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EXPRESSIONS OF BELIEF AND BELIEF ASCRIPTION

In this article I present some arguments in favour of the *de re/de dicto* distinction in reading sentences expressing attitude reports and argue for the priority of the *de re* reading of sentences expressing mental attitudes.

Mental attitudes comprise beliefs, fears, assumptions, doubts, and other similar states (acts, standpoints, or whatever) held towards a certain entity expressing a state of affairs. In the philosophical tradition they have usually been understood as attitudes towards a *proposition*, a *sentence*, or sometimes to a group of entities, whether they are parts of a sentence or a proposition. Alternatively, a proposition can be taken to be the *content* of an attitude (from now on: belief) sentence and then belief is not seen as a relation between a person and a proposition (cf. S e a r - l e 1983). I am concerned only with nonfactive attitude verbs, i.e. verbs which generate propositions the truth of which does not entail that the embedded proposition (indirect statement) is itself true. *A fortiori*, the only object of my analysis are sentences of the propositional attitude type, i.e. of the form "X believes thar Y φs". Since this construction is semantically and syntactically prior to other belief constructions such as "X believes in p" ("X believes in Y's φ-ing"), these types will not be considered[1].

I shall not be concerned here with deciding on a particular standpoint. The main aim of this article is to justify the view which states that there is a genuine ambiguity in reading belief expressions and that one of these readings is primary in our grasping the contents of one's belief. The same difficulty occurs in the case of belief reports. This view, being frequently attacked nowadays (mainly, but not only, by S t i c h 1983 and folk psychology), seems to require further defence.

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[1] For arguments see, for instance, M o n t a g u e 1973.

DE RE/DE DICTO REVISITED

The actual problem with attitude ascription arises out of a factual mistake: let us imagine Q u i n e ' s (1956) famous character, Bernard J. Ortcutt, seen at the beach, believed by somebody called Ralph to be a spy. Ralph points at Ortcutt saying that "the man wearing a brown coat" is a spy. However, in another situation, Ralph denies that "Ortcutt", about whom he hears a newspaper report which describes him as arrested for espionage, is a spy. The problem arises, how to ascribe a belief about Ortcutt to Ralph: does he believe that Ortcutt *is* or *is not* a spy, or maybe both?[2]

We shall assume here, after Hintikka, Montague and many others but unlike, e.g., Dennett, a requirement of consistency of a person's beliefs (see also S t i c h 1983 on the network of beliefs) and consequently we can say that Ralph simply does not know that he refers to the same individual in both judgements[3]. Moreover, as we could say in terms of possible worlds semantics, the *modes of individuation* of the individual may differ in these two cases: Ralph *perceives* the object of his belief in the first case, whereas in the second (when it follows the first), he may merely *know its description*. Here the issue arises as to whether there are any conditions for grouping the cases where the sentence[4] was uttered as referring to an actual person independently of his/her name (*de re*; relationally), as opposed to the situations where the sentence refers to a person with respect to the particular name, whoever it might be (*de dicto;* notionally).

Before we start, a short comment on Stich's views is necessary. S t i c h (1983, 1986) accepts the traditional view on ambiguity, saying that it has to be either lexical or syntactic in nature. The analysed difficulty is not, however, a lexical ambiguity of the predicate "believe" and it is not a syntactic one either; nevertheless, it is a referential ambiguity of belief expressions. Thus we do not see any basis for following this restriction and we claim that the referential ambiguity of attitude constructions is semantic

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[2] Quine's inner-theoretic problem of the failure of Leibniz's Law (substitutivity *salva veritate*) in intensional contexts will be seen as a separate issue from the problem of conversational substitutivity in attitude ascription.

[3] This does not mean that there are no logical inconsistencies among mental attitudes but that attitudes constitute a network where psychological inference replaces the logical one: there are factors which can render perfectly logical inferences impossible and, on the other hand, trigger non-logical inferences as well. But this issue from the straightforward, overt consistency of beliefs, i.e. consistency concerning the person/object referred to by using a certain name or definite description. See also J o h n s o n - L a i r d 1983, L a k o f f 1987 and W i l s o n and S p e r b e r 1986A.

[4] For the present purposes we shall ignore the distinction between *sentence* and *statement. Utterance* can be defined as a single expression of a sentence in a particular situation.

in nature and can be described by a semantic analysis, e.g. of the *lamb-da*-categorial type (cf. Cresswell 1985), showing the difference of sensitivity to structure exhibited by these constructions under different circumstances (and where the priority of one of the possible readings can also be observed on the basis of contrastive studies). Stich says that such problem, if it is semantic in nature, must fall under *vagueness* or *undefinedness*, similarly to natural language existential quantifiers such as "a", "some". This classification is regarded as incorrect. Moreover, the phenomenon is too systematic to be called *context sensitivity* either.

Another contentious view of Stich concerns the speaker's awareness of these readings. Stich says that in order for beliefs to be ambiguous between *de re* and *de dicto*, the believer has to have one of these readings in mind. We do not have any explanation concerning the grounds for such a conviction; it seems to be unfounded, and so does the general claim by Stich that there are no such states as propositional attitudes[5].

At first sight, we may say that all beliefs are uttered with the *de dicto* implication: beliefs can be taken as being "in the head" and constructed in a certain inner language which would not be sensitive to a whole range of names for the represented entities: these objects must have a specific label in order to function in a thought at all[6]. On the other hand, we could argue that beliefs which are not "about things" (existing or not) are not beliefs at all: knowing only one guise of a thing, its one name, means that our linguistic competence is, in most cases, not good enough to communicate any belief which would be "about a thing" at all. In this sense, only *de re* beliefs would be full, "proper" beliefs, and certainly would be more fundamental as a description of a concept of belief.

To argue for the latter view from another standpoint, we can say that *de re* attitudes are more fundamental in a sense that they require our being able to use an expression deictically and nothing else. On the other hand, attitudes *de dicto* require further information (from our background knowledge, or whatever other source) to render talking about an object under a particular guise possible[7] (see also B u r g e 1977).

Both these views have to be, however, rejected. They involve a misunderstanding of the term *de dicto*: referring to an object under its one guise does not have anything to do with the question whether beliefs are in the head and whether they refer to a real *res*. *De dicto* means, according to the definition commonly accepted (i.e. according to the view stating that *de re* can be virtually regarded as the same as *relational*, whereas *de dicto*

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[5] N. B., so does D e n n e t t 's (1978) view that they are theoretical constructs.

[6] Cf. S e a r l e 1983 who claims that all beliefs are *de dicto* and only some of them, those about real objects, are also *de re*.

[7] Although Kripke would deny this claim with respect to proper names.

as *notional*), that the believer lacks certain essential knowledge which would enable him to recognise the object when confronted with it/him/her (cf. at this point Hintikka's 1969 methods of individuation). In this sense he holds only a *partial* belief[8].

Another possible argument in favour of the *de re/de dicto* ambiguity in reading belief expressions can be summarized as follows: if there was such a distinction, a person reporting on one's beliefs would have to know whether the believer would consent to this report, i.e. whether he or she possesses the same information about the object of belief as the reporter (cf. Stich 1986). However, it is difficult to see why it has to be so; the reporter may assume that, if there is no evidence to the contrary, the belief is a *de re* one. And this is the standpoint which is being defended throughout this article as the one which reflects better the actual mechanism of construing a belief report[9].

However, it must be made clear that to justify the above distinction does not mean to claim that we are aware that our beliefs are in fact *de re* or *de dicto*. We are aware of the mode of individuation, i.e. that we would or would not be able to use the name "Ortcutt" deictically when no perception was involved in the initial act of acquiring knowledge about him. The distinction as applied to beliefs is a different issue, although strongly related to the modes of individuation: it merely shows what the beliefs are *taken to be* by the hearer who makes a belief report; it is a result of the hearer's analysis of one's belief, that is the first stage of the process of attitude ascription. And in this sense it is an observable fact that deciding what kind of belief it is, is what we actually do whenever any doubt arises as to the referent of the object of belief; namely, first

   (1) we usually assume that our beliefs are all connected in a network
   and thus they have to be consistent;
next,
   (2) we take the believer to be *like us* and we process his belief as if it
   was ours;
then,

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[8] It is difficult to speak about any *consensus* as to the definition of the *de re/de dicto* distinction. However, it is commonly agreed that these names lost their original meanings, namely as an attitude "to a thing" and "to a name". My claim against the psychological implications of *de dicto* has to be seen as revealing a categorial mistake: what makes a belief *de dicto* is not the place it is in but the kind of relation it exhibits to its real world object. This much is certain.

[9] The arguments for non-ambiguity of beliefs as opposed to belief expressions which are the main subject of Stich's paper constitute a separate issue, the one that does not seem to arouse much controversy.

(3) we add the information we have concerning his/her background knowledge (as different from ours), taken from various sources, but mainly from the believer's linguistic and non-linguistic actions.
Finally,

(4) on this basis, we decide whether the name the believer used in his/her belief sentence is *correct*, i.e. whether other members of the linguistic community would ascribe the same referent to it. If the answer is "yes", in spite of the presence of the initial doubt which caused the whole process described in (1)–(4), then

    (a) the (psychologically possible) inferential processes differ from person to person and it is difficult to establish conditions for consistency of one's beliefs.

If the answer is "no", then

    (b) we realize that the belief must be taken as a *de dicto* one (i.e. lacking certain universality) and consequently our report contains an altered description of the object in question.

We have to notice, however, that the (a) option is practically impossible, not to mention the methodological objection, namely that such a process of reasoning which is caused by an initial doubt and leads to the cancellation of this doubt by proving that our inferential processes are unique in every case would be close to circular: only having assumed the requirement of consistency of one's beliefs can we arrive at the information about one's lack of knowledge about an object of belief and thus ascribe an "incomplete" *de dicto* belief. The path from (1) to (4b) is thus uninterrupted: point (4) is simply reduced to observing that the name the believer used must be wrong and it is done merely on the basis of our initial intuition that "something is inconsistent", backed by further investigations. And this is the first argument for the claim that the *de re* reading is *assumed* in our processing of one's belief as a basic, typical, default case. The whole process of choosing between the two readings begins only when an initial doubt arises. And the same conclusion can be reached when we observe actual conversations (see Klein 1981).

UNMARKED *DE RE*?

The *de re/de dicto* distinction taken in its weak sense (i.e. not as ontologically present in beliefs but merely as a methodological tool for their understanding) can be thus regarded as justified. It is also clear that it is empirical in nature, not being, nevertheless, a mere lexical or syntactic ambiguity: if it was, all sentences would be ambiguous in this way!

However, the claim about the priority of the *de re* reading requires further arguments. We shall search for them collecting evidence from the background knowledge, physical and mental activities, and finally, language itself, i.e. the semantic analysis of attitude expressions.

In our two examples of Ralph's beliefs about Ortcutt we can observe that the name of the individual believed to be (or: not to be) a spy is ascribed to this individual on the basis of different principles in each case. In the first one, Ralph perceives a man and ascribes a property of being a spy to him. We can wonder whether Ralph knows the man to be Ortcutt or simply is able to point at him, i.e. recognise and describe him without being able to give his name. When we know both of Ralph's beliefs (i.e. also the one expressed having heard the newspaper report), the doubt disappears. But was it really there in the first place or did the difficulty occur only after being acquainted with the second situation? Similarly, knowing the second situation without the context of the first, do we really wonder whether Ralph knows who he is talking about? Certainly not. There nust be special reasons for this doubt to appear.

Let us imagine Tom saying to us:

"I think Frege is still alive".

Do we really set ourselves to solving a dilemma what referent Tom ascribes to the name "Frege"? Certainly not, as long as we do not hear from Tom something like:

"Look, the man over there is the author of 'Über Sinn und Bedeutung'. I told you he was still alive!"

or, in another case,

"I know that Carnap wrote 'Über Sinn und Bedeutung'",

or any other sentence which would invoke our feeling of doubt as to Tom's knowledge concerning the object of his belief. And in this trivial sense the *de re* understanding of one's belief can be seen as simply assumed in any typical conversation.

However, this point is not as trivial as it looks. In possible worlds semantics, the sentence

"Ralph believes that Ortcutt is a spy"

could be interpreted as follows: in all possible worlds compatible with what Ralph believes, it is the case that Ortcutt is a spy. Intuitively, we can see that the substitution of "Ortcutt" for "the man in the brown coat" can be blocked between a belief statement and a report since we can imagine a possible world in which these two names refer to two different individuals, although in our world they both refer to the person called Ortcutt (and wearing the brown coat on this particular occasion). This difference in referents is the case when Ralph is mistaken as to Ortcutt's identity; in

the world of his beliefs, Ortcutt and the man in the brown coat are two different men.

In other words, Hintikka would say here that the name "Ortcutt" refers to *a set of individuals* from different possible worlds[10]. Moreover, following his view, we claim that when we hold a belief we are also aware of the way in which we determine the reference of the term used in our expression of belief, that is we are aware whether we know the object directly or merely by its name or description.

But even if it is so, does it help the believer to realize the limitations of his/her knowledge or the fact that he/she can be referentially mistaken? Certainly such implications do not arise. It is not only the case that we do not have access to the person's mental processes and thus his/her reasons for using a certain name, but also it is common-sensically obvious that Ralph, not having access to these "disambiguating worlds", must assume that they do not exist and that both *de re* and *de dicto* manners (or, more correctly here: referential and attributive[11]) of individuating an object are equally valid and powerful. Thus, in our sense of *de re* beliefs, he is convinced that his beliefs are always *de re* (meaning: *unmarked*). And, necessarily, so is the hearer. This fact does not, however, alter our previous statement namely that the believer is aware of the distinction of the sources of belief. Consequently, we can repeat that a certain minimum of doubt is required to break the initial certainty that everything proceeds smothly in our process of communication.

As a digression it is worth mentioning in this place that the issue of the bearers of truth and falsity in the case of belief seems to be solved: a report can be true when made on the basis of one belief statement, but become false when what looks like a contradictory belief is also heard. Thus the context (situation) plays a crucial role for the understanding of a belief sentence and so sentence cannot constitute the unit which is responsible for truth and falsity; it has to be the belief itself. And if so, at the level of belief, the referential ambiguities must necessarily disappear.

One more explanation is required before we pass to thoughts and actions. Namely, it is necessary that we acknowledge the possibility that the believer may not assign any individual to the name or description used. In other words, we may hold a belief which is purportedly what looks like neither *de re* nor *de dicto* and then the reporter must be allowed to

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[10] We leave this issue unresolved: the decision as to whether it is the same person in every possible world or a different one would not lead us any further.

[11] H i n t i k k a (1969) calls these methods *perceptual* (or: *contextual, perspectival, "by acquaintance"*) and *physical ("by description")* respectively.

substitute any name describing the object of belief as if it was a belief *de re*. The main reason for doing so is that the belief, in fact, has an object provided by the concept, idea of the thing. Moreover, no limitation of knowledge occurs here that would allow us to say that the belief is "incomplete", "faulty", or *de dicto*: it is deliberately "devoided of *res*". Taking such cases (including trivial beliefs with no presupposed knowledge) to be *de re* intuitively is another supportive evidence for the priority of the latter interpretation.

We have said that belief sentences must be fully interpretable at the mental level (i.e. of thoughts, beliefs as such). Roughly speaking, we could choose here one of the two standpoints: we can assume that the mind has access to all cognitive information previously acquired, or, following F o d o r (1989), claim that this access is constrained. Moreover, it must be remembered that the inferences we draw do not have to be logical ones, and even when they are, there are some psychological limitations on them, i.e. we do not draw all logically possible inferences from our beliefs[12]. This allows us to claim that there is a certain amount of logical inconsistency possible among mental attitudes, but only as we see them, not as they really are. However, this affects only inferences rather than immediately contradictory beliefs[13].

To illustrate the claim of the logical inconsistency among mental attitudes it is worth looking at the cognitive perspective of the system of beliefs: the apparent inconsistency can be derived from the way our mental processes work.

According to J o h n s o n - L a i r d 's (1983) cognitive approach, people are said to construct *mental models* of their premises in syllogistic inference. Such models are said to correspond in their structure to the states of affairs described. Some meanings of words are said to relate directly to reality, being themselves mental constructions imposed on the world; others are said to refer to something whose structure is unknown and thus the intensions of the words are not known either. The third category comprises words which relate to analytic inferences. The relation of all these kinds of words to the world depends on human "cognitive capacity" and therefore on the mutual interaction of the words, leading to their use in a discourse. Consequently,

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[12] We claim that our beliefs (knowledge) constitute a network (sometimes also called "cluster"). The fact whether we utilize certain part of this knowledge depends on various external and internal factors accompanying a situation of a conversation. For explanation of how an item of information enters our background knowledge and how it interacts with other items see L e w a n d o w s k a - T o m a s z c z y k (1987:62–73).

[13] Cf. also R y l e (1979) on the conditions for such a lack of inference. See also W i l s o n and S p e r b e r (1986:247).

[...] a discourse is true if and only if there is at least one mental model of it that can be mapped into the real world model in a way that preserves the context of the mental model, i.e., the individuals represented in the mental model occur in the real world with the same properties and the same relations holding between them. J o h n s o n - L a i r d (1983:441)

The semantics of beliefs is claimed to be provided by embedding one mental model in another. A more accurate explanation of how we build these models is provided by L a k o f f ' s (1987) proposal of *idealized cognitive models* (ICMs) for the organization of our knowledge. In representing our knowledge[14] we make use of "default values"[15] when no other information (or: information that something other than contained in default values is the case) is available.

The approach which makes use of this ICM framework and explains the apparent inconsistency of beliefs is F a u c o n n i e r ' s (1985) semantics (see also F a u c o n n i e r 1986 on the distinction "role-value"). Language is regarded here as a phenomenon which builds *mental spaces*, its own constructions. The opaque and transparent readings of intensional contexts are explained by the ability of language to construct different spaces, where objects are linked by different "pragmatic functions"[16]. In other words, a name referring to an element of one space may also refer to an element of the other space linked with the former by a *connector* if this element is a counterpart of the first one. A name can also set up a new element in the second space if no such counterpart exists.

To be less abstract, let us apply the "spaces" explanation to the *de re/de dicto* ambiguity of the "Ortcutt" example. The differentiation between the (1) *de re* cases where a representation of a person (object) in a believer's mind has its equivalent in the real world and the (2) *de dicto* cases where, strictly speaking, no such equivalent exists is an essential point in this cognitive description of belief reports. Schematically, it would look as follows: *de re*:
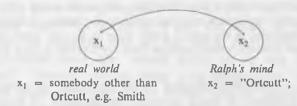
$$x_1 \qquad\qquad x_2$$

real world   Ralph's mind
x_1 = Ortcutt x_2 = "Ortcutt"

de dicto:

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[14] Mostly in what he calls *propositional models*.

[15] Cf. Putnam's stereotypes: "yellow" for gold, etc. N. B. what is essential in Lakoff's approach is the connection between operating our conceptual system and the bodily experience: the mind is not a computer-like machine that manipulates abstract symbols (words, etc.): thought and conceptualization are dependent on human body.

[16] See F a u c c o n n i e r (1985:22) for the "ID Principle on spaces".

(1)

x_1 x_2

     real world   *Ralph's mind*
x_1 = somebody other than x_2 = "Ortcutt";
      Ortcutt, e.g. Smith

which, from Ralph's point of view, would be a *de re* belief, although it is possible that (1) is in fact (2):

(2)

                                              x

     real world   *Ralph's mind*
                                    x = "Ortcutt",

as in a particular proposition, e.g. "Ortcutt is a spy"

This view narrows down the options in looking at the subject of the belief sentence, namely:

(I) If a referring expression does not seem to describe an individual of the real world, then the reference is made to an entity present merely in the believer's thoughts since there is no object in the real world which the belief is *really* about.

Investigating it any further, namely whether it is the case of (1) or (2) above, is a different level of analysis that can be accounted for mainly by further contextual information such as that from our actions.

What it means for our "Ortcutt" example is that the options of reading of these beliefs are narrowed down to

(II) In the first situation, Ralph holds the belief *de re* about Ortcutt (not knowing his name since he uses it also in the other situation), and in the other he holds a *de dicto* belief "about a mental object", somebody called "Ortcutt" but present only in his mental representation.

Thus,

(III) Given our two initial situations, we can report on the first by the sentence "Ralph believes that Ortcutt is a spy", since (1) the object of the other situation is different in kind (i.e. a mental one) or (2) the belief expressed in it is about somebody else, due to the belief being of a *de dicto* nature.

And thus the ambiguity is solved and the apparent lack of inference between beliefs explained. Consequently and juxtaposing our claims based on Hintikka's methods of individuation across possible worlds and the arguments for the consistency of one's beliefs, we claim that

(IV) Given both of the discussed situations, we cannot report on the second in a sentence of the form: "x is (not) a spy" where x is a simple

referring expression, since Ralph's response to the newspaper report concerns not only a different individual than this report, but an individual who, under this name, does not exist.

The crucial question is: how do we know that Ralph ascribed wrong name to the individual in this belief? This is clear by comparison with the first situation where no such case can arise due to the presence of Ortcutt and the description used. But we must remember that Ralph may not have ascribed the name "Ortcutt" in his other belief to anybody; then this is a true belief *de dicto*, referring to the whole proposition. Nevertheless, this does not really matter: both cases have to be handled by enriching the description in the embedded clause of a belief report:

(V) "A believes that somebody called x φs" is a correct report on a *de dicto* belief.

The further differentiation within the *de dicto* type can be provided within the analysis of the non-linguistic activities.

What we tried to find out here was how such an explanation of our inferences influences the dilemma of te priority of one of the readings. And again, as before, the answer seems straightforward: there would be no question of factors preventing inference (such as the distance in time or low gossip value of the information mentioned by Ryle) if the names were void, acquired by description, just for the names' sake; no incentive would be created to retain such information, similarly as having no fully internalized knowledge of the laws of physics, there is no incentive to remember or possibility to "fully" believe (if at all possible) that "$E = mc^2$". Our mind processes only what is useful. And the sources of this usefulness seem to allow for degrees: perceiving comes first, whereas acquiring information indirectly (through a newspaper report) stands below it on the scale of importance; it is a well known observation that

> When the speaker refers to a specific individual, by whatever means, he tacitly accepts the convention that he will provide any information (not given in the context) that is necessary for the addressee to identify the individual in question. L y o n s (1977:655).

Applied to our "Ortcutt" puzzle, this claim amounts to saying that since reference is context-dependent, we have to make use not only of linguistic means of conveying information in our decoding, but also of the non-linguistic one, such as ostension. And the contribution of the non-linguistic (here also: nonverbal) component can contribute to the meaning of the utterance to a no lesser degree that the verbal component: this is the case when using the name "Ortcutt" is in conflict with the ability to identify (correctly) Ortcutt deictically. In such cases, as Lyons (1977:63) suggests, it is the paralinguistic information (from ostension) that dominates.

To argue further for the priority of ostension, we can refer to S p e r b e r and W i l s o n 's (1986:46) theory of relevance: the process of decoding information is said to rely on the individual's cognitive environment, i.e. a set of his/her assumptions, often contradictory, from which only some will be chosen and processed. As they further say, "ostension comes with a tacit guarantee of relevance" (*ibidem*, p. 49): information from ostension triggers the process of decoding since it makes the addressee choose the correct (relevant) set of assumptions. In other words, in our situation, pointing at Ortcutt takes precedence over saying, let us say "Smith is a spy" in the same act of utterance; we regard ostension as more relevant information and more exact representation of the situation[17].

To conclude, when Ralph believes that the man pointed at is a spy and this is correct, the belief is true and *de re*, whereas when he also thinks that (in fact the same) Ortcutt is not a spy, this belief is false about Ortcutt and true and *de dicto* about whoever it is really about since this is the case where the lack of knowledge is explicitly exhibited. And, as it was mentioned before, this classification concerns only the beliefs as the reporter sees them, not as they really are, for example the second belief is not about Ortcutt at all, the above analysis depicts the process of recovering the actual belief by the reporter. In the first situation the lack of knowledge may also occur but it is negligible unless revealed in conjunction with the second situation; otherwise there always would be certain thing we do not know and the distinction would not be of much profit. Thus the "fault" or "incompleteness" is perfectly concealed in the first case and the belief is thus *de re*: whatever substitutions the reporter makes, provided they are correct to his knowledge, he cannot make an error. And this seems to be another proof for *de re* being prior: both beliefs can initially be taken as *de re* and while the first one withstands its weaknesses while confronted with the other, the second one is discarded as not applicable.

Do beliefs lead to actions? We can observe that not necessarily. A person believing something will not always act in accordance with his/her beliefs, and this is so for numerous reasons. But beliefs and desires may sometimes *interact* with other factors as the causes for actions. And thus the analysis of actions is important for eliminating certain belief ascriptions. We shall define an action as an activity performed intentionally, although not necessarily with a belief (conviction, etc.) that performing it is useful or

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[17] Cf. also: "The hearer supplies specific contextual assumptions and derives specific contextual implications. What varies is not the specificity of the assumptions and conclusions derived, or the formality of the reasoning processes involved, but simply the amount of foreknowledge the speaker must be taken to have had of the way the utterance would be processed, and with it the degree of responsibility he must take for the particular conclusions derived". W i l s o n and S p e r b e r (1986A:61).

brings about the result which satisfies us. It is now obvious that within this definition, mental events can contribute to the general causes of such activities, sometimes being even the only reason (cf. also D a v i d s o n 1963).

This subject is vast. But in whatever scope we take it, the above view seems to agree with the observation of real situations of attitude ascription. To trivialize, when one opens the umbrella, we know that there is a set range of reasons for doing so and this knowledge at least helps us to establish the beliefs as:

– it is raining;

– the sunshine is very intense;

– the person wants to see the umbrella before buying it; and some other reasons in other situations, if the person is like us.

What we have said so far about actions is not very conclusive. However, the convincing argument for the importance of such an analysis comes from the discussed superiority of a non-linguistic information over an utterance. A man pointing at Mr Smith and saying: "Ortcutt is a spy!" will be taken to believe that Smith, rather than Ortcutt, is a spy. And in conjunction with what we have said above about elimination, this suffices to conclude once again that the *de re* reading is more fundamental and unmarked in our ascription of beliefs: if not for the act of ostension dominating over the linguistic act, Ralph would be taken to believe that the real Ortcutt is a spy, not that "someone whom he (mistakenly or not) calls 'Ortcutt', but we do not know if he also calls him 'the man in the brown coat' and thus God knows whom he really means!"[18] is a spy. Our behaviour shows what referents we assign to names we use in our statement of belief. If it does not, we cannot possibly suspect that something is wrong!

What remains to be said concerns language constructions. No linguistic theory provides a satisfactory explanation of the *de re/de dicto* ambiguity. Not that this is a task for a linguistic theory alone; it should give account of it and this is what most theories successfully do. This much is certain. When we look at different types of semantics, such as situation semantics of B a r w i s e and P e r r y (1983), Montague model (i.e. PTQ, 1973), or cognitive approaches for instance that of Fauconnier's mental spaces (1985), we can see that only *descriptive adequacy* is reached: they acknowledge the fact that a belief sentence has two readings caused by the transparent or oblique occurrence of the subject of the embedded sentence and these two readings acquire their semantic representation in terms of any contemporary semantic theory. The ambiguity as such is not linguistic in nature (i.e. as

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[18] Another argument comes from B a r w i s e and P e r r y 's (1983) *semantic innocence*: believing that the man in the brown coat is a spy, we believe that Ortcutt is a spy, although we may not know it.

Stich understands "linguistic ambiguity"); it does not come from the lexicon or syntax[19]. However, it is an empirical fact, caused by the scope and quality of our knowledge concerning a particular object. Thus it can only acquire a semantic representation, i.e. mapping into a model of language, rather than a semantic explanation as such. However, the question of the cognitive priority of one of the readings is a different one: it can be answered by reference to languages other than English where the distinction is linguistically represented or where at least the scope of meaning of certain belief constructions shows the relation between the two readings. In other words, there are languages where one type of belief construction has a wider scope of interpretation, ranging over the other type, which means that this other type is a marked, further specified case. And it can be proven that the broad, unmarked reading is the *de re* one, whereas the *de dicto* one is its *sub-case*. Deciding on the latter as a belief report requires further information, changing the "default" *de re* one into the special case of *de dicto*.

In certain languages there are linguistic means of differentiating between these readings. There can be a different complementizer used, and also a different type of complement clause. In Polish, for instance, in the negative belief reports the subjunctive is used in a complement clause, introduced by a complementizer whose semantic field would comprise only a part of that of "that" and its Polish equivalent. And this special type of clause is used only as a marked case, i.e. only when certain doubt arises as to the ascription of the referent to the name used by the believer. If we did not have the additional piece of information, the ordinary *that*-clause would be used, similarly to the genuine *de re* case.

This linguistic intuition (which is an observable fact) is confirmed by the formal semantic analysis. If we accept Fregean compositionality principle and amend it by saying that the meaning of a sentence is sensitive to the structure of its constituents as well (cf. C r e s s w e l l 1985), we can see that only the *de re* reading exhibits such sensitivity; only in this case can we substitute a different name for the individual in question in our report. In the *de dicto* case, the embedded sentence is taken as one entity (or two, when negation is involved): subject and predicate constitute one unit. This reflects the fact that we do not know what the believer knows about the object of his/her belief and thus we are not free to make substitutions of

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[19] Non-linguistic ambiguity means here a kind of ambiguity that can be d e s c r i b e d by a linguistic analysis, but not e x p l a i n e d by reference to linguistic units: it is worth noticing that it is not i n d e t e r m i n a c y or v a g u e n e s s either. We can call it semantic, in a broad understanding of semantics as a study of meaning of linguistic expressions by means of analysing the relations between these expressions, the speakers, and the phenomena of the world to which they refer (i.e. what is usually called philosophical semantics).

coreferential names. But we have to remember that this structure reflects the fact of our being aware that something is wrong with the ascription of the referent, i.e. there must always be some reason for the *de dicto* reading. The analysis of belief constructions shows therefore that the construction which comprises both readings has the structure of the *de re* one, i.e. it is sensitive to the structure of the embedded sentence, being thus the unmarked, primary, default reading, with a smaller clause integrity than the other, *de dicto* one.

This is not the place to provide further evidence. The above remark must be taken only as a further possibility of construing a semantic argument in favour of the priority of the *de re* understanding of belief sentences which requires a separate study[20]. C r e s s w e l l ' s (1985) claim that the complementizer "that" belongs to different categories, i.e. operates on (1) the whole embedded sentence or (2) the subject and predicate of the embedded sentence separately, or (3) smaller units of the embedded sentence, can be further developed by the analysis of lexical items fulfilling the role of the complementizer "that" in other languages. Polish complementizers "że", "iż", as opposed to "żeby", "aby", "by", "jakoby" in negative belief sentences[21] present a very good examle of the lexical differentiation between *de re* and *de dicto*: sentences with "że" complementizer are analysed primarily as sentences where the complementizer operates on the separate constituents of the embedded sentence, rendering as a result the *de re* interpretation, whereas sentences with "żeby" complementizer ("że" + mood maker "by") exhibit the phenomenon of a very strong integrity of the embedded sentence, mainly due to its being embedded under the complementizer and the category of the subjunctive[22], and thus render the *de dicto*, marked reading. But this argument from categorical grammar will not be developed here; it exposes the semantic priority of *de re* rather than its conversational unmarkedness in attitude ascription and it is the latter which is the subject of this article.

CONCLUSION

After all, it is useful to sum up the factors which determine belief ascription. First, the meaning of a belief sentence makes use of our perception (with all the inferences in it), although to a lesser degree than

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[20] For the detailed semantic analysis of Polish and English belief sentences within *lambda*-categorial language see also J a s z c z o ł t (1992).

[21] "Ralf nie wierzy, że Ortcutt jest szpiegiem" vs. "Ralf nie wierzy, żeby Ortcutt był szpiegiem".

[22] See J a s z c z o ł t (1992).

in the case of factive attitudes ("know", etc.). Non-verbal component of meaning having a dominant role over the verbal one, the *de re* interpretation of belief utterances seems evident: the speaker *knows who* the object of his/her belief is and in attitude ascription we make use of this fact.

Next, we established that beliefs constitute a network (cluster) and thus our background knowledge influences the interpretation of newly acquired information (one's uttered belief). The fact that beliefs interact makes us presume that we use our knowledge in constructing a report in assumption that this knowledge corresponds to the knowledge (system of beliefs) of the believer; without this latter claim we would not preserve the meaning of the original sentence, which is the fundamental requirement of a conversation (cf. Grice's principles of being informative, relevant, etc.). In other words, if we have evidence that our knowledge relevant to the interpretation of the belief utterance differs from that of the holder of the belief, we have to indicate it in the belief report. If no such indication occurs, the report can thus be taken to relate a *de re* belief.

In other words, the reporter connects a belief sentence with his/her previous knowledge and with the system of his/her beliefs and assumptions of the moment of perception, and also with the needs and desires concerning the world. And all these factors separately analysed, together with the arguments from cognitive (Fauconnier's) and possible worlds (Hintikka's) perspective and the criticism of folk psychology, show the indispensability of the *de re*/*de dicto* distinction and, moreover, the epistemological priority of the first.

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WERBALNE I NIEWERBALNE PRZEDSTAWIANIE POSTAW EPISTEMICZNYCH

W artykule przedstawiam tezę, że zadania wyrażające postawy epistemiczne, a w szczególności zdania typu: „X wierzy, że p", są semantycznie wieloznaczne; interpretacje tych zdań można podzielić na interpretacje *de re* i interpretacje *de dicto*.

Wykazuję ponadto, że interpretacja *de re* jest prymarna zarówno (1) w sensie epistemologicznym, dla zbudowania teorii semantycznej stosującej się do zdań wyrażających postawy epistemiczne, jak i (2) w sensie psychologicznym, w rzeczywistym przypisywaniu postawy epistemicznej (tutaj: wiary) dokonywanym przez interlokutora na podstawie werbalnego i niewerbalnego przedstawienia postawy epistemicznej przez podmiot tej postawy („holder of belief").