Propositional attitudes are cognitive states such as believing, desiring, doubting, and hoping. Propositional attitude reports (or ascriptions)—i.e., sentences reporting the propositional attitudes of individuals—are central to our psychological discourse and to our understanding of the world, since in order to explain and predict behavior, we must appeal to information about the beliefs, desires, etc. of ourselves and others.

These attitude reports (often generically called “belief reports”) are of special interest to philosophers of language because a number of particularly challenging problems arise in connection with these linguistic constructions, including (among others) issues about the substitution of co-referring terms into attitude reports, the rationality of belief and other attitude states, the status of so-called de re thoughts, and cognitive anti-individualism.

The sentences we use to report propositional attitudes come in various forms, including sentences such as the following (where ‘believes’ can be replaced by other cognitive attitude verbs).

1. Faith believes that koalas are herbivorous
2. Madeline believes Zorn’s Lemma
3. Isabel believes Phyllis

While these are all attitude reports, the philosophical focus is primarily on locutions such as (1) that characterize the contents of the reported beliefs, especially when the report is constructed from a subject, a propositional attitude verb, and an embedded declarative sentence prefaced with the complementizer ‘that’. Discussion focuses on such sentences both because they are so central to our explanations and predictions of behavior and because the aforementioned puzzles about attitude reports arise primarily with respect to reports of this sort.

The Propositional Theory

Since the pioneering work of Gottlob Frege (1892), the received account of propositional attitudes has been what might be called The Propositional Theory (its orthodoxy reflected in the very label “propositional attitude”). It comprises the following two claims.
• **Relational Account of Attitudes:** Propositional attitudes are relations that individuals can bear to propositions. (Propositions are also typically taken to be the individuating contents of beliefs, so that to share a belief is to believe the same proposition.)

• **Relational Analysis of Attitude Reports:** A (de dicto*) attitude report of the form ‘S believes (desires, hopes, etc.) that P’ ascribes to S the relational property of bearing the relevant attitude (belief, etc.) to the proposition expressed by the embedded sentence of its ‘that’-clause. (‘That’-clauses are also typically taken to be referring expressions designating the propositions expressed by their embedded sentences, thus making the logical form of the attitude report straightforwardly relational.)

* See “De Re/De Dicto Distinctions” below.

The Propositional Theory provides an integrated, plausible and rather robust explanation of many of the facts about cognitive states and the sentences we report them with. Discourse about beliefs, etc. strongly suggests a commitment to abstract entities like propositions as the contents of these states. For example, Existential Generalization appears to apply validly to attitude reports, as in the inferences (4)-(5) and (6)-(8). And as Jerry Fodor (1978) says, “EG may not be criterial for ontological commitment, but surely it is a straw in the wind.”

4. Phyllis believes that three is prime and four is composite
5. There is something that Phyllis believes
6. Bernard believes that virtue is its own reward
7. Sophie believes that virtue is its own reward
8. Therefore, there is something that Bernard and Sophie both believe

Furthermore, what Phyllis believes must have a number of important semantic properties such as being true, being about three and four, entailing that three is prime, etc.—the very sorts of semantic properties that propositions are standardly thought to have. The Relational Theory’s appeal to propositions also straightforwardly explains the validity of various other common inferences, such as the following.

9. Daisy said that squirrels are omnivorous
10. Otis believes what Daisy said
11. Therefore, Otis believes that squirrels are omnivorous

Propositionalism is not without its challengers (e.g., the sententialism of Rudolf Carnap (1947), W.V.O. Quine (1956), and Donald Davidson (1968), as well as Michael McKinsey’s (1986, 1999) property theory and Kent Bach’s (1997) descriptivism). Furthermore, the nature of propositions is itself the subject of debate, for example as to whether they are best conceived as highly structured pieces of information or as sets of possible worlds, although the latter view faces significant difficulties, summarized nicely by Soames (1987: 197–200). Nevertheless, Propositionalism and its close variants dominate the literature.
Among the most challenging puzzles about cognitive attitude reports are those involving the substitution of co-referring terms into ‘that’-clauses. Efforts to resolve these have played a prominent role in shaping theories of the attitudes as well as semantic theories of various parts of speech, such as names.

As Frege (1892) realized, if the truth value of a sentence is a function of what its constituent expressions refer to, then substituting one expression for another referring to the same item should not produce a sentence with a different truth value. (Jennifer Saul (2007), though, has argued that substitution puzzles can arise outside of attitude reports, even in simple sentences.)

For example, consider the Spider-Man comics (and treat them as if they were factual for present purposes). Since ‘Spider-Man’ and ‘Peter Parker’ refer to the same person, and (12) is true, then it seems (13) must be true as well.

12. Peter Parker lives in New York
13. Spider-Man lives in New York

But Frege also realized that certain linguistic contexts seem not to permit such substitution *salva veritatae* of co-refererring expressions. Prominent among these so-called *opaque* contexts are the ‘that’-clauses of some propositional attitude reports. For example, Peter’s boss is unaware of Spider-Man’s secret identity, so even though (14) is true, there are strong reasons for thinking (15) must be false. (Among these reasons is the fact that Jameson himself would not assent to ‘Peter Parker is a vigilante’.)

14. Jameson believes that Spider-Man is a vigilante
15. Jameson believes that Peter Parker is a vigilante

In addressing the puzzle he discovered about informativeness (e.g., how can a true statement of the form ‘a=b’ be informative when ‘a=a’ is not?), Frege famously concluded that there must be two dimensions to an expression’s meaning – its *Bedeutung* or reference (the entity singled out) and its *Sinn* or sense (a way of singling out the referent). Frege’s solution to the problem of substitution in attitude reports also makes use of his theory of *Sinn* and *Bedeutung* by postulating that inside the scope of a cognitive attitude verb, the reference of an expression shifts from its customary reference to its customary sense.

Thus, on the Fregean view, it is not problematic that (14) and (15) should diverge in truth value, because the embedded tokens of the names ‘Spider-Man’ and ‘Peter Parker’ are not co-referential and instead refer to two distinct senses (the web-slinging costume-wearing way of picking him out and the young photographer way). It is worth noting that on Frege’s view, then, substitution of co-referentials *salva veritatae* technically only *appears* to fail, since the name tokens inside ‘that’-clauses are not actually co-referential.

Frege’s solution, while elegant, faces serious difficulties. Among the major problems specific to the Fregean analysis of attitude reports is one involving anaphoric pronouns, such as the occurrence of ‘he’ in (16).

16. Jameson believes that Peter Parker is cowardly, but he really isn’t
On Frege's analysis of attitude reports, the token of 'Peter Parker' in (16) refers not to Peter himself, but to a sense—a way of picking out Peter. Since the anaphoric pronoun 'he' inherits its reference from the token of the name, the Fregean analysis would say that the pronoun also refers to this sense, which is plainly wrong, since it surely isn't the sense of 'Peter Parker' who is said not to be cowardly, but Peter himself.

Furthermore, the Fregean analysis violates the intuitively plausible principle of Semantic Innocence, according to which the semantic contribution made by a term is the same whether or not the term is embedded in a 'that'-clause.

Russell

Russell's (1905 and 1912) solution to substitution problems originates in his Theory of Descriptions and differs significantly from Frege's. While Russell, unlike Frege, held that logically proper names are genuinely singular terms (i.e., terms that are directly referential in the sense that they contribute just their referents to the propositions expressed by sentences containing them), he argued that other types of terms, including definite descriptions, could not be genuinely singular. One of the lines of thought that led him to this view had to do with substitution failure.

Consider attitude reports with descriptions in their 'that'-clauses. Even though the author of Nobody's Fool (Richard Russo) is the author of Straight Man, it is entirely possible for (17) and (18) to have different truth values.

17. Otis believes that the author of Nobody's Fool won the Pulitzer
18. Otis believes that the author of Straight Man won the Pulitzer

Russell's explanation of substitution failure, unlike Frege's, did not entail that terms in attitude reports function differently than elsewhere. Instead Russell inferred from substitution failure (and other phenomena) that sentences containing descriptions have unexpectedly complex logical forms. He famously argued that despite their surface grammatical appearances, sentences of the form The F is G do not have simple subject-predicate form and instead have underlying logical forms involving multiple quantifiers, with the following truth conditions.

19. There is at least one F, there is at most one F, and whatever is F is G

Thus, on Russell's Theory of Descriptions, the propositions expressed by the ‘that’-clauses of (17) and (18) are given by the following—where ‘Nx,’ ‘Sx’ and ‘Px’ abbreviate ‘x authored Nobody's Fool’ ‘x authored Straight Man’ and ‘x won the Pulitzer.’

20. \exists x (Nx \& \forall y (Ny \rightarrow y=x) \& Px)
21. \exists x (Sx \& \forall y (Sy \rightarrow y=x) \& Px)

Therefore (17) and (18) correspond to (22) and (23), where ‘<S>’ indicates the proposition expressed by ‘S’.

22. Believes (Otis, <\exists x (Nx \& \forall y (Ny \rightarrow y=x) \& Px)>)
23. Believes (Otis, <\exists x (Sx \& \forall y (Sy \rightarrow y=x) \& Px)>)
PROPOSITIONAL ATTITUDE REPORTS

But (22) and (23) clearly report belief relations to entirely different propositions, so there is no reason to expect them to share truth values. Thus Russell neatly resolves the substitution problem, at least with regard to descriptions.

It should be noted that Russell held a view somewhat more complicated than the straightforward Relational Analysis. Russell (1912) stated that belief reports do not ascribe binary relations between believers and propositions, but rather report more complex relations among the believers and the constituents of the proposition believed. In Russell’s example, Othello’s belief that Desdemona loves Cassio is a relation among Othello, Desdemona, Cassio, and the relationship of loving. But this complication can be ignored for our present purposes.

It should also be noted that while (17) and (18) are interpreted above in the most natural way (with the descriptions understood as characterizing how Otis thinks of the described individual, and with the associated quantifiers, etc. occurring in small scope, or secondary occurrence, as Russell called it, relative to the belief operator), there are attitude reports—including less-natural readings of (17) and (18)—in which descriptions take large scope (or primary occurrence, as Russell called it) relative to belief operators. These reports would have logical forms such as those in (24) and (25), with respect to which the substitution of co-referring descriptions is uncontroversially valid. Sentence (24) states that the author of Nobody’s Fool is such that Otis believes him to be a Pulitzer winner, and (25) states that the author of Straight Man is such that Otis believes him to be a Pulitzer winner. (For further discussion, see “De re/de dicto Distinctions” below.)

24. \[\exists x \left( \forall y (Ny \rightarrow y=x) \land \text{Believes} (Otis, \langle Px \rangle) \right) \]
25. \[\exists x \left( \forall y (Sy \rightarrow y=x) \land \text{Believes} (Otis, \langle Px \rangle) \right) \]

Let us now consider how Russell analyzed attitude reports with proper names occurring in small scope, inside the scope of the cognitive attitude verbs.

14. Jameson believes that Spider-Man is a menace to New York
15. Jameson believes that Peter Parker is a menace to New York

If names like ‘Peter Parker’ and ‘Spider-Man’ function as genuine singular terms, as Russell thought logically proper names do, he would have to regard (14) and (15) as expressing the same proposition and hence the same in truth value.

Russell’s (1912) surprising solution was not to challenge the Relational Analysis or the claim that logically proper names are genuine singular terms. Rather, he postulated that ordinary proper names are simply not logically proper names and that they function instead as if they go proxy for definite descriptions. So the embedded sentences of (14) and (15) would express propositions like those expressed by (26) and (27).

26. The web-slinging, spider-costume-wearer is a menace to New York
27. The young photographer who works for the Bugle is a menace to New York

Therefore, just as with definite descriptions, the belief reports (14) and (15) would attribute to Jameson belief of very different propositions, thus explaining how their truth values can diverge.

Russell’s solution (often labeled The Description Theory of Names) has the virtue of being well integrated into his broader philosophical views. It is a key part of his solutions to
several other important problems, such as Frege’s puzzle about informativeness, problems about negative existence claims, and issues about non-referring names. Additionally, it is well motivated by his epistemological commitments, such as his Principle of Acquaintance which states that sentences we understand must express propositions composed only of items we can directly apprehend—i.e., items of our immediate acquaintance. According to Russell (1912), the only sorts of things with which we have this acquaintance are properties and relations, our own sense data, and (perhaps) ourselves. Therefore, a proper name of any other sort of item (such as an external physical object or another person) cannot contribute its referent to the proposition, for we could not understand the propositions expressed by such sentences, and clearly we do. But he held we can be directly acquainted with the properties and relations that descriptions contribute to the propositions.

Russell’s solution is superior to Frege’s in several respects. For instance, it does not violate Semantic Innocence, since on his view names and other terms inside ‘that’-clauses make the same contributions to propositions that they make elsewhere. Neither does Russell’s solution face the problems Frege’s does in accounting for anaphoric pronouns.

Nonetheless, there are persuasive reasons for rejecting Russell’s Description Theory of Names. Principal among these are arguments advanced by Saul Kripke (1972), Keith Donnellan (1970), and others against the description theory of names and in support of the Direct Reference semantic theory that supplanted it. The two main approaches to propositional attitude reports in the wake of the Direct Reference theory are Naïve Russellianism and The Hidden-Indexical View.

**Naïve Russellianism**

Naive-Russellianism—so-called because it resembles Russell’s early semantic views—holds that ordinary proper names and indexicals normally function as Russell thought **logically** proper names did—i.e., as genuine singular terms, contributing only their referents to the expressed propositions, even when these terms designate external contingent objects.

Naive-Russellianism furthermore holds that attitude reports with singular ‘that’-clauses report attitude states with those same singular propositions as their contents. Consider pairs like (14) and (15) once more.

14. Jameson believes that Spider-Man is a vigilante
15. Jameson believes that Peter Parker is a vigilante

According to the Naïve Russellian, (14) and (15) express the same proposition; they both report that Jameson bears the belief relation to the singular proposition that attributes the property of vigilantism directly to that individual. Consequently, Naïve Russellianism is committed to the counter-intuitive view that substitution of co-referential terms is actually valid. Given that a name is a genuine singular term, its semantic value is exhausted by its referent; thus co-referential names share their semantic values. So, assuming the Compositionality principle that the semantic value of an expression is a function of the semantic values of its component expressions, co-referential names and indexicals must be mutually substitutable in other expressions like sentences.

Thus the Naïve Russellian must explain away the widespread conviction that substitution into small scope positions in attitude reports is **not** valid. As Mark Richard (1990,
p.125) says, it would require “bribery, threats, hypnosis, or the like” to convince most people” that a pair such as (14) and (15) report the same belief.

The characteristic Naïve Russellian rejoinder—from, e.g., from Tom McKay (1981), Nathan Salmon (1986), and Scott Soames (1987, 1988 and 2002)—is that while (14) and (15) semantically express the same proposition, they pragmatically convey different propositions. Hearers conflate the pragmatically and semantically conveyed information and take the two reports to express different propositions. (Not all Naïve Russelians offer such pragmatic explanations. David Braun (e.g. 1998, 2001a and 2001b) is a notable exception.)

Naïve Russellians have suggested various sorts of information to play this pragmatic role. For example, utterances of (14) and (15) might pragmatically convey the information expressed by (28) and (29). And, since the former is true and the latter is false, hearers may conclude that (14) is true while (15) is false.

28. Jameson would assent to the sentence ‘Spider-Man’ is a vigilante’
29. Jameson would assent to the sentence ‘Peter Parker is a vigilante’

Salmon, Soames, and most other Naïve Russellians have proposed that propositional attitudes are mediated by “ways of apprehending” the proposition, or propositional “guises,” and have furthermore proposed that information about the subject’s way of taking the proposition can be pragmatically conveyed by an utterance of an attitude report. That is, they distinguish what someone believes (a proposition) from how he or she believes it (a way of taking the proposition), and they assert that an attitude report semantically conveys the “what” and only pragmatically conveys the “how.”

For example, Salmon (1986) proposes that while the ordinary language operator ‘believes’ semantically expresses a dyadic relation between a believer and a proposition, the psychological reality underwriting the truth of the dyadic statements is a triadic relation (he calls it ‘BEL’) between a believer, a proposition, and a propositional guise. So while (14) and (15) both semantically convey that Jameson believes the same singular proposition, (14) pragmatically conveys that Jameson believes it under ‘Spider-Man’ ways of thinking, while (15) pragmatically conveys that he believes it under ‘Peter-Parker’ ways of thinking. And this information—that Jameson believes it under the ‘Peter-Parker’ ways, really is false; hence the mistaken, though understandable, belief that (15) is false.

The pragmatic solutions offered by Naïve Russellians face significant difficulties. It is implausible that ordinary speakers are normally reasoning by way of meta-linguistic information or information about the believer’s ways of taking propositions. There are difficulties as well in spelling out the precise pragmatic mechanism by which the information is allegedly conveyed. For example, Gricean conversational implicature has been proposed—e.g., by Salmon (1986) and by Kirk Ludwig (1996)—but Stephen Schiffer (1987) and others, have raised serious objections for this strategy. The primary problem for Naïve Russellianism remains its counter-intuitive commitment to the validity of substitution.

Hidden Indexical Theories

Hidden Indexical Theories of attitude reports—e.g., from Schiffer (1977), Mark Crimmins and John Perry (1989), and Crimmins (1992a and 1992b)—offer a way of
accommodating the direct reference view that the ‘that’-clauses of attitude reports refer to singular propositions while respecting the powerful anti-substitution intuitions. This approach agrees with typical Naïve Russellians that attitudes toward propositions are mediated by ways of apprehending them, but it differs by asserting that information about the subject’s way of apprehending a proposition is semantically, not just pragmatically, conveyed by an attitude report.

These theories derive their name from the fact that they posit context-sensitive “unarticulated constituents”—i.e., elements of the propositions expressed by attitude reports for which there are no explicit corresponding syntactical elements in the reports themselves—that pertain to the subject’s way of taking the proposition. Thus a pair of reports such as (14) and (15) could semantically express different propositions, despite having semantically equivalent ‘that’-clauses—e.g., if (14) introduced Jameson’s ‘Spider-Man’ types of ways of apprehending the proposition expressed while (15) introduced his ‘Peter-Parker’ ways of apprehending it.

Related views have been advanced by Mark Richard (1990), who postulates “Russellian annotated matrices” (the constituents of which are pairs of linguistic entities and their semantic values, such as names paired with their referents) as the contents of attitude states, and by Francois Recanati (1993), who postulates “quasi singular” propositions as contents. The term ‘Contextualism’ is sometimes used for these sorts of theories, but sometimes instead as a more general name to cover these as well as Hidden Indexical Theories.

Despite accommodating both Direct Reference and anti-substitution intuitions, Hidden Indexical Theories face substantive problems. Bach (1993) and Schiffer (1992) have persuasively argued against the psychological reality of speakers making attitude reports that include ways of apprehending propositions in their truth conditions. Furthermore, the reliance on unarticulated constituents seems ad hoc. (See Jason Stanley (2002) for example.) While these theories, like Naïve Russellianism, respect Semantic Innocence, they do so only at the expense of the important principle of Compositionality, since a pair of attitude reports such as (14) and (15) have different semantic value despite all of their proper parts sharing their semantic values.

De Re/De Dicto Distinctions

The cognitive attitudes literature has supposed, often as a load-bearing part of its theories, a distinction between de re (“concerning the thing”) attitude reports and de dicto (“concerning the word/sentence/proposition”) attitude reports.

Following Russell, this has usually been drawn as structural distinction in terms of relative scope. In this sense, an attitude report is de dicto with respect to the terms (or positions occupied by terms) occurring inside the scope of its cognitive attitude verb, and de re with respect to the terms occurring outside that scope. We might call these “structurally de dicto” and “structurally de re” occurrences.

Let us first consider reports containing descriptions. For example, with respect to ‘the dean’s partner,’ (30) would likely be interpreted as structurally de dicto and (31) as structurally de re, since the description occurs in small scope in the surface grammar of (30), and in large scope in (31). Furthermore, (31) is structurally de re with respect to the anaphoric pronoun ‘he.’

30. Otis believes that the dean’s partner is a sociologist
31. The dean’s partner is such that Otis believes that he is a sociologist
Given Propositionalism and its Relational Analysis, (30) and (31) would have logical forms suggested by the following partial analyses.

32. Believes (Otis, <the dean’s partner is a sociologist>)
33. $\exists x \ [x = \text{the dean’s partner} \& \text{Believes (Otis, <X is a sociologist>)]}

Thus, structurally de dicto occurrences appear to function as part of the characterization of the contents of the reported beliefs, while de re occurrences do not. Because the description occurs in small scope in (32), its semantic value is contributed to the proposition expressed by the ‘that’-clause and hence to the proposition that Otis is reported to believe. The description in (33), having wide scope, does not contribute its semantic value to the ‘that’-clause, and hence not to the reported belief content.

However, although it seems natural to read a sentence like (30) as structurally de dicto with respect to the description, matters are more complicated. There is a plausible alternative interpretation of (30) according to which the description does not characterize how Otis is thinking of the individual but only identifies the individual believed to be a sociologist. For instance, if someone overheard Otis saying, “Today’s guest speaker is a sociologist,” and she knew that the guest speaker was the dean’s partner, then she might plausibly report this with an utterance of (30)—even if she thought Otis did not know that the speaker was the dean’s partner. So it is evident that a “believes-that” sentence such as (30) can be used to express either a structurally de dicto report or a structurally de re report, although in most contexts the former would be more natural, and philosophers of language tend to use “believes-that” sentences as if they were canonically de dicto.

Along with an expression’s role in content characterization, several other important semantic differences appear to correspond to the structural de re/de dicto distinction. For example, structurally de re occurrences of terms commit the speaker to the existence of a referent, while structurally de dicto occurrences do not in general. In the structurally de re (31), the speaker is using ‘the dean’s partner’ to refer to the object of Otis’s belief, and is thus committed to there being a partner. But, a de dicto structure like (32) does not necessarily commit the speaker to the existence of a referent; Otis can bear the belief relation to the proposition that the dean’s partner is a sociologist even if the dean has no partner. Similarly, it is not generally valid to apply Existential Generalization (i.e., to “quantify in”) to structurally de dicto occurrences of descriptions, since from the truth of (32), the truth of (33) does not follow. (Classic discussions of these issues can be found in Quine (1956) and Kaplan (1969), among others.)

Furthermore, since a structurally de re occurrence of a term, being outside the ‘that’-clause, does not contribute its semantic value to the proposition said to be believed, then any report resulting from replacing the term with a co-referring expression should share the truth value of the original report. That is, substitution of co-referring terms should be valid. Such an occurrence is said to be transparent. A structurally de dicto occurrence, being inside the scope of the ‘that’-clause, contributes to the belief’s propositional content. Therefore, only substitution of a term that shares its semantic value (and not just its referent) can insure preservation of the truth value. That is, substitution can fail. Such an occurrence is said to be opaque.

To summarize: there is an ambiguity involving reports of the form ‘X believes that the F is G’, which may best be explained as a structural ambiguity between large and small scope occurrences of ‘the F’. (Some accounts, e.g. Quine’s, instead hold the attitude verbs like ‘believes’ to be lexically ambiguous, positing two distinct belief operators.) With
respect to definite descriptions, at least, the structural distinction is arguably of a piece with several semantic distinctions, at least on the assumptions of Propositionalism.

But only reports containing definite descriptions have been considered so far. Of course, if names or other terms are construed along classic Russellian lines—i.e., as going proxy for descriptions—there is no problem in extending this structural-and-semantic distinction to reports in which names occur. But if ordinary names, indexicals, etc. are construed as genuine singular terms, then the structural de re/de dicto distinction and corresponding semantic distinctions come apart from each other. Small scope occurrences of genuine singular terms carry existential commitment, permit EG and permit substitution. In short, they behave rather like large scope descriptions. Consider (34).

34. Daisy believes that Obama is tall

On the Relational Analysis, a structurally de dicto reading of (a) attributes to Daisy the property of believing the proposition expressed by ‘Obama is tall.’ Given direct reference semantics for names, that proposition contains Obama himself a constituent. So the report has existential commitment, since there is no such proposition for Daisy to believe if ‘Obama’ has no referent. For similar reasons, it appears that Existential Generalization is valid and one may quantify in to the position occupied by the name. For instance, (34) entails (35).

35. \( \exists x [x = \text{Obama} \& \text{Believes (Daisy, } <x \text{ is tall}>)] \)

Finally, since direct reference entails that the co-referential names make the same contribution to propositions expressed (their referent), it follows that two ‘that’-clauses like (14) and (15) differing only in substituted co-referential terms must semantically express the same proposition, and—given the Relational Analysis—belief reports with such that clauses must report the same belief. That is, substitution is valid for names. (Of course, this last point is the subject of much debate. The fact that it would license such substitution is frequently the basis of objections direct reference views such as Naïve Russellianism.)

14. Jameson believes that Spider-Man is a vigilante
15. Jameson believes that Peter Parker is a vigilante

Thus there is no univocal answer as to whether a small scope occurrence of a genuine singular term is de dicto or de re. We might say that such an occurrence is structurally de dicto, but semantically de re.

Somewhat confusingly, in addition to the de rel/de dicto distinction among attitude reports, the cognitive attitude literature has also made a metaphysical distinction among attitude states using the labels ‘de re’ and ‘de dicto.’ The distinction is intended to demarcate states that are about specific objects (de re) from those that are not (de dicto). For example, in his well-known disambiguation of ‘X desires a sloop,’ Quine (1956) suggests that on the one (“notional”) interpretation it ascribes a desire to own some particular sloop, while on the other (“relational”) interpretation it ascribes a desire to own any sloop whatever. The former, object-specific, desire would be a de re attitude, while the latter (the general desire to relieve “slooplessness”) would be de dicto.
The special nature of such \textit{de re} states remains controversial. It has frequently been held to require some particularly close connection between the person and object—e.g., Kaplan’s (1969) notion of being causally \textit{en rapport} with an object, or Roderick Chisholm’s (1976) notion of “epistemic intimacy.” Another common conception of \textit{de re} thoughts is that they are attitude states with a special sort of propositional content, e.g. genuinely singular (“Russellian”) propositions. These two approaches can be combined, if one holds that bearing an attitude to a genuinely singular proposition requires a special relation to the singular term’s referent.

The two \textit{de re/de dicto} distinctions are sometimes thought to be connected in some systematic way—e.g., that \textit{de dicto} ascriptions can be only be used to ascribe \textit{de dicto} thoughts, while \textit{de re} ascriptions can be employed only to ascribe \textit{de re} thoughts. But there are good reasons for thinking that the two distinctions do not line up so neatly. (See Kent Bach (1987) for a good discussion of such reasons.) Therefore, it is important to be clear about whether with the labels ‘\textit{de re}’ and ‘\textit{dicto}’ one is characterizing the reports or the reported attitudes. As Bach (1987: 17) noted, “we must be careful to distinguish \textit{de-re}-belief ascriptions from \textit{de re} belief-ascriptions and \textit{de-dicto}-belief ascriptions from \textit{de dicto} belief-ascriptions.”

\textbf{Kripke’s Puzzle About Belief}

Kripke (1979) introduces an important puzzle that resembles substitution puzzles in some respects, but which does not appear to depend on the assumption of a direct reference account of nouns or involve substitution of terms into attitude reports.

Pierre, initially a French-only speaker, reads a book showing lovely pictures of London captioned as ‘Londres’ and thus becomes disposed to assent to the sentence ‘Londres est jolie.’ Kripke concludes, via plausible principles of translation and disquotation (roughly, that assent to sentence $S$ entails belief that $S$), that Pierre believes that London is pretty. Pierre then moves to a shabby part of London, where he picks up English but somehow has no idea that the city he lives in and knows by the name ‘London’ is the city called ‘Londres.’ He is disposed to assent to ‘London is not pretty’ and (again by way of a disquotation principle) Kripke deduces that Pierre believes that London is not pretty. So both of the following appear true, despite ascribing beliefs with contradictory contents.

36. Pierre believes that London is pretty
37. Pierre believes that London is not pretty

But, says Kripke, Pierre cannot have genuinely contradictory beliefs, since anyone is in principle able to detect inconsistent beliefs if he has them, and (as long as he is unaware that the city called ‘London’ is the one called ‘Londres’) there is no way that Pierre could possibly recognize that the beliefs in question are inconsistent.

Kripke also constructs a related example that does not involve translation. Peter believes that there is a pianist named ‘Paderewski’ and that there is a politician named ‘Paderewski,’ but does not believe they are the same individual. The following reports about Peter are derived from the scenario—another alleged case of contradictory beliefs.

38. Peter believes that Paderewski had musical talent
39. Peter believes that Paderewski had no musical talent
While Kripke’s puzzles must be explained by any account of propositional attitudes, they pose special challenges for those that combine direct reference with the Propositional Theory—for instance, most forms of Naïve Russeliansism. Bach (1997) and Shier (1996) have argued that these puzzles are only problematic on the assumption of the Relational Analysis of Attitude Reports. If one does not assume that the contents of beliefs can be ‘read off’ from their ‘that’-clauses, then there is no reason to think the pairs above report belief of contradictory contents. (Brian Loar makes a similar point.) Bach (1997: 233) points out that any ‘that’-clause can be used, in the right circumstances, to generate a Paderewski case, and uses this as the basis of an argument against the Relational Analysis and its assumption (which he calls “The Specification Assumption) that the ‘that’-clause specifies the complete propositional content of a belief.

Anti-individualism and Attitude Reports

Propositional attitudes and attitude reports also figure prominently in the Individualism/Anti-Individualism (Internalism/Externalism) debates in philosophy of mind and language. The influential lines of argument against Individualism about meanings developed by Hilary Putnam (1975), Tyler Burge (1982), and others were extended, by way of Propositionalism, to argue against cognitive individualism.

Cognitive Individualism is the view that a person’s beliefs and other propositional attitude states supervene on just her internal features and are thus logically independent of the features of the environment. This is often put as the claim that such states are properly individuated by the subject’s narrow psychological properties where, following Putnam (1975), a narrow property is (roughly) one that “does not presuppose the existence of any individual other than the subject to whom [it] is attributed.” According to Cognitive Individualism, any two internally identical persons would share all their attitude states, despite any differences in their environments.

Individualism is intuitively appealing; how could remote external objects and events logically determine what one believes? Certainly they play causal roles, but they seem able to do this only in a mediated way by impinging on the internal determinants of mental states—i.e., by affecting how the world appears to the individual.

Despite Individualism’s intuitive plausibility, it has come under attack from philosophers who hold the semantic thesis of Direct Reference and take it to entail the existence of propositional attitude states with wide content—i.e., content that essentially involves contingent external objects. Consider a propositional attitude report containing an occurrence in its ‘that’-clause of a directly referential term for a contingent external object.

40. Phyllis believes that a volcano is erupting on Jupiter

Given Direct Reference, this seems to ascribe a belief that essentially involves the planet Jupiter itself—a belief that one simply could not have in a possible world in which Jupiter never existed. (This is also related to one of the common conceptions of de re thoughts (above)—that of thoughts with contents that essentially involve particulars.)

The existence of wide beliefs is not entailed by Direct Reference, but by conjoining it with Propositionalism. (See McKinsey (1991 and 1994) for a thorough discussion of this issue.) Given the Relational Analysis of Attitude Reports, (40) reports that Phyllis bears the belief relation the proposition expressed by ‘a volcano is erupting on Jupiter.’
And, given the Relational Account of the Attitudes (and the usual further assumption that the propositional content is individuating content), Phyllis' belief is type-individuated by that proposition; i.e., one can have the same belief just in case one believes that proposition. Therefore, the belief-individuating proposition will include the planet Jupiter itself, contrary to Individualism.

The recognition that the route from Direct Reference to Cognitive Anti-Individualism runs through Propositionalism suggests a strategy for reconciling Individualism and Direct Reference by challenging Propositionalism, which entails that a report with a wide 'that'-clause must report a wide belief. Some variations of this approach are advanced by Simon Blackburn (1984), McKinsey (e.g. 1991 and 1994), Shier (1996) and Bach (1997).

### Related Topics

1.2 Semantics and Pragmatics
1.7 Meaning and Communication
2.1 Reference
2.3 Propositions
3.1 Names
3.6 Anaphora
3.7 Descriptions
3.11 Indexicals and Demonstratives
7.3 Modern Philosophy of Language
7.4 Frege, Russell, and Wittgenstein.

### References