be sets of possible world-states, so cognitive propositions open up analyses artificially foreclosed by traditional conceptions of structured propositions.

Here is a personal example. Shortly after arriving at Princeton as an Assistant Professor in 1980, I encountered a distinguished gentleman whom others called 'Peter Hempel'. Months later I discovered he was the famous philosopher Carl Hempel. Then, I could have truly reported my epistemic state using (5a), despite the fact I could not very well have done so with (5b).

- 5a. I have only just now realized that Peter Hempel is the famous philosopher Carl Hempel.
- b. I have only just now realized that Carl Hempel is the famous philosopher Carl Hempel.

The truth I would then have reported is that I hadn't, until recently, known or believed the enhanced proposition entertained by predicating the identity relation of Mr. Hempel,

identified using the name ‘Peter Hempel’, and Mr. Hempel, identified using the name ‘Carl Hempel’ (even though I had believed the corresponding bare singular proposition). Pressed to explain what it was, precisely, that I hadn’t previously grasped, I would probably have answered along the lines of (5c).

5c. I have only just now realized that the man, Mr. Hempel, previously known to me as ‘Peter Hempel’ is the famous philosopher Carl Hempel, known to me as ‘Carl Hempel’.

Although this would have been true, and may in some conversational settings even have been as among the propositions asserted by my utterance of (5a), it is inferentially downstream from the truth directly reported by my use of (5a).

It is crucial in considering (4) and (5) to distinguish (i) predicating *being so-and-so* of *o* using a name *n* as one’s means of designating, and so identifying, *o* from (ii) predicating both *being so-and-so* and *being named n of o*. Doing the former doesn’t involve doing the latter; so one who asserts the proposition that is the first cognitive act need not assert the proposition that is the second. Since the two propositions predicate different properties of *o*, and so represent *o* differently, they have different truth conditions. The former is true at world-state *w* iff *o* is so-and-so at *w*; the truth of the latter also requires *n* to be used at *w* to designate *o*.

The case illustrated by (5a) is further generalized in (6) and (7).¹

- 6a. John asserts/believes that Carl Hempel was a famous philosopher.
- b. John asserts/believes that Peter Hempel was a famous philosopher.
- 7a. John didn’t assert/believe that Carl Hempel was a famous philosopher.
- b. John didn’t assert/believe that Peter Hempel was a famous philosopher.

When it is presupposed that one’s audience knows that John is familiar with Mr. Hempel under the name ‘Carl Hempel’, one may use (6a) to attribute to John assertion of, or belief in,

¹For related discussion, see Soames (2005a) and chapters 6 and 8 of Soames (2002).

a proposition that requires the predication target, Mr. Hempel, of *being a famous philosopher* to be identified using that name, while using (7a) to deny that attribution. Similarly for (6b), (7b), and the name ‘Peter Hempel’. When it isn’t presupposed that John knows Mr. Hempel by name, there is no similar enrichment.

For example, I might correctly use (8) to report John’s inquiry, even though he didn’t know, or use, Martha’s name.

8. John asked whether Martha was my wife.

Here, the proposition I use the complement clause to contribute to the proposition I assert is *not* one the entertainment of which *requires* an agent to identify its predication target by name. This might be problematic if the proposition *semantically encoded* by the clause required one who entertained it to use ‘Martha’. But it doesn’t.

There are, of course, many cases of both kinds: those in which linguistic information about the use of names by agents of reported attitudes is presupposed, and those in which it isn’t. This variation, which has been the bane of attempts to give semantic solutions to Frege’s puzzle, suggests that propositions *semantically expressed* by sentences containing names don’t require agents who entertain them to pick out their constituents in any special linguistic way. Linguistic enhancements are simply candidates for pragmatic enrichment. In short, the cognitive theory of propositions allows us to incorporate some of what Nathan Salmon calls “guises” (by which by which propositional constituents are picked out in entertaining them) into propositions themselves, without changing representational content, and without semantic encoding.²

² Salmon (1986). Since typically such guises are not included in semantic content, Salmon and I continue to agree on the semantic contents of the sentences in question, even if we disagree regarding which propositions are asserted by utterances of sentences containing names and other singular terms.

With this in mind, I revisit a classic instance of Frege's puzzle.

- 9a. Peter Hempel is Peter Hempel.
 - b. Peter Hempel is Carl Hempel.
-
- 10a. Mary knows that Peter Hempel is Peter Hempel.
 - b. Mary knows that Peter Hempel is Carl Hempel.

Although the semantics of the (a) sentences are the same as those of the (b) sentences, the propositions they are used to assert are typically different. One who assertively utters (9b) asserts a set of distinct but representationally identical propositions, each of which predicates identity of the pair of Mr. Hempel and Mr. Hempel. One of these places no restrictions on how the arguments of the identity relation are identified; one requires only that the first argument be identified using the name 'Peter Hempel', one requires only that the second argument be identified using 'Carl Hempel'; and one requires both. Typically the reason for uttering (9b) is to assert and convey this last proposition – along with, in some cases, further representational-content changing enrichments of it.

For example, if it is already presupposed in the context that 'Carl Hempel' designates a famous philosopher and that 'Peter Hempel' designates the man to whom you have just been introduced, I may answer your question "Who is the man, Peter Hempel, to whom I have just been introduced?" by uttering, (9b), "Peter Hempel is Carl Hempel." In such a case, I thereby assert the proposition that predicates *being identical* of a pair of arguments the first of which is Mr. Hempel, *identified using 'Peter Hempel'* and the second of which is Mr. Hempel, *identified using 'Carl Hempel'*. Because of the special circumstances of the context of utterance, I will also communicate, and might also be counted as asserting, the further descriptively enriched proposition *that the man, Mr. Hempel (identified using 'Peter Hempel') to whom you have been introduced is the famous philosopher, Mr. Hempel (identified using 'Carl Hempel')*. Although the first pragmatically

enriched proposition is representationally identical to the bare singular proposition semantically expressed by the sentence uttered, the second enriched proposition changes representational content by adding further conditions that Mr. Hempel must satisfy if the proposition is to be true.

All of this carries over to assertive utterances of the attitude ascription (10b). As before, the proposition semantically expressed is uninteresting. So, speakers use, and hearers expect them to use, the sentence to attribute knowledge to Mary of an enrichment of its complement clause. One minimal enrichment merely adds linguistic restrictions on how the arguments of the identity relation are identified. Although this enrichment is representationally inert, the perspective it provides on Mary's cognition may allow hearers to infer further, asserted or unasserted, contents about what Mary knows. If she is known to be a philosophy of science student who will recognize the name 'Carl Hempel', and to be one to whom Mr. Hempel has been introduced as 'Peter Hempel', then the utterance of (10b) will put hearers in a position to infer that she knows that Mr. Hempel, to whom she has been introduced as 'Peter Hempel', is the philosopher of science Carl Hempel, who publishes under that name. In some contexts, this might be included in what is asserted. But whatever Mary is *asserted* to know in a given case will often be supplemented by further information the conveyance of which the linguistic enrichments have facilitated.

Apriority, Aposteriority, and Representational identity

This sort of enrichment also adds a new twist to discussions of the apriority or aposteriority of propositions expressed by identity sentences containing Millian names. The

bare singular proposition p that is the semantic content of both (9a) and (9b) (which predicates identity of Mr. Hempel and Mr. Hempel) is knowable apriori because there are ways of entertaining it -- e.g. by performing the predication recognizing the use of the same name 'Peter Hempel' twice over -- such that, once entertained, no empirical evidence is needed to justify accepting the proposition, or to determine it to be true. Descriptive enrichments such as the proposition that *the man, Mr. Hempel, to whom you have been introduced is the famous philosopher, Mr. Hempel*, are, of course, knowable only aposteriori. What about the minimal enrichment of the semantic content of (9a) and (9b) that requires the first and second arguments of the identity relation to be identified using the names 'Peter Hempel' and 'Carl Hempel' respectively?

Although this proposition -- call it " p_{PC} " -- is representationally identical to the apriori truth p semantically expressed by (9a) and (9b), it is knowable only aposteriori. When one entertains p_{PC} , one has no way of determining its truth by reflection, without being provided with empirical information that the names are being used codesignatively. What has, until now, made the aposteriority of p_{PC} difficult for Millians like Salmon and me to recognize has been our tendency, along with almost everyone else, to take representationally identical propositions to be absolutely identical. With cognitive propositions, one can see how the linguistically enriched proposition p_{PC} associated with (9b) can be representationally identical to the apriori truth p semantically expressed by (9a), without itself being apriori. But one must be careful how one expresses this. *If*, when one asks, "*Is the proposition that Peter Hempel is Carl Hempel knowable apriori?*", one is asking whether the proposition p *semantically expressed* by (9b) is knowable apriori, then the answer is, as Salmon and I have long maintained, "Yes." But if one is asking whether the

linguistically enriched proposition p_{PC} that sentence (9b) is often used to express is knowable apriori, then the answer is “No, it isn’t.”

With this we can add an addendum to the discussion of the following trio of propositions characterized in chapter two as distinct, representationally identical truths distinguished by the presence, absence, or distribution of the Millian mode of presentation requiring one or more of the arguments of the identity relation to be identified by entertaining it.

- 11a. Logicism is (the proposition) that arithmetic is reducible to logic.
- b. Logicism is logicism.
- c. That arithmetic is reducible to logic is (the proposition) that arithmetic is reducible to logic.

In that discussion I took ‘logicism’ to contribute only its referent to the propositions expressed by (11a) and (11b). On that understanding (11a) counted as knowable apriori, by virtue of the fact that knowledge of proposition (11c) was sufficient for knowledge of it. But if we consider a case in which the proposition an agent uses (11a) to present is one in which the first argument of the identity relation is identified using the name ‘logicism’, then the proposition presented is knowable only a posteriori.

Linguistic Modes of Presentation and Kripke’s Puzzle

Typically in philosophy we have assumed that we can uniquely specify propositions using constructions of the form *the proposition that S*, when S is unambiguous and indexical free. We have assumed that uses of ‘the proposition that Hesperus is Phosphorus’ and ‘the proposition that London is pretty’ each designate a single proposition that doesn’t vary from use to use. The reality of free linguistic enhancement and other pragmatic enrichment belies this in a way that connects with an observation made in Kripke (1979). There, Kripke introduces a formerly monolingual Frenchman, Pierre, who moves to London and learns

English by immersion, without learning that ‘Londres’ translates ‘London’, and hence without learning that ‘Londres est jollie’ translates ‘London is pretty’. Although Pierre understands the former as well as any monolingual Frenchman, while understanding the latter as well as any monolingual Englishman, he sincerely assents to the former while sincerely dissenting from the latter. Kripke asks “Does Pierre believe that London is pretty, or not?” The answer he wants is a simple “Yes,” or “No,” not a redescription of Pierre’s cognitive situation in other terms. Refusing to provide such an answer himself, Kripke argues that any direct answer faces seemingly disqualifying difficulties.

He says:

“I have no firm belief as to how to solve it [the puzzle]. But beware of one source of confusion. It is no solution in itself to observe that some *other* terminology, which evades the question whether Pierre believes that London is pretty, may be sufficient to state all the relevant facts. I am fully aware that complete and straightforward descriptions of the situation are possible and that in this sense there is no paradox...But none of this answers the central question. Does Pierre, or does he not, believe that London is pretty. I know of no answer to *this* question that seems satisfactory.”³

Later, he adds the following suggestive diagnosis of the source of the problem he has exposed.

“When we enter into the area exemplified by ... and Pierre our normal practices of interpretation and attribution of belief are subjected to the greatest possible strain, perhaps to the point of breakdown. So is the notion of the *content* of someone’s assertion, the *proposition* it expresses.”⁴

Using cognitive conception of propositions we can identify what has broken down, and why.

Our normal practices of interpretation and belief attribution allow us to use meaning-preserving translations in interpreting the words of others and ascribing beliefs to them. The resulting reports contain *that* clauses which we take to uniquely specify the proposition believed. But sometimes in moving from one language to another, we lose more than words

³ Kripke (1979), at pp. 895-896 of the 1997 reprinting.

⁴ Ibid., at p. 906.

used to express propositions that can equally well be expressed in other ways. There are, of course, many propositions we can express in one language when describing attitudes of speakers of another. But there are also linguistically-enhanced propositions representationally identical to their linguistically neutral counterparts that play crucial roles in the lives of agents like Pierre. In his case, we have no way, without using or mentioning French words to report some of his motivationally significant beliefs.

Because of this we have a hard time answering Kripke's question, "Does Pierre believe that London is pretty?" with a simple "Yes" or "No" – even though we can say precisely what Pierre does, and doesn't, believe. He believes the proposition semantically expressed by 'Londres est jollie' and 'London is pretty', which simply predicates *being pretty* of London. He also believes the proposition semantically expressed by their negations. He further believes the enhanced proposition that predicates *being pretty* of London, entertainable only by one who identifies London via the name 'Londres'; he does *not* believe its negation. The situation is reversed for the enhancement of the semantic content of 'London is pretty' entertainable only by identifying London via the name 'London'.

The reason that neither this nor any other story will provide a simple answer to Kripke's question is that he hasn't asked a single question. Instead, he has put several questions in play, to some of which the answers are 'Yes' and to others the answer is 'No'. This doesn't *always* happen when one asks what someone believes, or answers such a question. Sometimes a sentence "*So-and-so believes that S,*" is used to report belief in a single propositional object, whether linguistically enhanced or not. When this is so, it is usually determinate whether the report is true. Even when it is

indeterminate which of various propositions is reported believed, the truth value of the report may still be determinate, if the agent believes, or doesn't believe, each proposition about which the report is indeterminate. In such cases the indeterminacy may not matter, even though it is there.

By contrast, Kripke's scenario shows how, in some cases, our normal interpretive practices don't allow us to converge on a single interpretation of an attitude report, but instead make contending interpretations with different truth values available, where the differences among them are relevant to the issues at hand. In such a case, the use of a sentence [Does A believe that S?] will fail to express a determinate or relevantly answerable question because the agent, like Pierre, bears different attitudes to representationally identical but cognitively distinct propositions - - while those trying to use ordinary belief ascriptions to report the agent's attitude are unable to pick out objects of the agent's attitudes with sufficient determinacy to yield unique truth values.

Meaning and Understanding

In the section before last, I used the names 'Peter Hempel' and 'Carl Hempel' rather than the philosophically ubiquitous 'Hesperus' and 'Phosphorus' in illustrating linguistic propositions incorporating linguistic modes of presentation. I did so for a reason. Although both pairs of names contribute only referents to propositions semantically expressed by sentences containing them, *understanding* the latter pair requires having information of a sort not required to understand the former. Those well enough informed to employ the names 'Hesperus' and 'Phosphorus' are expected to know that speakers who use them typically presuppose that 'Hesperus' stands for something visible in the evening and

‘Phosphorus’ stands for something visible in the morning.⁵ One who mixed this up would misunderstand, or at the very least not fully understand, the names. Nothing of this sort is true of ‘Peter Hempel’ and ‘Carl Hempel’.

With this in mind, consider an utterance of (12) by a speaker A addressing a hearer B, in a context in which A and B share the presupposition that both understand the names.

12. Hesperus is Phosphorus.

Here, A asserts not only the bare singular proposition expressed by (12), but also the linguistically enhanced proposition entertainable only by those who identify the predication targets via the two names. The cognitive impact of this enhancement is more predictably identifiable and less sensitive to changeable contextual features than are the impacts of similar enhancements involving ordinary names like ‘Peter Hempel’ and ‘Carl Hempel’. Although the enhanced proposition that A asserts merely represents Venus as being identical with Venus, B’s acceptance of it puts B in position to draw further conclusions. Knowing that A asserted the linguistically enhanced proposition, and presupposing that A understands the names involved, B reasons that A knows he will be taken to be committed to the claim that *the object Hesperus, visible in the evening sky, is identical with the object Phosphorus, visible in the morning sky*. Realizing that A has done nothing to undermine this expectation, and in fact anticipates this reasoning, B may further conclude, correctly, that A *asserted* the descriptively enriched proposition.

The extra assertive content attached to A’s remark arises from (i) the linguistically enhanced proposition A asserted, which incorporates the Millian modes of presentation requiring identification of Venus via the two names, (ii) the shared presupposition that both

⁵ I here use ‘so-and-so’ as a schematic predicate letter, and ‘Hesperus is so-and-so’ and ‘Phosphorus is so-and-so’ as sentence schemata.

A and B understand those names, (iii) the descriptive information that comes with such understanding, and (iv) the fact that nothing else about the utterance blocks the reasoning used by B to identify the descriptively enriched assertion. It is important to realize that there are cases in which reasoning of this sort *is* blocked.

Suppose, for example, that the conversation between A and B were to continue as follows:

- 13a. If Hesperus's orbit had been different it wouldn't appear in the evening. (Said by A)
- b. In that case would Hesperus still have been Phosphorus? (Asked by B)
- c. Certainly. Hesperus would have been Phosphorus no matter what (A again)

Here, factors (i) – (iii) remain in place, but (iv) doesn't. Although A's assertive utterance of (13c) commits A to the necessity of the linguistically enhanced proposition that Hesperus is Phosphorus, it *doesn't* commit A to the absurdity that *no matter what the planet's orbit had been*, the unique thing that was both Hesperus and visible in the evening would have been identical with the unique thing that was both Phosphorus and visible in the morning. The difference between the descriptive enrichment of A's use of (12) and the lack of such enrichment of A's use of the modal sentence (13c) hinges on what understanding the names requires. It requires knowing that most agents familiar enough to use them take 'Hesperus' to designate something seen in the evening and 'Phosphorus' to designate something seen in the morning. Presupposing this about each other, A and B assign a rich descriptive content to A's assertive utterance of (12). Since taking the names to designate things *actually* seen at certain times carries tells one *nothing* about when those things are seen at *possible world-states*, A and B are not tempted to descriptively enrich the modal assertion made by A's use of (13c).

Although nothing could be simpler, the contrast illustrated by (12) and (13c) has been difficult for theorists to accommodate. Some contemporary Millians, fixated on examples

like (13c), have mistakenly distrusted descriptive enrichment of assertive content in examples like (12). While followers of Frege have correctly taken the propositions asserted by examples like (12) (in contexts in which the names are understood) to include descriptive contents, they have had trouble with uses of modal examples like (13c). Their trouble is grounded in a misunderstanding of the way descriptive information is tied to *understanding* expressions. Many descriptivists have wrongly assumed that the descriptive information needed to understand special names like ‘Hesperus’ and ‘Phosphorus’, ordinary names, and natural kind terms are their *semantic contents*. Since they think that all such expressions have semantic contents, they think that the expressions must all have descriptive Fregean senses of one or another sort.

This view is based on three cardinal errors:

- (a) the idea that names like ‘Hesperus’ and ‘Phosphorus’, which arguably impose substantive descriptive conditions on what it takes to (fully) understand them, are representative of names in general,
- (b) the assumption that conditions on (fully) understanding terms – including those like ‘Hesperus’ and ‘Phosphorus’ -- are incorporated in descriptive senses that determine their referents and are the contributions these terms make to the propositions semantically expressed by (uses of) sentences containing them, and
- (c) the presumption that the “cognitive significance” (inference potential) of a proposition p for one who entertains it is exhausted by p’s representational content (so representationally identical propositions have the same cognitive significance).

(a) is false because there is no standard descriptive information that must be known or believed by those who use most ordinary names; (c) is false because, as I have used (12) to illustrate, referentially identical propositions can differ in their inference potential; (b) is false because it wrongly incorporates conditions on *understanding* into a term’s meaning or semantic content.

Outliers like 'Hesperus' and 'Phosphorus' aside, this final error doesn't show up much in our ordinary talk of names, because we don't normally speak of *what the names* 'Saul Kripke' or 'David Lewis' mean, or of whether one *understands* them. Rather, we are inclined to ask whether one *is familiar* with the names. We are more prone to error with general terms like 'water' and 'heat'. These are directly referential designators of kinds – one a chemical kind involving hydrogen and oxygen, one a physical kind involving motion of molecules. In each case, the kind K is the semantic content that the general term G contributes to propositions semantically expressed by sentences containing G. Given this, plus the idea that the semantic content of G is the meaning of G, one is tempted to think: (i) that knowing *what G means* and *understanding G* are the same; (ii) that knowing that K is the meaning of G – which is knowing, of K, that it is the meaning of G -- is necessary and sufficient for knowing *what G means*, and (iii) that therefore knowing that K is the meaning G (i.e. knowing, of K, that it is what G means) is necessary and sufficient for understanding G.

This can't be right. To know (the truth of) the proposition expressed by [n is G], where n denotes o, is to know, of K, that o is an instance of it. As Kripke and Putnam taught us, one can know things like this without being able to define what it takes to be instance of K, or even to reliably identify K's instances. It is enough that there be a general term designating K that one picks up with the intention of preserving the content it has already acquired. It is also enough if one has had limited contact with instances of K, and one uses the term to designate the unique kind (of the relevant type) of which the things one has encountered are instances -- where it is tacitly understood that being an instance of a kind

involves sharing properties that explain the salient observable characteristics of its instances.⁶

Given all this, one can acquire knowledge of K very easily. One of the easiest things one can come to know is that a certain general term means or stands for K – e.g. that ‘water’ stands for water and that ‘heat’ stands for heat. An agent who has acquired these terms by one of the easy routes just mentioned thereby knows, of each relevant K, that the corresponding term G stands for it. But, contrary to (i) – (iii) above, this is *not* sufficient for *understanding* G, let alone for *fully understanding* it in the sense in which we ordinarily speak of such understanding. Such understanding requires more than minimal competence with the term, which is simply the ability to use it to designate what it conventionally designates. *To understand a term is to have the knowledge and recognitional ability to use it to communicate in ways widely presupposed in the linguistic community.*

This dynamic, illustrated using ‘Hesperus’ and ‘Phosphorus’, but otherwise rarely found with ordinary names, is nearly always present with natural kind terms. Understanding them -- in the sense needed to use them to communicate in ways widely presupposed by members of one’s linguistic community -- requires more than knowing of the kinds that the terms designate them. For example, understanding ‘water’ requires knowing that those who use it standardly presuppose that it stands for something that can take the form of a colorless drinkable liquid, something that falls from the sky in rain, and so on. A similar remark can be made about the general terms ‘heat’, ‘light’, and ‘red’, the (full) understanding of which may require some ability to recognize instances of the designated kinds via the senses, in

⁶ See Soames (2007b)

addition to knowledge of commonplace facts about the kinds and their instances presupposed by most uses of the terms.

Understanding in this sense is *not* a semantic notion in the sense of theories of semantic content. Our ordinary notions of *understanding an expression E* and *knowing what E means* track information commonly presupposed by most speakers who use E -- which is only distantly related to the technical notion *semantic content* or its determinants. For a semantic theory that assigns a given content to E to be correct, most minimally competent speakers must use E with that content, which in turn must typically appear as a constituent of the contents of speech acts performed using E. Widely shared presuppositions about information normally carried by uses of sentences containing E go much further.

These presuppositions together with representationally inert but cognitively significant linguistic modes of presentation pragmatically added to propositions semantically expressed by sentences containing general terms are important for understanding instances of Frege's puzzle like (14).

- 14a. Water is the substance molecules of which are made up of one hydrogen atom and two oxygen atoms.
- b. Water is H₂O.
- c. Water is water.

The proposition semantically expressed by (14c) predicates identity of the kind water and itself, and so is knowable a priori. The proposition semantically expressed by (14a) is both distinct from proposition (14c) and non-trivial because it involves a genuine description. The status of (14b) depends on whether 'H₂O' is a name or an abbreviated definite description. The most plausible view, I think, is that, like 'Hesperus' and 'Phosphorus', it is a Millian name the understanding of which requires associating it with certain minimal descriptive information. In the case of 'H₂O', the information required to understand it is that it is

widely presupposed (and known to be presupposed) by users of the name that it stands for some kind of chemical compound involving hydrogen and oxygen. (Nothing more detailed than that is required). Under these assumptions, (14b) *semantically* expresses the same trivially true proposition that (14c) does. But the pragmatically enhanced proposition that arises from it by requiring the first argument of identity to be identified via the term ‘water’ and the second to be identified via the term ‘H₂O’ is new and knowable only a posteriori. Those who believe this proposition, *understanding both* ‘water’ and ‘H₂O’, are typically able to infer that assertive uses of (14b) will assert *that the stuff, water, that comes in the form of a colorless, drinkable liquid that falls from the sky in rain is a chemical compound involving hydrogen and oxygen*. Since speaker-hearers standardly presuppose that they understand the expressions, this highly informative proposition will normally be communicated and even asserted by assertive utterances of (14b).

In this example, *understanding* the terms ‘water’ and ‘H₂O’ require having different collateral information about what they stand for, despite the fact that their representational contents are identical. A similar contrast can be drawn in cases in which (fully) understanding one term requires *recognitional ability* not required in order to understand a second term with the same representational content. A case in point is provided by the color term ‘red’ and what we may take to be a Millian general term ‘R’ designating the same surface spectral reflectance property that ‘red’ does.⁷ It is plausible to suppose that fully understanding ‘red’ (in the sense of satisfying what is widely presupposed in contexts in which it is used) requires the ability to visually identify objects that are instances of the

⁷ See Soames (2007b) for an analysis of ‘red’ along these lines.

color it designates, whereas no such recognitional ability is required to fully understand 'R'.⁸ If this is right, then sentences that differ only in the substitution of one of these terms for the other may be used to assert and/or convey different information despite semantically expressing the same proposition. Thus, if I tell you,

15a. The property *being red* just is the property *being R*

in a context in which it is presupposed that we both (fully) understand 'red' (and so can recognize by sight things to which it correctly applies), then I assert a linguistically enhanced proposition from which, together with background information in the context, you can conclude that various things you visually recognize as being red are also *R*, despite the fact that you would not be in the position to draw such conclusions had I uttered (15b) or (15c) instead.

15b. The property *being red* just is the property *being red*.

c. The property *being R* just is the property *being R*.

In cases in which we each know that we both visually recognize certain things to be red my utterance of (15a) will communicate, and in some cases even assert, that those things are also *R*.

Next consider the attitude ascription (16), referring to a monolingual Spanish speaker.

16. Juan has just learned that that water is H₂O.

Here, the falsehood semantically expressed by (16) is enriched by requiring one who entertains the object of 'learn' to identify one argument of *identity* via the term 'water' or *some translation of it*, while identifying the other via 'H₂O', or *some translation of it* -- T₂ being a translation of T₁ only if conditions for *understanding* them are (roughly) the same.

So understood, a use of (16) asserts that Juan has only recently come to believe a certain

⁸ Since the blind and the color blind aren't able to do this, they don't count as fully understanding 'red', though they often are able to use it perfectly well to designate its conventional representational content.

informative proposition that makes no claims about words or translations. When, as is standard, he is presupposed (i) to understand the relevant terms, and (ii) to take the descriptive information required by such understanding to genuinely apply to the designata of those terms (as, of course, the vast majority of speakers of his language do), the assertive utterance of (16) will result in the assertion and communication of a proposition that characterizes Juan as only recently coming to know that *that a certain stuff that comes in the form of a colorless, drinkable liquid and falls from the sky in rain is a chemical compound involving hydrogen and oxygen.*⁹ A similar point can be made about uses of (17).

17. Juan has just learned that for any object x whatsoever, it is red iff it is R.

Lessons for Frege's Puzzle and Beyond

Like the discussion of earlier examples, this result illustrates how cognitive propositions combined with Millian, and in particular linguistic, modes of presentation can be used to great advantage in defusing Frege-puzzle cases involving natural kind terms, attitude ascriptions, and even cases involving ascription of attitudes to agents who speak other languages. The same combination also gives a positive twist to the treatment of the classic example in John Perry (1977) of the amnesiac Rudolf Lingens, trapped in the Stanford library reading a fact-filled biography of Lingens that includes a description of his predicament. From his reading, he knows of Rudolph, i.e. *himself*, that he is named 'Rudolf', but doesn't know this *in the first-person way*, and so doesn't self-ascribe being so named. This changes when he remembers "who he is" and *truthfully* says, "*I have just realized my name is 'Rudolf'.*" The truth of his remark requires that the proposition to which he

⁹ (ii) is essentially the condition that that Juan is typical in believing that the *stereotypes* of 'water' and 'H₂O', in the sense of Putnam (1970), are accurate.

previously did not bear the *realizing* relation is one requiring him to be identified in the first-person way. This is easily handled by the account given in chapter 3.

Suppose, however, that Rudolf expresses his epiphany using (18a).

18a. I have just realized that I am Rudolf Lingens.

How can his assertion be true? Suppose the library has a mirror. Looking in it, the amnesiac says “I am he” demonstrating RL. In so doing, RL self-ascribes *being RL*, realizing in the first-person way that he is RL. Although this threatens the truth of (18a) on Lewis- or Perry-style analyses, the cognitive analysis of propositions has the resources to avoid the threat. Starting from the semantic content (18b), we first reorganize that content in a form (18c) suitable for representing self-ascription.

18b. Only just now has it been so that: *RL realizes that RL is RL*

c. Only just now has it been so that: $\lambda x [x \text{ realizes that } x = RL] RL$

Next we proceed with two pragmatic enrichments: one requiring the target of *realizing one is identical with RL* to be identified in first-person way, and one requiring the second argument of the identity relation to be identified via the name ‘Rudolf Lingens’.¹⁰ The larger lesson exhibited by this case is that since all *de se* cases, original or extended, are at bottom variants of Frege’s puzzle, they should be treated in similar fashion.

The final lesson to be learned about Frege-puzzle cases from the above discussion of meaning and understanding is that there are two different senses of ‘meaning’ which must be distinguished. The first sense of meaning is strictly Millian; it is the object or kind that a Millian term stands for. This is what the term contributes to what -- in the terminology of contemporary theories of language -- is called “the semantic content” of, or “proposition

¹⁰ Although (18c) serves the purposes of this example, a more complicated representation -- *Only just now has it been so that: $\lambda x [x \text{ realizes that } \lambda y (y = RL) RL] RL$* (with two first-person enrichments) -- is needed for some cases, including a variant of one discussed in chapter 3.

semantically expressed by”, sentences containing it. The second sense of ‘meaning’ is one in which the meaning of a term – or of a phrase or sentence containing it – is a set of conditions that must be satisfied in order for a speaker to be counted as *understanding* the expression. Sometimes satisfying these conditions requires knowing widely presupposed facts about the semantic content of the expression; sometimes it requires recognitional, verificatory, or inferential abilities concerning that content. The chief error of theories descending from Frege is that they conflate these two kinds of meaning (semantic content vs. that needed for understanding). The chief error of theories descending from Mill is that they have often ignored the second type of meaning. These errors must be corrected if we are to continue to make progress in the study of linguistic meaning and language use. Any adequate theory must recognize the different ways in which the two kinds of meaning contribute to what speakers assert and believe when they use sentences. I have tried, in this chapter, to illustrate how the cognitive conception of propositions fits into this larger picture.

