When speakers report on people’s mental states, they often use expressions which identify the type of this mental state (e.g. belief, doubt, fear) and its content, referred to in the form of a *that*-clause, as in (1).

(1) Ben believes that Alaska is an island.

Such mental states were called propositional attitudes by Bertrand Russell. However, it is now often disputed whether the object of such attitudes should be construed as a **proposition** or perhaps as a sentence, thought, or a structure of some kind.

Linguists are predominantly interested in the **semantics** and **pragmatics** of propositional attitude reports. Attitude reports belong to the class of so-called intensional contexts in which substitution of coreferential expressions is not truth-preserving (*salva veritate*). For example, although ‘Alaska’ has the same referent as the definite description ‘the U.S. state purchased from the Russian tsar Alexander II in 1867 for $7.2 million’, substituting this phrase for the proper name ‘Alaska’ as in (1’) may affect the truth value: Ben may not know that the proper name and the description are coreferential.

(1’) Ben believes that the U.S. state purchased from the Russian tsar Alexander II in 1867 for $7.2 million is an island.
This lack of substitutivity poses theoretical problems for the theory of meaning, as well as practical problems for human communication. These two problems are interconnected: satisfactory solutions to both take into account the guise, the way of thinking about the referent, that can be ascribed to the speaker and assumed as shared by interlocutors – the so-called mode of presentation, modelled to a greater or lesser extent on Frege’s notion of sense (Frege 1892; cf. Schiffer 1992, 1996; Crimmins and Perry 1989; Crimmins 1992; Forbes 1990, 1997; Jaszczolt 1999, 2000). At the other end of the spectrum are approaches that deny modes of presentation any role in the logical form of propositional attitude constructions (Salmon 1986; Soames 1987, 1995). It has also been suggested that the verb believe is context-sensitive (Richard 1990, 1995; Pelczar 2004, 2007). The general problem with these categories of solutions is this: when the semantic significance of the mode of presentation is denied, the truth conditions cease to be intuitive. When the modes of presentation or some other form of context-dependence are admitted to the logical form, semantics ceases to be compositional. From the pragmatic, contextualist perspective, however, it seems that modes of presentation, the guises under which speakers talk about beliefs, are necessary for representing intentional meaning and should figure in the contextualist semantic representation, arguably by making use of a more relaxed, pragmatic version of compositionality of meaning.

Propositional attitude constructions are standardly regarded as ambiguous between a transparent reading and an opaque reading. For example, (2) has two logical forms in (2a) and (2b), corresponding to the wide and narrow scope of the existential quantifier. ‘∃x’ stands for existential quantification (‘there is an x…’), ‘KoP’ for ‘king of Poland’, ‘∧’ for logical conjunction (‘and’), ‘∀y’ for universal quantification
(‘for all ys…’), ‘→’ for logical implication (‘if…then’), and ‘BelB’ for ‘Ben believes that’ (see Russell 1905, 1919; Quine 1956; Neale 1990).

(2) Ben believes that the king of Poland is a polyglot.

(2a) \( \exists x \,(\text{KoP}(x) \land \forall y \,(\text{KoP}(y) \rightarrow y = x) \land \text{BelB Polyglot} (x)) \)

(2b) \( \text{BelB} \, \exists x \,(\text{KoP}(x) \land \forall y \,(\text{KoP}(y) \rightarrow y = x) \land \text{Polyglot} (x)) \)

(2a) reflects the reading that is transparent to substitutions. When a speaker uses (2a), he/she ascribes to Ben a belief about a particular, identifiable individual (\textit{de re}). A report with the form as in (2b) ascribes to Ben a belief that there is someone whom he calls the king of Poland and that that individual has a certain property (\textit{de dicto}). The philosophical literature on the subject focuses on the semantics of the attitude sentences. In pragmatics we are interested in the utterance, the \textbf{speech act} of reporting on someone’s beliefs, and hence must also recognize the situation in which the holder of the belief is referentially mistaken. Imagine that while using the definite description ‘the King of Poland’ Ben intentionally refers to ‘the King of Sweden’. The logical form corresponding to this utterance is that in (2c), where ‘KoS’ stands for ‘king of Sweden’. If the objective is to represent the speaker’s intended meaning, we are faced with many different possible semantic representations instead of a clear \textit{ambiguity de re/de dicto}.

(2c) \( \exists x \,(\text{KoS}(x) \land \forall y \,(\text{KoS}(y) \rightarrow y = x) \land \text{BelB Polyglot} (x)) \)

Such a contextualist, pragmatics-rich approach to meaning is currently dominant and propositional attitude research also reflects this orientation.
The *de re/de dicto* distinction must not be confused with the distinction between factive and nonfactive attitudes and factive and nonfactive verbs. Factive verbs engender a proposition whose truth entails that the proposition expressed in the embedded *that*-clause is itself true. For example, (3) entails (4).

(3) Anna knows that whales are mammals.

(4) Whales are mammals.

Nonfactive verbs, such as *believe* or *think*, do not have this property.
See also: Definiteness; intentionality; reference

Suggestions for further reading:


BIBLIOGRAPHY


