

Multiplying Senses

Jonathan Sutton

1 Introduction

My aim is to motivate and develop a view of what senses are. Senses, as I conceive of them, avoid a number of the problems that plague a broadly Fregean approach to the semantics of belief ascriptions, as I hope to show. The chief innovation of my view that enables these solutions is that beliefs are taken to have multiple, truth-conditionally equivalent contents. In traditional Fregean terminology, a belief does not involve a relation to a single thought, but to many thoughts, some of which are very fine-grained, and some of which are rather coarse-grained. Each thought is a structured entity ultimately composed of unstructured senses that themselves vary in their level of grain. It is no part of my attempted vindication of senses that senses are closely related to the *meanings* of words, phrases, and sentences; this feature of historical Fregeanism I disavow. I endorse rather the equally traditional claim that senses are concepts or, if truth-evaluable, the propositional contents of belief.

I will spend some time motivating my view by comparing it to a popular alternative view of the semantics of belief ascriptions: the hidden indexical view. In particular, I will outline how my view preserves the advantages of the hidden indexical view while retaining the natural idea that belief ascriptions are two-place relational statements. I will then answer perhaps the most crucial question for any Fregean account: what is a sense? This answer leads to an explanation of how a single belief¹ is a relation to *many* truth-evaluable senses (i. e.,

¹A single belief in the *psychological* sense; see p. 14 for what I mean by the psychological, as opposed to metaphysical, sense of ‘belief’.

thoughts). In the third and final section of the paper, I will explain how the proliferation of senses that I have endorsed solves a number of the problems that have been associated with Fregean views of belief ascription semantics. I do not, of course, aim to solve *all* the major problems that Fregeans face. I will have little to say about quantifying in, compositionality, and anaphoric reference. Although I think that the problems that the Fregean faces with these issues can be overcome, their solution has little to do with a detailed account of the nature of senses; such an account is helpful for the problems that I will address.

Although this paper can be conceived primarily as an argument for a Fregean view of belief ascriptions which makes crucial use of a theory of the nature of belief and belief content, it can also be seen as an argument for that theory of belief and belief content. Insofar as one finds a Fregean theory of belief ascription semantics desirable (should we manage to solve the kinds of problem that will be my concern at the end of the paper), it is a mark in favor of a theory of belief and belief content that it makes such a theory of belief ascription semantics possible.

2 A Motivation by Comparison

My first goal in this section is to answer the following questions: What is the hidden indexical theory of belief ascription semantics, what problems does it solve, how does it solve them, and why does it posit a rather *recherché* logical form for belief ascriptions? I will then argue that, if we are willing to proliferate senses in the manner indicated above and explained in detail in the next section of the paper, we can solve the problems that the hidden indexical theory solves in the same manner that the hidden indexicalist does while retaining a more natural logical form for belief ascriptions.

In recent times, it has been commonly claimed that propositional attitude ascriptions have context-sensitive truth-conditions: distinct tokens of the same attitude ascription sentence differ in their truth-conditions. Mark Richard attempts to draw out our semantic intuitions in support of this claim in the following passage:

Consider Mutt and Jeff, who agree on what sentences Odile accepts. They agree about her dispositions to behavior. They agree on just about everything that seems relevant to the question Does Odile believe that Twain is dead?

They don't agree on the answer. When Mutt was asked, it was because someone wanted to know whether Odile would list Twain under dead Americans. Mutt knew she accepted 'Twain is dead' and thus said yes. Jeff was asked by someone who couldn't understand why Odile, who is pointing to Twain's picture, wants to meet him. Doesn't she realize that Twain is dead? Jeff knew she rejected 'He's dead'. He answered that, no, Odile didn't believe that Twain was dead. (Richard, 1990, p. 106)

The truth-conditions (and truth-value) of 'Odile believes that Twain is dead' are different in Jeff's context from what they are in Mutt's context.

I do not take our semantic intuitions to be the basis of the strongest argument for the context-sensitivity of the truth-conditions of attitude ascriptions. Rather, I take the strongest argument for the claim to be that theories allowing for context-sensitivity can solve puzzles such as Kripke's puzzle about belief (Kripke, 1979) and Richard's phone booth case (Richard, 1988), and theories that do not allow for context-sensitivity seem incapable of doing so. I will now briefly explain how Kripke's puzzle about belief motivates the claim that attitude ascriptions have context-sensitive truth-conditions. Much better explanations are found in Richard (1990) and Crimmins & Perry (1989).

Kripke presents us with a thinker, Peter, who believes that there are two individuals named 'Paderewski', one of whom is a pianist, the other a politician; there is only one man who has both characteristics. He further believes that the man named 'Paderewski' who is a pianist is no politician, and that the man named 'Paderewski' who is a politician is no pianist. We seem to want to endorse both the claim:

- (1) Peter believes that Paderewski is a pianist.

And the claim:

(2) Peter believes that Paderewski is not a pianist.

We do not, however, wish to say that Peter has contradictory beliefs—his problems derive from ignorance, not from irrationality. That is, we are reluctant to say that:

(3) Peter believes that Paderewski is and is not a pianist.

Furthermore, we seem to have some inclination to assert that:

(4) Peter does not believe that Paderewski is a pianist.

And now we appear to be contradicting our own endorsement of the claim that Peter does believe that Paderewski is a pianist.

If attitude ascriptions have context-sensitive truth-conditions, *all* of the claims ((1), (2), and (4)) that we want to endorse can be true without it being the case that Peter has contradictory beliefs (that is, that (3) is true). In different contexts, the term ‘Paderewski’ used inside an ascription’s that-clause somehow makes a different contribution to the truth-conditions of the ascription. In some contexts, ‘Paderewski’ has *something* to do with Peter’s Paderewski-the-pianist way of thinking of Paderewski (whatever that means); in those contexts, (1) is true and (2)–(4) are false. In other contexts, ‘Paderewski’ has something to do with Peter’s Paderewski-the-politician way of thinking of Paderewski; in those contexts, (1) is false, and (2) and (4) are true. All of the claims that we want to endorse are true in some context, although there is no context in which they are all true; hence, we do not contradict ourselves. Moreover, in *no* context is (3) true since there is no single way of thinking of Paderewski contributing to both a belief of Peter’s that its subject is a pianist and a belief of Peter’s that its subject is not a pianist; Peter’s beliefs are not contradictory.

Hidden-indexical theorists explain the different contributions that ‘Paderewski’ makes to the truth-conditions of different tokens of the same sentence as follows. Attitude ascriptions

contain a silent (that is, not phonetically realized) predicate satisfied by modes of presentation which is responsible for the context-sensitivity of the ascription.² The simplest form of the theory is found in Schiffer (1979). The logical form of a belief ascription is something like $(\exists m)(P(m) \ \& \ B(S, p, m))$ where ‘ P ’ is a predicate that specifies a *type* of mode of presentation of the Millian proposition p expressed by the sentence forming the ascription’s that-clause, ‘ m ’ is a variable ranging over modes of presentation, and B is the belief relation. Modes of presentation are taken to be particular mental representations by many hidden indexicalists (e.g., Crimmins and Fodor), something like sentences in a language of thought.³ Generally, the contribution that a word or phrase within a that-clause makes to determining the type of mode of presentation P of p is determined by pragmatic rather than semantic factors. It varies between utterances of the same attitude ascription sentence—for example, between Mutt’s context and Jeff’s context—as does the hidden indexical predicate (here, ‘ P ’) itself. Something similar applies to the sentences (1)-(4) above in the Paderewski puzzle. The hidden indexical predicate and the mode of presentation type associated therewith differs between an utterance of (1) and utterances of (2) and (1)’s apparent contradictory, (4). There is a mode of presentation of one type that figures in a belief of Peter’s whose Millian content is that Paderewski is a pianist; there is a mode of presentation of a quite different type that figures in a belief of Peter’s whose Millian content is that Paderewski is *not* a pianist. More sophisticated versions of the theory (for example, Crimmins (1992)) take account of the fact that propositions and their modes of presentation are *structured*, and that individual words and phrases in an ascription’s that-clause correspond to modes of presentation that are constituents of the mode of presentation of the whole proposition expressed by the that-clause. (Although there are ample reasons for thinking that propositions and modes of presentation are so structured, it is far less clear that a belief ascription

²Such theories are offered by Crimmins & Perry (1989); Schiffer (1979); Richard (1990); Crimmins (1992); Fodor (1990).

³Or mentalese words and phrases on views that posit more articulation within the logical form of belief ascriptions—see below.

should be taken to explicitly entail that beliefs have such a structure—that the logical form of a belief ascription articulates the structure that a belief that would make it true would have.)

Types of modes of presentation, then, do the work in solving Kripke's puzzle about belief and in accounting for our intuitions concerning the context-sensitivity of belief ascription truth-conditions, together with the claim that pragmatic factors determine the type of mode of presentation that figures in the truth-conditions of a given utterance of a belief ascription sentence.

The hidden indexicalist departs, however, from the natural view that belief ascriptions express two-place relations between a thinker and a thought, proposition, or content in his account of the logical form of belief ascriptions. For the hidden indexicalist, belief is at root a *three*-place relation between a thinker, a Millian proposition, and a very fine-grained mode of presentation of that proposition; moreover, belief ascriptions are existentially quantified conjunctions, the first conjunct being hidden along with its constituent hidden indexical predicate, and the quantification being over the fine-grained modes of presentation that are one of the relata of the belief relation. Of course, there are numerous variations of the hidden indexical theory, and some do not contain all of these features—all, however, feature fairly radical departures from the apparent structure of belief ascriptions, a structure that a traditional Fregean theory preserves.

A simpler account of belief ascriptions is available which preserves both the logical form that the Fregean ascribes to them but which also accords types of modes of presentation and their pragmatic determination a central role. We can simply suppose that a belief ascription is made true by a two-place relation between a thinker and a more or less structured entity composed of *types* of modes of presentation. Which entity a thinker is said to be related to when one utters a given belief ascription sentence is determined by the same pragmatic factors that the hidden indexicalist appeals to. Whenever the hidden indexicalist claims that there is a hidden indexical predicate contributed pragmatically in the logical form of a

belief ascription sentence, the simpler theory claims that the type of mode of presentation associated with that predicate is or is a part of the relatum that the believer is said to be related to by the ascriber. If we take Schiffer's simple hidden indexical theory as our point of comparison, the even simpler two-place theory claims that a belief ascriptions states a two-place relation between a thinker and a type of mode of presentation of an entire Millian proposition. Modes of presentation determine the Millian proposition that they are modes of presentation of, and the types of modes of presentation specified by the hidden indexical predicate all specify modes that present the same Millian proposition, so we can drop the Millian proposition as a relatum of the relation that makes a belief ascription true without worry that we have specified the content of a belief to a lesser degree than the hidden indexical account does. If we consider instead a more complex hidden indexical theory that involves distinct modes of presentation of individual elements of Millian propositions (objects, properties, etc.), and distinct hidden indexical predicates that are satisfied by those modes of presentation, the two-place theory says that a belief ascription states a relation between a thinker and a structured entity whose elements are the types of modes of presentation expressed by those hidden indexical predicates.

Since it is types of modes of presentation and their pragmatic determination that make available solutions to Kripke's puzzle and its relatives and explain our intuitions of belief ascription context-sensitivity, the solutions and explanations that the hidden indexicalist employs appear to be available to the two-place theorist. The convoluted logical form does not play an explanatory role thus far. Why, then, does the hidden indexicalist adhere to the more convoluted account of the logical form of belief ascriptions?

I think that there are two reasons, one good and one not so good. Let us consider the not so good reason first. According to the hidden indexicalist, the sentence 'Peter believes that Paderewski is a pianist' is made true by what is at root a three-place relation, one of whose relata is the Millian proposition that Paderewski is a pianist. That Millian proposition contains Paderewski himself as one of its constituents. In an unembedded utterance

of the sentence ‘Paderewski is a pianist’, the name ‘Paderewski’ refers to Paderewski himself. It might be suggested that the name ‘Paderewski’ also refers to Paderewski in ‘Peter believes that Paderewski is a pianist’ on the hidden indexical view, although it is likely to play a further role in the pragmatic determination of the hidden indexical predicate, since Paderewski is a constituent of the Millian proposition that is one of the relata of the belief relation. In other words, the hidden indexical theory preserves a lot of the semantic innocence of a straightforward Millian account, according to which a belief ascription is a two-place relational statement, expressing a relation between a believer and a Millian proposition.⁴ A Fregean view notoriously fails to preserve semantic innocence. On the quasi-Fregean account that we are currently considering, the term ‘Paderewski’, it might be suggested, refers to a type of mode of presentation of Paderewski and not Paderewski himself; on a more orthodox Fregean view, it refers to a sense or, so to speak, *token* mode of presentation of Paderewski. The hidden indexicalist’s convoluted logical form is required to preserve semantic innocence.

This is not a good reason for preferring the hidden indexical theory to the two-place theory, however. Neither the hidden indexical theory nor a straightforward Millian theory preserve semantic innocence. ‘Paderewski’ does not refer to Paderewski in the belief ascription on either account for the simple reason that it does not refer to anything at all. On the straightforward Millian theory, there are precisely two entities referred to in ‘Peter believes that Paderewski is a pianist’, Peter and the Millian proposition that he believes. It is clear that Paderewski is not among the entities referred to by the belief ascription on the hidden indexical theory, either. On *both* views, ‘Paderewski’ merely contributes its reference to determining the reference of the belief ascription’s that-clause. We might even say, along with James Higginbotham, that ‘Paderewski’ refers to Paderewski relative to the that-clause and its constituent sentence, but not relative to the sentence as a whole (Higginbotham, 1986).

⁴Salmon’s Millian account is not straightforward (Salmon, 1986). He takes belief ascriptions to quantify unrestrictedly over guises (his stand in for modes of presentation) of Millian propositions, conjoining a more or less Fregean view of belief with a more or less Millian view of belief ascription semantics. This enables him to deny (3) in our exposition of Kripke’s puzzle since Peter does not believe the contradictory proposition in any guise.

Very few theories of belief ascription semantics are semantically innocent—on very few such theories does ‘Paderewski’ make the same semantic contribution to the truth-conditions of a belief ascription as it does to the truth-conditions of an unembedded sentence. Exceptions include a theory of belief ascriptions based on Davidson’s paratactic account of indirect speech according to which Paderewski actually occurs unembedded in ‘Peter believes that Paderewski is a pianist’ since the belief ascription is in fact two sentences contrary to appearances (Davidson, 1968), and Recanati’s theory that takes ‘Peter believes that’ to be an operator (Recanati, 2000). Recanati, indeed, makes very similar points about semantic innocence to those made above, and they motivate his abandonment of the view that attitude ascriptions are relational statements. Of course, it is in Davidson’s work on indirect speech that the term ‘semantic innocence’ was coined.

It has certainly been much abused since—philosophers of language have used the term to denote many completely different characteristics of a semantic theory.⁵ I am using it in what I take to be Davidson’s original (and the most theoretically important) sense, as does Recanati. However, it might be claimed that Millian and hidden indexical theories are semantically innocent in another sense, and in a way that Fregean theories both of the traditional kind and of the kind that we are currently considering are not. Unembedded, ‘Paderewski is a pianist’ expresses the Millian proposition that Paderewski is a pianist, which includes Paderewski as a constituent. Embedded in a belief ascription, the sentence expresses the very same proposition according to the Millian and the hidden indexicalist.

This objection to a Fregean theory begs the question. A Fregean takes it that an unembedded sentence expresses a *Fregean*, not a Millian proposition. Similarly, a theorist who claimed that belief ascriptions express relations to types of modes of presentation, structured or unstructured, might also claim that unembedded occurrences of the sentences forming belief ascription complement clauses also express types of modes of presentation, structured or unstructured. Such theories are, or can be, semantically innocent if what is meant by the

⁵One of the most eccentric definitions is that a theory is semantically innocent if it does not posit reference to metaphysically exotic entities (Larson & Segal, 1995).

phrase is that a sentence expresses the same proposition embedded or no—this is consistent with the claim that only in the embedded case is that proposition *referred* to, a claim that, as we have seen, the Millian and the hidden indexicalist endorse along with the Fregean.

So much for the bad reason for embracing the hidden indexicalist’s convoluted logical form. What is the good reason that I mentioned above?

As noted, for the hidden indexicalist, a belief ascription is made true by what is fundamentally a relation between a thinker and fine-grained modes of presentation (I will suppress reference to the third relatum, the Millian proposition, since the considerations of the preceding paragraphs suggest that it is not as much of an advantage of the view as might be thought). It is that relation that is *the* belief relation, we might say. Now, it might be said, this is also true for the two-place theory that we are considering. The relation to types of modes of presentation that a belief ascription is supposed to express is not really *belief*. The believer’s relation to types holds in virtue of his relation to fine-grained token modes of presentation that are of those types, and it is that relation that is *the* belief relation. The hidden indexicalist’s account of logical form is metaphysically honest in a way that its rival is not.

The allegedly disingenuous rival theorist might very well protest that relational sentences are almost always made true by relations that hold in virtue of more metaphysically fundamental relations that are not expressed by any sentence constituent. ‘Recanati wrote *Oratio Obliqua, Oratio Recta*’ is *ultimately* made true (at least partially) by very complicated microphysical relations. Nevertheless, ‘wrote’ expresses the writing relation and not those microphysical relations. To which the hidden indexicalist should, perhaps, respond that we might at least expect ‘believes’ in ‘Peter believes that Paderewski is a pianist’ to express the belief relation and not some relation that holds in virtue of the belief relation, which is itself expressed by no constituent of the sentence.

I am not sure how much weight we should accord metaphysical honesty in judging rival theories of belief ascription semantics. The question need not be decided here, since there is

a theory with all the advantages of the theory that claims that belief ascriptions express two-place relations between a thinker and types of modes of presentation that is as metaphysically honest as the hidden indexical theory, and which inherits, just as the earlier rival did, the hidden indexicalist's solutions to the puzzles about belief and his explanation of our intuitions of context sensitivity. That theory takes what the hidden indexicalist and the earlier rival regard as types of modes of presentation to be modes of presentation of the first order, so to speak—items that believers are directly related to in their belief, *relata* of *the* belief relation. It achieves this synthesis by an innovation regarding the metaphysics of belief.

Beliefs are taken to be relations to multiple contents—thoughts, in Fregean terminology—rather than the traditional unique contents, and those multiple contents are themselves composed of subpropositional constituents or senses, just as Fregeans traditionally claim. The hidden indexicalist is right to insist that belief is a relation to fine-grained modes of presentation, but it is *also* a relation to coarse-grained modes of presentation. The coarser-grained senses are no less constituents of what is believed than the finer-grained senses—they are, as we shall see, types of *something* (namely, mental representations), but they are full-fledged modes of presentation and not types thereof.

I shall explain the view in some detail in the following section of the paper. I have *argued* for the view using considerations about psychological explanation elsewhere (Sutton, 2001); the only argument I offer here is that the metaphysical view enables us to adopt a view of the semantics of belief ascriptions that has the advantages of both a traditional Fregean theory and its hidden indexical rivals. It further enables us to solve a number of problems that a traditional Fregean theory and the associated notion of sense face, as we shall see in the final section of the paper.

3 The Metaphysics

In a nutshell, I propose that we abandon the view that *belief* is fundamentally a relation to a single fine-grained mode of presentation—the view that beliefs have unique, fine-grained

contents. In its place, I suggest that token beliefs have *multiple* truth-conditionally equivalent contents, each located on a continuum between very fine-grained modes of presentation such as concerned the hidden indexicalist and very coarse-grained contents such as, at the limit, Millian propositions. Belief reports are made true by a traditional *two*-place relation between a believer and a content; which content that is, and, in particular, how fine-grained it is is a context-sensitive matter. ‘That *p*’ in ‘*S* believes that *p*’ picks out differently “grained” contents in the different contexts in which that sentence can be used—which of those contents is referred to on a given occasion is determined by the same pragmatic factors that, according to the hidden indexicalist, determine the hidden indexical predicate (or predicates on a more sophisticated hidden indexical theory). (Indeed, some contents contain both relatively coarse-grained and relatively fine-grained constituent senses—in saying that Peter believes that Paderewski is a pianist, ‘Paderewski’ will generally contribute a more specific sense to the thought we refer to than does ‘pianist’.) What the hidden indexicalist regards as a *type* of content specified by the hidden indexical predicate I regard as a content simpliciter.

What are these truth-conditionally equivalent multiple contents of belief? Firstly, I take the objects of belief to be mental representations rather than merely abstract entities; I will not argue for this claim here, although the reader will no doubt be familiar with a number of such arguments (I contribute one myself in Sutton (2004)). A token belief (or other propositional attitude) is a relation to a token mental representation or symbol; contents themselves are mental representation *types*.

Once again, reflection on the benefits and problems of the hidden indexical theory shows this view of contents to be a natural one. The three-place relation that our paradigm hidden indexicalist takes belief to be relates a believer, a particular token mental representation occurring in a particular belief restricted to a particular believer’s mind (Crimmins & Perry (1989) are very explicit on this point), and a Millian proposition. These relata are not what is central in explaining believers’ behavior and reasoning, however. Millian propositions are widely supposed to be too coarse-grained for a lot of content-based explanation. We want

to explain why those who believe that Hesperus appears in the evening and do not believe that Hesperus appears in the morning but do believe that Phosphorus does so and those who believe that Hesperus appears in the evening and that Hesperus appears in the morning behave and reason differently. On the other hand, we do want to explain the characteristic similarities that those who believe that Hesperus appears in the evening but does not believe that Hesperus appears in the morning display (or are disposed to display) in their behavior and reasoning. The token mental representations to which believers are related in belief are too fine-grained to accomplish this task, since they differ for each individual who believes that Hesperus appears in the evening but does not believe that Hesperus appears in the morning.

What is central in such psychological explanations is the *type* of mental representation that our believers employ in thinking of Hesperus—there is a type of mental representation that our similar believers employ and which those who believe that Hesperus appears in the morning do not employ, a type of mental representation that is associated with ascribing to Hesperus the property of appearing in the evening but not with ascribing to it the property of appearing in the morning. On the hidden indexical view, it is precisely such types of mental representation that we specify via the hidden indexical predicate in belief ascriptions, and, of course, we accomplish psychological explanation in many cases by uses of belief ascriptions. In the spirit of our earlier discussion of metaphysical honesty, however, we surely want content-based explanation to make use of *contents*. Our account of contents should have as a consequence that many of our content-based explanations specify contents. If an entity (such as a token mental representation) is rarely or never specified in psychological explanation, why regard it as a content—in particular, a sense or mode of presentation—at all? And if an entity (such as a Millian proposition) is only sometimes specified in psychological explanation, we should be looking for other entities that are also contents—senses or modes of presentation—that are specified in the remainder of psychological explanations. Those

entities are, it is natural to suppose, the mental representation types that have concerned the hidden indexicalist all along.

(If one is inclined to respond that *some* psychological explanations specify contents and others specify only types of content, one should be prepared to find that distinction in looking at concrete examples of psychological explanation. I find no such distinction myself.)

Which types? In the first instance, *semantically individuated* mental representation types. For example, in believing that Paderewski is a pianist, Peter is in a particular belief state that is a relation to a particular token of a formally individuated mental representation *F*. (His relation to that formally individuated mental representation token and the formal type of which it is a token are not, then, themselves beliefs since they are not relations to semantically individuated entities. It is quite natural, however, to talk of ‘a belief’ as the thinker’s relation to the formal token and his relations to *all* the thoughts that he believes in virtue of being related to that token together, although, in another manner of speaking, these “beliefs” are collections of *many* beliefs (many relations to distinct thoughts) and one non-belief. I so talk throughout this paper, utilizing what we might label the “psychological” (as opposed to “metaphysical”) notion of belief.) *F* is a token of a certain formal type, but it is also a token of many semantic types. Many of those semantic types are contents on my view. For example, *F* contains a subsymbol referring to Paderewski, and a subsymbol that expresses the property being a pianist, and those subsymbols are structurally related in a distinctive way. I have just specified a semantic type that *F* instantiates, and I claim that that type is one of the many contents of Peter’s belief state—indeed, it is equivalent to the coarse-grained Millian proposition that Paderewski is a pianist. The semantically individuated mental representation types that subsymbols instantiate are senses, simpliciter. The structured, semantically individuated mental representation types that are truth-evaluable are thoughts, in the Fregean sense of that term.

The subsymbol that refers to Paderewski is also tokened in another belief state of Peter’s as part of a “mental sentence” that also contains a subsymbol that expresses the property of

being a man, let us suppose. I have just specified another semantic type that F falls under—it contains a subsymbol with certain referential properties that also occurs in a distinct mental sentence with certain truth-conditional properties. Indeed, I have specified two semantic types that the Paderewski subsymbol instantiates—one of those is the Millian “concept” Paderewski, and the other is the concept that you have if you think of Paderewski as a man, a concept that is finer-grained than its Millian counterpart. In believing that Paderewski is a pianist, Peter is in a single belief state that has at least two contents. One of those contents contains the coarse-grained Millian concept Paderewski (call it PADEREWSKI), and the other contains the finer-grained concept that requires its possessor to think of Paderewski as a man (call it PADEREWSKI*)—that has a certain conceptual role, we might say. Much finer-grained conceptual roles will individuate much finer-grained concepts that other contents of Peter’s belief also have as constituents. For example, suppose that Peter believes that Paderewski studied at the Warsaw Conservatory. That belief enters into a conceptual role that defines an even finer-grained concept (call it PADEREWSKI**) that enters into a third content that Peter’s belief has. ‘That p ’ as it occurs in a belief ascription on occasion might refer to a maximally coarse-grained entity—a Millian proposition. However, it need not do so; on other occasions, the very same complement clause will denote a finer-grained entity.

The multiple contents that I am claiming propositional attitudes have vary along the dimension of *fineness of grain*; they do not vary in their truth-conditions. One cannot believe the thought PADEREWSKI** IS A PIANIST unless one ascribes to Paderewski the property of having studied at the Warsaw Conservatory. Nevertheless, even if Paderewski had not studied there but trained to be a pianist elsewhere, the thought PADEREWSKI** IS A PIANIST would still have been true although believing it would require the believer to also have the false belief that Paderewski studied in Warsaw. The contents that Peter’s belief has include PADEREWSKI IS A PIANIST, PADEREWSKI* IS A PIANIST, and PADEREWSKI** IS A PIANIST. All these contents are true just in case Paderewski is a pianist. Similarly, the more or less finely individuated senses (e.g., PADEREWSKI*) that are constituents of those

more or less finely individuated thoughts share their extensions (e.g., Paderewski himself) with corresponding constituents in other thoughts (e.g., PADEREWSKI**) that a given belief is a relation to. It is traditional for Fregean theories to claim that senses are, in a way, truth-conditionally irrelevant (the thought that Hesperus appears in the evening is true just in case the thought that Phosphorus appears in the evening is true on Frege's view), and the foregoing is what truth-conditional irrelevance amounts to on my multiple senses account.

I have said that *many* of the semantically individuated mental representation types under which token mental representations fall are senses or thoughts. Just which ones? I suggest that the semantic symbol types that are senses and thoughts are those that have some robust explanatory role in theorizing about the mind, and that we should understand that explanatory role in quite broad terms—if a semantic symbol type is explanatorily useful in philosophy or in folk or scientific psychological explanation, for example, then it picks out a thought or sense.

(This view should not be understood as a form of *interpretivism*—the existence of a concept or thought is not *constituted* by the existence of an explanatory practice that accords that concept or thought a central role. Rather, the existence of the explanatory practice indicates that a semantic symbol type has a robust causal role, and it is *that* role that underwrites the existence of the concept or thought. An analogous view is the so-called empirical conception of properties. That view does not take there to be a property corresponding to every predicate in natural language, but rather takes there to be properties corresponding only to those predicates that have a central role in some causal-explanatory practice. The existence of a property does not *depend* upon there being a corresponding predicate that plays a central role in some explanatory practice. Rather, our explanatory practices are assumed to indicate reliably what the causal machinery of the world is like. I suggest that we should apply the empirical conception of properties to the explanatory practices of intentional psychology in all its forms (philosophical, folk-psychological, and scientific). Indeed, if one assumes the empirical conception of properties, then the moderate position can be stated succinctly:

concepts and thoughts are those semantically individuated psychological symbol types that correspond to genuine *properties*.)

One might worry that my account of senses is circular; most thoughts are finer grained than Millian propositions on my view because of the *other* thoughts with which their constituent senses are associated in other beliefs that a thinker has. I appear to be using thoughts and senses in my account of the nature of thoughts and senses—in my account of what individuates thoughts and senses. In fact, the circularity is merely apparent, for thoughts and senses are constructed from an entirely Millian base.

There is something we can call a thinker's *Millian doxastic base*, a set of thoughts from which all the thoughts that he believes are constructed. The Millian doxastic base consists of all the thoughts that the thinker believes individuated in a coarse-grained Millian fashion. The finer-grained thoughts that he also believes—and believes in virtue of relations to the same token mental representations that ground his Millian doxastic base—are individuated by their being grounded in relations to the same mental representations that occur in other *coarse-grained* thoughts in the Millian doxastic base. One of Peter's fine-grained thoughts that Paderewski is a pianist has a constituent sense that involves thinking of Paderewski as having studied at the Warsaw Conservatory, and *that* way of individuating the sense is to be understood in a coarse-grained, Millian fashion. It involves ascribing a property—having studied at the Warsaw Conservatory—to an object—Paderewski. What I called “conceptual roles” above are just collections of properties (and relations) attributed to the referent of the concept that they are conceptual roles for; they have impeccable Millian credentials.⁶ I hasten to add that these conceptual roles *do not* in general determine the reference of the associated concept; sense does not, in general, determine reference on my view for Kripkean reasons beyond there being a many-one mapping from sense to reference. Indeed, I allow that

⁶Actually, we will have to admit at least one component of some conceptual roles that cannot be individuated in a purely Millian fashion to account for distinctions between indexical thoughts and some of their truth-conditionally equivalent nonindexical counterparts. The difference between at least some indexical modes of presentation and referentially equivalent nonindexical senses cannot be explained entirely referentially for familiar reasons.

false beliefs can individuate a sense. One can have a mode of presentation of Paderewski that involves thinking of him as a violinist or a welder.

Consequently, what individuates a sense on my view has four components. Firstly, the independently determined reference associated with the sense (the causal relations between token mental representations and the world undoubtedly play a large role in reference determination in many cases as post-Kripkean orthodoxy would claim) (if there is such a reference; I will not explore empty senses here). Secondly, the *structure* of the sense—we distinguish the concept/sense WATER from the concept/sense H₂O. Thirdly, the conceptual role as understood above—this component is vacuous for a maximally coarse-grained sense or Millian “concept.”

The fourth component is what enables us to avoid the problems that afflict a purely Millian account of belief content despite our construction of thoughts and senses from a Millian base. It is identity or distinctness of formally individuated mental representation type (the *particular* formal type involved does not individuate a sense—that threatens to confine particular senses to particular (i.e., unique) minds). Peter does not have a mode of presentation of Paderewski that involves thinking of him as both a pianist and not a pianist. Lois Lane does not have a mode of presentation of Superman that involves thinking of him as both a superhero and a journalist. The ancient astronomers did not have a mode of presentation of Venus that involved thinking of it as both appearing in the morning and the evening. Peter does not have two beliefs involving relations to token mental representations that are of the same formal type one of which ascribes the property of being a pianist to Paderewski, the other of which ascribes the property of not being a pianist to Paderewski.

4 The Solutions

I will consider three problems for a Fregean account of belief ascriptions to which my multiple content approach to belief provides a solution. These are the “whose sense?” problem, the iterated ascription problem, and the quantified ascription problem.

4.1 Whose Sense?

I will illustrate the problems and their solutions by continuing to use ascriptions concerning Peter's beliefs about Paderewski for consistency's sake although Peter's confusions about Paderewski will not play much of a role.

Suppose I say 'Peter believes that Paderewski is a pianist', and thereby ascribe to him a belief about (as Peter would put it) Paderewski the pianist rather than Paderewski the statesman. On a Fregean approach, I thereby refer to a thought true if and only if Paderewski is a pianist containing a constituent sense that refers to Paderewski. Whose sense and whose thought? Mine or Peter's? There appear to be problems with supposing that it is *my* sense that I refer to. (For convenience, I will talk loosely as so many do in saying that I *refer* to the constituent sense of the thoughts that I genuinely refer to in ascribing beliefs. As explained earlier, this is not strictly speaking the case. The term 'Paderewski' helps determine in a pragmatic fashion which thought I refer to, but that term itself does not refer in the ascription.) I do not think of Paderewski in the way that Peter does; in particular, there is no mode of presentation of Paderewski that figures in my beliefs which presents him as being a pianist and as being no statesman. On my view, there are *many* senses that refer to Paderewski that I do share with Peter. There is the Millian sense individuated by reference, structure, and identity of formally individuated mental representation alone. There are also a number of finer-grained senses such as one that further involves thinking of Paderewski as a pianist, and perhaps (depending upon Peter's beliefs) an even finer-grained sense that involves thinking of him as a pianist who studied at the Warsaw Conservatory. But there is no fine-grained sense that figures in my beliefs which involves thinking of Paderewski as a non-statesman. Peter does have such a sense, and one way to combine the hidden indexical solution to Kripke's puzzle with my simpler account of logical form is to say that it is that sense that I refer to in my belief ascription. It is a different sense of Peter's that I refer to when I say 'Peter believes that Paderewski is not a pianist', a sense which involves thinking of Paderewski as a statesman and a non-pianist.

There is no problem with taking this line since it is quite clear that I can grasp these modes of presentation that figure in Peter's beliefs but not my own—there are likely to be many fine-grained senses figuring in Peter's beliefs about Paderewski that I do not grasp since he probably has many beliefs about Paderewski that I am unaware of (that is, even as far as their truth-conditions are concerned—which properties he thinks Paderewski has and which relations he enters into), but we do not need to suppose that I do grasp them to explain any belief ascriptions that I make. On my multiple senses approach, to grasp a sense is not necessarily to employ it in a thought of one's own—a virtue, since surely there are many concepts that others employ which we understand but do not employ since, for example, we believe them to be empty. Moreover, I grasp them not simply by being able to refer to them, but by being able to individuate them, by being able to denote them using descriptions of all and only their essential properties. Indeed, I take it that belief ascriptions involve something like second-order senses. I refer to one of Peter's thoughts concerning Paderewski by thinking of it as a thought with such-and-such truth-conditions that involves constituent senses with such-and-such references that further have such-and-such conceptual roles individuated in an ultimately Millian manner. (We do not need senses higher than the second order, as we will see below, and so these second-order senses will not be truth-conditionally relevant in ordinary speech.)

Alternatively, we need not suppose that I refer to senses that Peter employs and that I do not when I say that he believes that Paderewski is a pianist and that he believes that Paderewski is not a pianist. For *any* belief of mine concerning Paderewski is a relation to at least two thoughts, one involving a mode of presentation of Paderewski that involves thinking of him as a pianist but not thinking of him as a statesman (but *not* as a non-statesman, unlike one of Peter's employed senses), the other involving a mode of presentation of Paderewski that involves thinking of him as a statesman and not as a pianist (but not as a non-pianist). That is, there are two fairly coarse-grained senses, neither of which is individuated by the ascription of both pianist-involving and statesman-involving properties to Paderewski, and

both of those senses are parts of some of the contents of all my beliefs about Paderewski. Peter employs those senses just as I do, although they do not figure in all his beliefs about Paderewski as they do in all mine. Rather, he employs the sense that is silent on its referent's statesmanship when he believes that Paderewski is a pianist, and he employs the sense that is silent on its referent's pianism when he believes that Paderewski is not a pianist (and it is perhaps that sense that I refer to in saying that he does not believe that Paderewski is a pianist, although the Millian sense is also a candidate). He employs no sense in a thought that ascribes to Paderewski the contradictory properties of both being and not being a pianist, not even a maximally coarse-grained sense since there is not a single formally individuated mental representation type involved in any mental sentence to which Peter is appropriately related that has those contradictory truth-conditions.

We can solve Kripke's puzzle without supposing that I ever refer to senses that I do not myself employ in my own beliefs, then. It is perhaps best to suppose that this solution to Kripke's puzzle is correct, since it forestalls a looming indeterminacy problem. If there are *many* senses and thoughts that a believer is related to in holding a given belief that I can grasp (quite apart from the ones that I cannot or at least do not grasp), exactly which one do I refer to when I ascribe to him that belief? Which of Peter's thoughts do I refer to when I say that he believes that Paderewski is a pianist? If we suppose that a speaker refers to senses that he himself employs when possible, we narrow the range of candidates considerably. I do not think that we can give a general answer to the "which sense" question since it will depend on the speaker's purposes in ascribing a belief, his audience, and so on—as is characteristic of heavily pragmatic phenomena. Indeed, supposing that there is some indeterminacy in what an utterance of a belief ascription says is not obviously unacceptable. Sometimes, it will not be possible for the speaker to refer to a sense that he himself employs. We have already noted that this will be the case if a speaker ascribes belief involving an empty concept that he knows or believes to be empty. There will be many other cases, too; suppose that a believer takes there to be two people named 'Paderewski', one a violinist and

the other a mayor, but that his concepts still both refer to Paderewski. For some purposes (e.g., psychological explanation), a speaker will want to distinguish the believer's Paderewski-the-violinist beliefs from his Paderewski-the-mayor beliefs, and he will do so by referring to senses individuated by those very properties that the speaker knows the believer incorrectly ascribes to Paderewski.

4.2 Iterated and Quantified Ascriptions

Many have argued that a Fregean view of belief ascriptions is committed to a potentially infinite hierarchy of senses. Consider an iterated belief ascription such as 'Paul believes that Peter believes that Paderewski is a pianist'. The idea is that the ascription must, on Frege's view, be true in virtue of a second-order mode of presentation of a first-order mode of presentation of Paderewski himself, which second-order mode of presentation is itself referred to via a third-order mode of presentation. Third-order belief ascriptions will introduce fourth-order senses, and so on. The arguments are somewhat complex, and it is not entirely clear that even Frege is committed to the hierarchy of senses; since the view that I am proposing does not take senses to be meanings, and does not take sense to determine reference, there does not appear to be a straightforward case for my having committed myself to a hierarchy of senses. I do, however, need to say something about just how iterated ascriptions (and, for that matter, the associated higher-order beliefs) work; independently of the infinite hierarchy arguments, one wants to know just whose sense 'Paderewski', for example, refers to in the second-order ascription—Peter's, Paul's, the speaker's?

In principle, just as one's first-order beliefs have multiple contents on my view, so do one's higher-order beliefs. There is not just a single thought that Paul thinks concerning a *particular* thought that Peter thinks, but many such thoughts, all grounded in a single token mental sentence, and all truth-conditionally equivalent. This seems to threaten an infinite hierarchy problem; which of Paul's modes of presentation of Peter's thought do I refer to in making the second-order ascription? Which of my modes of presentation of Paul's second-

order thought do you refer to in ascribing the associated third-order belief to me? (Paul is further likely to believe that Peter believes many truth-conditionally equivalent but distinct thoughts on my view, but that does not present the same problem.)

However, we should remember that just which semantically individuated mental representation types are thoughts or senses is associated with, broadly speaking, their theoretical utility—we should expect this to diminish rapidly as we consider successive ranks of higher-order thoughts. Indeed, the potential hierarchy might very well come close to collapse at the second order. I suggest that Paul has but a single mode of presentation of a particular thought of Peter’s, a mode of presentation individuated simply by the structural and referential properties it ascribes to the thought that it is a mode of presentation of. The collapse is not complete since Paul will have a number of referentially equivalent modes of presentation of Peter himself and so Paul’s single belief (in the *psychological* sense) that Peter believes that Paderewski is a pianist has a number of contents each involving the same mode of presentation of Peter’s thought but different modes of presentation of Peter. (Of course, Paul might also have several beliefs about Peter’s belief in the psychological sense if he has two or more mental representations referring to Peter that he does not, so to speak, take to refer to the same individual—if he is a Frege puzzle victim, in other words.) These modes of presentation of Peter are, however, *first-order* senses—the second-order senses have collapsed. When *I* believe that Paul believes that Peter believes that Paderewski is a pianist, I will be thinking many thoughts since I will have many first-order modes of presentation of Paul but I will employ but a single mode of presentation of Paul’s thought that Peter believes that Paderewski is a pianist, one that features just one of Paul’s modes of presentation of Peter.⁷

⁷Of course, I might in principle have other modes of presentation of Paul’s thought that are grounded in a formally distinct mental representation. I might think of the thought descriptively as the thought Paul just entertained, for instance, or in a demonstrative fashion. Since Paul just thought *many* thoughts on my view, such expressions as ‘the thought that Paul just entertained’ and similar descriptive or demonstrative concepts either involve some implicit constraints on just which of those many thoughts is being referred to, or they refer to thoughts in the psychological sense—collections of thoughts in the metaphysical sense we have used up to now unified by their being grounded in a single mental representation of Peter’s. Compare my distinction between the psychological and metaphysical senses of ‘belief’ on p. 14.

Just which one is, as we noted above, a question impossible to answer in full generality. It is natural to suppose that the same principle for narrowing down the candidates holds here as it did there; if possible, I will refer to a mode of presentation of Peter that I and Paul both employ just as Paul himself tries to ascribe to Peter a mode of presentation of Paderewski that he shares with him in making his first-order belief ascription.

In practice, sufficiently iterated ascriptions will lead to a further collapse of senses. One of the thoughts that Paul takes Peter to believe on my view is the Millian thought that Paderewski is a pianist. When Bill believes that I believe that Paul believes that Peter believes that Paderewski is a pianist, in many cases it is likely that the only thought Bill is considering that *Peter* might believe is that Millian thought, and it is likely that he is considering only that Paul believes the further Millian thought that Peter believes that Paderewski is a pianist. It is, of course, possible that the utterer of a heavily iterated belief ascription refers to a finer-grained thought in uttering the final that-clause, but it is quite possible that the speaker will not have the necessary acquaintance with the thoughts of the last link in the chain of believers to do so, and even if he does, such refinement will serve little purpose. Iterated belief ascriptions are difficult to understand both practically and theoretically on anyone's view; since Millian thoughts are always part of the multiple contents of any belief on my view, it allows us to dispense with a good deal of the unnecessary complexity which a more traditional Fregean is saddled with.

I will close by noting that quantified belief ascriptions are no problem for the multiple senses approach, either. If I assert that everyone believes that Paderewski is a pianist or that someone (or most people, etc.) does so, any Fregean approach needs to account for how we might thereby refer to a thought that each member of the restricted domain of quantification can so much as grasp, let alone believe. A Fregean must account for how a quantified belief ascription has so much as a chance of being true. On the multiple senses approach, all of our beliefs involve relations to numerous coarse-grained thoughts, including those individuated in a Millian fashion in the limit. These coarse-grained thoughts are available as referents

of that-clauses in quantified belief ascriptions—their truth can be explained along the same lines as their singular counterparts.

References

- Crimmins, Mark. *Talk About Beliefs*. MIT Press, Cambridge, MA (1992).
- Crimmins, Mark & Perry, John. “The Prince and the Phone Booth: Reporting Puzzling Beliefs.” *Journal of Philosophy*, vol. 86:pp. 685–711 (1989).
- Davidson, Donald. “On Saying That.” *Synthese*, vol. 19:pp. 130–146 (1968).
- Fodor, Jerry A. “Substitution Arguments and the Individuation of Belief.” In *A Theory of Content*, pp. 161–176. MIT Press, Cambridge, MA (1990).
- Higginbotham, James. “Linguistic Theory and Davidson’s Program in Semantics.” In LePore, Ernest (ed.), *Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson*, pp. 29–48. Blackwell, Oxford (1986).
- Kripke, Saul. “A Puzzle about Belief.” In Margalit, Ashavi (ed.), *Meaning and Use*, pp. 239–283. Reidel, Dordrecht (1979).
- Larson, Richard & Segal, Gabriel. *Knowledge of Meaning*. MIT Press, Cambridge, MA (1995).
- Recanati, François. *Oratio Obliqua, Oratio Recta: An Essay on Metarepresentation*. MIT Press, Cambridge, MA (2000).
- Richard, Mark. “Direct Reference and Ascriptions of Belief.” In Salmon, Nathan & Soames, Scott (eds.), *Propositions and Attitudes*, pp. 169–197. Oxford University Press, Oxford (1988).
- Richard, Mark. *Propositional Attitudes: An Essay on Thoughts and How We Ascribe Them*. Cambridge University Press, Cambridge (1990).

Salmon, Nathan U. *Frege's Puzzle*. MIT Press, Cambridge, MA (1986).

Schiffer, Stephen. "Naming and Knowing." In French, P., Uehling, T., & Wettstein, H. (eds.), *Contemporary Perspectives in the Philosophy of Language*, pp. 61–74. University of Minnesota Press, Minneapolis (1979).

Sutton, Jonathan. "Russellian Thoughts, Fregean Thoughts, and the Unique Content Principle." under review (2001).

Sutton, Jonathan. "Are Concepts Mental Representations or Abstracta?" *Philosophy and Phenomenological Research* (2004).