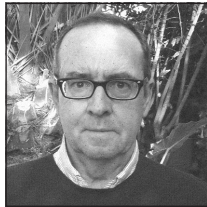# PROPER BELIEFS AND QUASI-BELIEFS

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In this paper, we distinguish two ways in which someone can be said to believe a proposition. In the light of this distinction, we question the widely held equivalence between considering a proposition true and believing that proposition. In some cases, someone can consider a proposition true and not properly believe it. This leads to a distinction between the conventional meaning of the sentence by which a subject expresses a belief and the content of this belief. We also question some principles of belief ascription, suggest a solution to a famous puzzle about belief and defend the unity of the semantic and causal aspects of beliefs.

Keywords: Belief content, Truth conditions, Belief ascription, Definite descriptions, Kripke's puzzle

Our everyday (or folk-) psychological language contains a wide array of cognitive terms and expressions. To name just a few: belief, conviction, certainty, doubt, knowledge, suspicion, deduction, justification, probability, possibility, evidence, reason, inference, explanation, experience, etc. In addition to shedding light on the concepts expressed by these terms, in the hope of understanding the nature of belief, knowledge, certainty, etc., philosophers have been led, in order to make sense of our cognitive activity and the judgments we make in developing it, to drawing several distinctions within some of those concepts. Examples of the latter are the distinction between knowledge by acquaintance and knowledge by description (Russell), knowing that and knowing how (Ryle), normative and motivational reasons, objective and subjective probability, epistemic and objective possibilities, induction and abduction, and so on. Our purpose in this paper is to draw an additional distinction within the broad concept of belief and to pursue the consequences of this distinction for some issues in epistemology, the philosophy of language and the philosophy of action.

I

Before coming to the distinction, we shall start by specifying our conception of the content of a belief (what is believed) and of belief itself. Concerning the former, it is plain (barring radical forms of holism about

content) that native speakers of different natural languages can share beliefs, in the sense of believing the same thing. English speakers can believe that it is raining, but so can native speakers of French, German, Spanish, Chinese, Russian, etc. Since the sentences by which they report what they believe are different ("it's raining", "il pleut", "es regnet", "llueve", etc.) and nonetheless they believe the same thing, what they believe is not a sentence, but, say, what those different sentences express. Let us call this a proposition (Frege would call it a "thought").

In our view, then, the content of a belief is a proposition. A proposition is individuated by its truth conditions. We shall conceive of truth conditions as structured entities, as events or states of affairs which may include (concepts of) individuals, properties and relations between them. A proposition is true just in case at least one sufficient condition for its truth is satisfied.

What about belief itself? *Believing* that P (a proposition) is not merely entertaining the thought that P (thinking of P's truth conditions); as a first approach, it is to assume that at least one sufficient condition for P's truth is (probably) actual. Now, this implies being disposed to take, in the relevant circumstances, the relevant conditions as a guide for action, given one's aims or purposes. The converse, however, does not hold: being disposed to take the relevant conditions as a guide for action does not imply believing that P (for example, one may just accept those conditions as a hypothesis, assuming them, say, for the sake of the argument)[1]. But (barring special pathologies, such as states of extreme apathy) not being disposed to take those truth conditions as guides for action in the relevant circumstances, given one's aims or purposes, does imply that one does not believe the corresponding proposition. There is, then, a close connection between belief and (dispositions to) action, but the relation is not one of equivalence. Logical behaviorism is not right.

II

On the basis of the preceding remarks, let us draw the announced distinction. We shall motivate it by means of an example.

Suppose that Henry Letter, a librarian at Town University, has seen Peter Burglar coming out of the university library carrying two books with the official library stamps on them. Peter has a bad reputation and Henry knows this. Moreover, in noticing that Henry is looking at him, Peter quickly

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[1] That is, one can accept a proposition, in Stalnaker's sense, without believing it: "Acceptance, as I shall use this term … is a generic propositional attitude concept with such notions as presupposing, presuming, postulating, positing, assuming and supposing falling under it … To accept a proposition is to act, in certain respects, as if one believe it" (Stalnaker 1984, pp. 79–80)

conceals the books under his coat. Hence, Henry comes to believe, on the basis of this evidence, that

A. Peter Burglar has stolen two books from the library.

And, on the basis of this proposition, he deduces that

B. Someone has stolen two books from the library.

B follows logically from A, and Henry knows it does. In fact, in order not to mention the thief's name, he tells Sally, a colleague of his: "Someone has stolen two books from the library". In being told this, Sally comes to believe that B, i.e., that someone has stolen two books from the library. Henry is convinced that what he has told Sally is true. In fact, Henry has not been insincere to Sally; he has told her something that he considers true. And in *some* sense he also believes that B. But this sense is different from the sense in which he believes that A (and from the sense in which Sally believes that B). Let us try to distinguish these two senses.

We may call an "essential reason" for believing a proposition a reason such that, if one ceased to have it, one would immediately abandon one's belief in that proposition. An essential reason for believing a proposition is, then, a reason that is necessary for having that belief. Henry's belief that A is for him an essential reason for his belief that B. In effect, suppose that, after forming his belief that A, Henry revises, just in case, the loan cards and, to his surprise, he finds that two of them correspond to Peter Burglar. Hence, not without feeling a bit ashamed, he ceases to believe that A, i.e., that Peter has stolen the books. And, given that A was for him an essential reason for believing that B, he automatically ceases to believe that B as well.

Did Henry believe that B in the same sense in which he believed that A? Our response is negative. Let us explain. We have said that believing a proposition P is to assume that at least one sufficient condition for P's truth is (probably) actual. Clearly, the truth conditions of A do not coincide with those of B. A is a singular proposition, which is true if, and only if, a particular person, namely Peter Burglar, has stolen two books from the library of Town University. Its logical form is *Fa*. Instead, B is a general proposition, which is true if, and only if, anyone (from a certain domain of individuals, presumably the set of library users) has stolen two books from that library. Its logical form is *VxFx*. Now, if Henry had 'really' believed that B, he would not have abandoned this belief after coming to know that Peter had not stolen the books. Instead, he would have gone on to believe that *some other library user* had stolen them.

In order to mark the difference, let us call Henry's cognitive attitude towards A "proper belief" (or "p-belief", for short) and his cognitive attitude towards B "quasi-belief" (or "q-belief", for short). We shall say that someone p-believes that P if, and only if, s/he assumes that any of the sufficient conditions for P's truth may be actual and that at least one is so.

And we shall say that someone q-believes that P if, and only if, s/he considers P true only because s/he assumes that only one (or some) *determinate* sufficient condition(s) for P's truth is (are) actual, and this assumption is his or her only essential reason for considering P true. Hence, in our example, Henry p-believed that A, but only q-believed that B. He considered B true only because he believed that Peter, and nobody else, had stolen the books. If he had p-believed that B, so assuming that any of B's sufficient truth conditions might be actual, then, after ceasing to believe that Peter had stolen the books, he would have come to believe that someone else had done so.

Instead, and unlike Henry, Sally p-believes that B. Her essential reason for believing that B was Henry's testimony that someone had stolen two books from the library. In checking the loan cards and finding Peter's among others, she would still believe that two cards were missing and that someone else had stolen the corresponding books.

III

The difference between p-beliefs and q-beliefs can also be seen from the perspective of their respective relation to behavioral dispositions, given certain purposes. Suppose that two books have actually been stolen and that both Henry and Sally want to retrieve them to the library. Whereas Sally will start from scratch, opening the scope of her search to any recent library users, Henry will directly investigate Peter.

Someone might object that, in order to explain the difference in behavior, there is no need of a distinction between p- and q-beliefs. We could explain that difference by the fact that Henry believes both A and B, whereas Sally believes only B. He does not engage in typical behavior associated with B, not because he does not (properly) believe that B, but because he *also* believes that A, and this belief grounds his belief that B. Our response is that, for this to be the case, the circumstances would have to be different. Imagine, for example, that Henry starts believing that two books have been stolen from the library because he has checked and discovered the absence of the books. Suppose also that, as he knows Peter's reputation, Henry strongly suspects him. In these circumstances, Henry can be said to properly believe both A and B, so that, if he abandoned his belief that A, he would continue to believe that B. But this was not the case in our original example. In it, Henry believes that B is true only because (and as far as) he believes that A.

It is possible that q-beliefs turn into p-beliefs. Suppose again that two books are actually missing from the library's shelves and that Henry's p-belief about Peter proves wrong. Henry will then widen the field of

possible culprits: his initial q-belief that B will turn into a p-belief. Another way in which this sort of change can happen is by forgetting about the initial p-belief from which the q-belief derived. Suppose that, after a couple of months, Henry does not remember who exactly was the one of whom he believed to have stolen the books; he may then go on to p-believe that someone stole books from the library, something which he initially only q-believed.

If, as happens in Henry's example, one arrives to a q-belief by deducing its content from the content of a p-belief, the p-belief contains more information, in the sense of excluding more possibilities, than the q-belief. Henry's p-belief that Peter stole the books excludes all possible thieves but one, whereas his q-belief that someone stole the books does not exclude any possible culprit from the relevant universe (the library users). This difference in the amount of information is the reason why, in most circumstances and for most purposes, we take p-beliefs, rather than q-beliefs, as our guides for action. If Henry wants to catch the thief and to have the books back to the library, the right thing for him to do is start his search with Peter, so guiding his behavior by his p-belief that A.

However, in particular circumstances, and for particular purposes, a q-belief, arrived at by deduction, can also become a guide for action, either by itself or by giving rise to another belief. Suppose that what interests Henry about Peter's theft, in which he believes, is the theft itself, rather than the particular person who committed it. Since Peter, a library user, has stolen the books, Henry deduces, rightly, that a library user has stolen them, which is roughly equivalent to B. This latter proposition is general. And from it Henry deduces, rightly again, that

C. It is possible for library users to steal books from the library.

Given his interest in keeping the library's book collection safe, Henry decides to design and implement a program intended to increase the library security. Henry's purpose is to avoid further thefts, rather than retrieving the two books stolen by Peter. And given this purpose, the relevant guide for him is C, which he has deduced from B, rather than A. The q-belief that a library user has stolen books has become relevant as an action guide for Henry, even if it contains less information than his belief that A.

IV

Let us reflect on some consequences of the preceding considerations.

The following seems to be a plausible principle of belief ascription, which, in closely related forms, has been explicitly endorsed by different

authors, including Kripke. Following common usage, let us call it "Weak Disquotation" (WD). Here is a version:

(WD) Weak Disquotation: "If an agent *A* sincerely, reflectively, and competently accepts a sentence *s* (under circumstances properly related to a context *c*), then *A* believes, at the time of *c*, what *s* expresses in *c*" (McKay and Nelson 2010, sect. 1).[2]

We might generalize this principle as follows (leaving the parenthetical proviso implicit):

(GWD) If a competent language speaker knowingly, reflectively and sincerely assents to 'P', where 'P' is a declarative sentence of his or her language, then s/he believes that P.

Here is a related principle that connects assertion (rather than assent) to belief:

(AB) If a competent language speaker knowingly, reflectively and sincerely asserts that P, where 'P' is a declarative sentence of his or her language, then s/he believes, at the time of the assertion, that P.

Finally, here is another plausible principle of belief ascription, which connects deduction and belief:

(DB) If one believes that P, and consciously deduces Q from P, then one believes that Q as well.

That is, one believes what one consciously takes to be logical consequences of what one believes.

Plausible as they may seem, the preceding principles cannot be confidently used, as they stand, in belief ascription, for they are threatened by ambiguity, owing to lack of the distinction between proper believing and quasi-believing.

Starting with (DB), we have seen that, in our example of the library, Henry deduces the proposition that someone has stolen books (B) from the proposition that Peter Burglar has (A); however, his cognitive attitude towards A is different from that which he adopts towards B. He properly believes that A, but only quasi-believes that B. So, (DB) cannot be accepted as it stands as a criterion for belief ascription.

As for (WD), (GWD) and (AB), they are also affected by lack of the distinction we have drawn. As for (AB), Henry has knowingly, reflectively and sincerely asserted that someone has stolen books from the library; he has made this assertion to Sally. Nonetheless, for the reasons given above, we cannot ascribe him, without ambiguity, the belief that someone has

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[2] Also Salmon: "If a normal English speaker, on reflection and under normal circumstances, sincerely assents to 'ц' then he/she believes that ц" (cf. Liebesman p. 613).

stolen two books, since he only quasi-believes this, and only fully and properly believes that Peter is the thief. It is easy to see how similar objections can be raised against (WD) and (GWD). Suppose that a third library officer hears Henry make the indicated assertion to Sally. He can then tell Henry: "So, you think that someone has stolen books from the library". Henry may knowingly, reflectively and sincerely answer, "Yes, I do", so assenting to the proposition that someone has stolen books from the library (B). However, if we are right, he does not properly believe that proposition; he only quasi-believes it.

<div align="center">V</div>

Our distinction points to a potential and important difference between the truth conditions of the proposition that a subject (p- or q-) believes and the truth conditions of (the proposition expressed by) the sentence by means s/he reports his or her belief. Their respective semantic properties may differ quite drastically. When Henry tells Sally, "Someone has stolen two books", this sentence is true just in case there is some library user or other who has stolen two books; but the proposition he properly believes, which he expresses by that sentence, is true just in case Peter Burglar has stolen two books. The truth conditions of the proposition conventionally expressed by the sentence are general; those of the proposition p-believed are singular. So, very different (proper) beliefs may be reported by utterances of the same sentence.

Our distinction may help understand Donnellan's distinction between referential and attributive uses of definite descriptions, as well as other semantic properties of definite descriptions and of sentences that contain them, by means of which people may express what they believe.

Imagine that Joseph Smith has been murdered and that two subjects, S1 and S2, express their beliefs about this murder by uttering (or assenting to) tokens of the sentence, "Smith's murdered is insane". Suppose that S1 utters these words only because he believes that Barry Hendon (whom he is acquainted with) has murdered Smith and that Barry Hendon is insane. The proposition that S1 p-believes and expresses with those words has singular truth conditions and has the logical form *Fa & Ga* ("Barry Hendon murdered Smith and Barry Hendon is insane"). In this case, S1's utterance of the definite description "Smith's murderer" would correspond to what Donnellan called the "referential use" of definite descriptions.

Suppose instead that S2 utters these words because he has seen Smith's body horribly mutilated, with no idea about who the murderer is. The proposition that S2 p-believes has instead general truth conditions.

He believes that Smith's murderer, whoever he is, is insane. Its logical form would be close to Russell's analysis of sentences of the form "the such-and-such is so-and-so": *Vx [(Fx & Gx) & (y) (Fx > y = x)]* ("there is someone, and only one, who murdered Smith and is insane"). In this case, S2's utterance of the definite description "Smith's murderer" would correspond to what Donnellan called the "attributive use" of definite descriptions.

However, we take Donnellan's distinction to be pragmatic, not semantic.[3] It does not affect the meaning of the sentences uttered, though it may affect what they communicate, owing to contextual clues that allow an agent to get the implicated content. What both S1 and S2 have *said* ("Smith's murderer is insane") has general truth conditions: it is true just in case Smith's murderer, whoever the one to whom this description truly applies may be, is insane. However, the truth conditions of what S1 and S2 properly believe (the proposition they believe) are different. What S2's properly believes has the same (general) truth conditions as the proposition conventionally expressed by the sentence he utters. These conditions are different in the case of S1.

VI

Similar considerations could also be applied to utterances containing proper names and to beliefs expressed by those utterances. In analogy with Donnellan's distinction between referential and attributive uses of definite descriptions, we may also distinguish between referential and attributive uses of proper names, and take it to be a pragmatic pheno-menon. We don't intend to adjudicate between Millian or Kripkean views of proper names' semantics, according to which proper names are a sort of tags which refer directly to the particular entities they name, and Fregean views, according to which proper names refer to their bearers indirectly, through descriptions or modes of presentation of the object. Whatever account is correct, we can still distinguish, as in the case of definite descriptions, between the conventional truth conditions of the proposition expressed by the uttered sentence and those of the proposition believed by the agent who utters that sentence.

It could be shown that distinct assertive utterances of, or assents to, the same sentence, where this sentence contains a proper name, may express proper beliefs with different truth conditions, even if the person denoted by the name is in fact the same. Some of these truth conditions may be general, in the case of attributive uses of the respective proper

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[3] As, after all, Donnellan(1966) himself acknowledges.

name. Suppose, for example, that, at the University, I happen to hear a prestigious professor telling another person: "Molly Malone is extremely brilliant". I have not the slightest idea of who Molly Malone is, but I trust the speaker and form a belief that I then express by asserting, "Molly Malone is extremely brilliant". Or I sincerely and reflectively assent to this sentence, when uttered by another person. The proposition I properly believe has general truth conditions; what I believe is that there is exactly one woman called "Molly Malone" who is extremely brilliant; in formal terms: *Vx [(Fx & Gx) & (y) (Fx > y = x)]*. Suppose now that someone who actually knows Molly Malone and thinks she is very brilliant hears me utter that sentence and assents to it. He has a proper belief with singular truth conditions; he believes that a particular person, namely Molly Malone, is extremely brilliant (*Ga*, presumably, in formal terms). He will probably ascribe me, on this basis, a belief of the same kind as his, but he will be wrong. His belief, but not mine, is singular. However, he may quasi-believe, on the basis of his proper singular belief, the content of my proper general belief.

VII

Armed with our criticism of (WD) (Weak Disquotation) and with the distinction between referential and attributive uses of proper names, we can now try to provide a response to a famous puzzle about belief, which Kripke presented using the story of Pierre.[4] Here is a summary. Pierre is a native French speaker who is brought up in France, where he learns about a city with the name "Londres" and, on the basis of what he hears of it (in French), comes to assent to the sentence "Londres est jolie". Now, applying (WD), and given that the sentence "London is pretty" correctly translates the indicated French sentence, we can ascribe Pierre the belief that London is pretty. Later on, Pierre moves to a rather ugly part of London and learns English by immersion, without translating from his native French. He comes to assent to many English sentences, including "London is not pretty". Using (WD) again, we can ascribe him the belief that London is not pretty. As we see, Pierre did not behave irrationally in forming his belief that London is pretty, which he still retains when he lives in London; and he is not irrational in forming there his belief that London is not pretty. In general terms, Pierre is a reflective and rational person, who would not believe contradictions. Nevertheless he seems to believe both a proposition and its negation, which is to believe a contradiction. It seems that something must go. Either we reject 1) that Pierre believes that London is pretty, or 2) that he

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[4] We follow David Liebesman's presentation of the puzzle in his 2012, p. 613. For a recent attempt to address the puzzle cf. Powell 2012.

believes that London is not pretty, or 3) that he does not believe contradictions. Alternatively, one might try to show that, appearances to the contrary notwithstanding, the claims do not actually form an inconsistent triad.

The alternative we prefer, on the basis of our arguments so far, is to reject 1), which leads us to a qualified rejection of 3). Let us explain.

An essential element in the generation of Kripke's puzzle is the use of (WD). It is this principle that allows one to ascribe Pierre the relevant beliefs. But we have seen, by means of our example of Henry the librarian, that (WD) does not always yields the right results for what concerns belief ascription. In particular, it does not reliably discriminate between p- and q-beliefs. It may, e.g., lead to ascribing someone a p-belief in a proposition with general truth conditions, when the subject only q-believes that proposition and p-believes a different proposition, with singular truth conditions.

So, leaving aside problems about translation, the fact that Pierre assents to "Londres est jolie", a sentence which normally expresses a proposition with singular truth conditions, does not show that Pierre properly believes that proposition, namely that London is pretty. Remember our remark that proper names can have attributive uses, as happens in my asserting, "Molly Malone is extremely brilliant"; the proposition I actually believe in asserting this has general truth conditions. I believe that there is a woman who is called "Molly Malone" and is extremely brilliant. Our suggestion is that something similar happens with Pierre's assenting to (or asserting) "Londres est jolie". After all, before moving to London, he has come to know about London by description. His use of "Londres" is attributive; by "Londres" he means "the (or a) city called 'Londres'". And the belief he expresses by asserting "Londres est jolie" is a p-belief in a general proposition, namely that there is a city that is called "Londres" and that this city is pretty. After moving to London, Pierre comes to know the city by acquaintance. Our view is that his assent to "London is not pretty" actually expresses his p-belief in a proposition with singular truth conditions, which is true just in case London, the particular city, is actually not pretty.

So, our view is that Pierre believes that the city called "Londres" is pretty and that London is not pretty. Since in the actual world the city called "Londres" and London are one and the same city, those two beliefs are not jointly true. However, if a contradiction is false in all possible worlds, Pierre is not guilty of believing a contradiction, for there are possible worlds where his two beliefs are true. The city called "Londres" might not have been London and, whereas the former city might be pretty, the latter might not.

VIII

Our line of argument so far gives us also useful tools for resisting what Akeel Bilgrami has aptly called "the bifurcation of content", a widely spread tendency to split the content of beliefs into a semantic, truth conditional aspect and a causal or motivating aspect.[5] According to this tendency, what moves us to act is not what we believe, individuated in terms of its truth conditions, but our way of believing it and the role this way plays in our psychological economy. Examples of this tendency to bifurcate the content are John Perry's (1979) distinction between belief content and belief state, or William Lycan's distinction between a semantic, truth conditional, and a computational or narrow individuation scheme for beliefs.

That truth conditions as such are not what lead agents to act can be seen, according to Lycan, by noticing that an agent can have two beliefs with exactly the same truth conditions but with strikingly different effects in behavior. Lycan attempts to show this by means of an example:

> Suppose Smith believes that that man he is ostending is about to be pounced on by a crazed, homicidal puma, but unbeknownst to Smith the man he is ostending is … himself reflected in a mirror. He will proceed on his way, unconcerned about his own safety, until he turns and sees the puma in the flesh and thereby suddenly acquires the belief that *he himself* is about to be pounced on, which change of belief will prompt an immediate and striking change in behavior (Lycan 1988, p. 85)

According to Lycan, the proposition Smith believes before seeing the puma in the flesh, say, that *that* man he points to is about to be pounced on, and the proposition he comes to believe after seeing the feline, say, that *he himself* is about to be pounced on, have exactly the same truth conditions and are true in the same possible words (cf. ibid.), since both are true just in case Smith, the very same individual, is about to be pounced on by a puma. Hence the change in behavior has to be explained in different terms, presumably by the different causal role that the representations "that man" and "I" play in Smith's process of information processing.

We do not think that Lycan's contention is correct. To argue for this, we shall first assume, as seems plausible, that Smith is not aware that he is looking at a mirror when he believes that *that* man is about to be pounced on. Clearly, Smith is not at the place where he is pointing to; hence "that man" fails to refer. We may state the truth conditions of Smith's initial belief

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[5]   A fuller treatment of this question can be found in our 1997.

as follows: that belief is true just in case there is a man, different from Smith himself, at the place he points to, who is going to be pounced on. The truth conditions of Smith's second belief, after turning and seeing the puma in flesh, are very different: this second belief is true just in case Smith himself is going to be pounced on. Hence, *pace* Lycan, Smith's change in behavior is explained by a change in what he believes, individuated in terms of truth conditions.

Suppose, instead, implausible as this may sound, that Smith is aware that he is looking at a mirror. In this case, Smith is using the demonstrative expression "that man" as a definite description with an attributive use, roughly "the man reflected in that mirror". The proposition he properly believes has general truth conditions, namely that there is a man who is reflected in the mirror, who is not himself, and who is going to be pounced on. It is clear that Smith does not include himself in the range of the corresponding variable, given his lack of any pertinent behavioral disposition. After turning and seeing the puma, Smith comes to properly believe a proposition with very different, singular truth conditions, which excludes all the possibilities included by the initial belief and includes the one that was excluded by it: that he himself is going to be pounced on. Against Lycan's contention, the striking change in Smith's behavior is explained by a striking change in the semantic, truth conditional content of his beliefs.

IX

In this paper, we have called attention to two very different ways in which one can be said to believe something; we have labeled these two ways "proper belief" and "quasi-belief". We quasi-believe a proposition as long as we consider the proposition true only because we assume that only one (or some) determinate sufficient condition(s) for its truth is (are) actual, where this assumption is our only essential reason for considering the proposition true. We properly believe a proposition when we have implicitly assumed that any of its sufficient truth conditions can be satisfied and that at least one has been so. In connection with this distinction, we have insisted on the distinction between the truth conditions of the proposition conventionally expressed by a sentence through which an agent expresses his or her belief, and the truth conditions of the proposition she properly believes. And we have pursued some consequences of these distinctions and reflections for several philosophical issues, such as principles of belief ascription, the relationship of an agent's beliefs to his or her behavior, a famous puzzle connected to belief and the relation between the semantic and the causal/motivational properties of our beliefs.

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