

Chapter 16

Propositional Attitude Reports: Pragmatic Aspects

Kasia M. Jaszczolt

1. Propositional attitudes and propositional attitude reports

Believing, doubting, knowing, fearing, hoping, and so forth, that something is the case are all examples of a propositional attitude: a cognitive attitude to a certain content (proposition) expressed by a sentence. Reports on people's cognitive attitudes pose a particularly challenging problem for semantics and pragmatics for a variety of reasons. First, the sentence uttered by the holder of the attitude may not give sufficient information about the intended proposition because the information states of the holder of the attitude and the reporter on the attitude differ more than the utterer of the attitude predicted. For example, uttering (1), Lidia may not know who the author of *Wolf Hall* is and therefore dissent from the report made by Charles in (2).

- (1) The author of *Wolf Hall* is visiting Cambridge this spring.
- (2) Lidia believes that Hilary Mantel is visiting Cambridge this spring.

Second, Charles, who reports on Lidia's attitude, may not know who wrote *Wolf Hall* and simply 'echo' Lidia's statement of belief as in (3).

- (3) Lidia believes that the author of *Wolf Hall* is visiting Cambridge this spring.

Third, either Lidia or Charles may be under the misapprehension that *Wolf Hall* was written by, say, Michael Morpurgo, producing (1) or (3), respectively, with a referential mistake, associating the description with an incorrect referent. This gives various combinations in which we include the scenarios where the holder of the attitude (i) knows the identity of the subject of the uttered sentence and is able to substitute other expressions to refer to it/him/her; (ii) does not know the identity of the subject and holds a, so to speak, 'half-digested attitude' (a *semi-propositional belief*, see Sperber 1985; 1996); (iii) is mistaken as to the identity of the subject. Next, (i)-(iii) also apply to the reporter. Allowing for the misjudgement of the background information (say, in (2), Charles thinks that Lidia knows that Hilary Mantel wrote *Wolf Hall*), presents us with the full spectrum of the conversational problem with attitude reports.

Moreover, a report can be produced on the basis of non-linguistic evidence. Suppose Lidia is reading *Wolf Hall*, showing clear signs of involvement in the story and reluctance to put the book down when Charles arrives. Charles utters (4).

- (4) Lidia thinks *Wolf Hall* is a very captivating novel.

In this chapter I focus on this conversational problem and hence address the *pragmatics* of propositional attitude reports. But, as will become clear in what follows, the pragmatic problems and the semantic problems with attitude reports are closely related. I shall also argue that the semantics and the pragmatics of attitude reports are closely related in that the most satisfactory semantic solutions are also at the same time the most satisfactory pragmatic solutions because semantics benefits from the contextualist outlook and from assigning truth conditions *not* to minimal content of sentences but rather to the intended speaker's meaning,

thereby taking Grice's programme further into new, compositional, pragmatics-rich truth-conditional semantics. Let us therefore begin with some selected problems and some semantic and pragmatic solutions.

2. Attitudes at the semantics/pragmatics interface: An overview

Standard approaches in philosophy of language consider propositional attitudes to be ambiguous between the *transparent* and the *opaque* reading. The transparent reading asserts the existence of the subject of the attitude, giving it a wide scope as in (5a), while the opaque reading puts the referent in the scope of the attitude verb as in (5b). 'Bel_L' stands for 'Lidia believes that', 'AoWH' for 'the author of *Wolf Hall*', and 'VC' for 'is visiting Cambridge this spring'.

(5) Lidia believes that the author of *Wolf Hall* is visiting Cambridge this spring.

(5a) $\exists x (\text{AoWH}(x) \wedge \forall y (\text{AoWH}(y) \rightarrow y = x) \wedge \text{Bel}_L \text{VC}(x))$

(5b) $\text{Bel}_L \exists x (\text{AoWH}(x) \wedge \forall y (\text{AoWH}(y) \rightarrow y = x) \wedge \text{VC}(x))$

(see Russell 1905, 1919; Quine 1956; Neale 1990; Jaszczolt 2010b). 'Transparent' and 'opaque' refer here to the characteristics of the definite description in the subject position of the *that*-clause, namely transparency and opacity to the substitution of coreferential expressions in place of the extant one, say, 'Hilary Mantel' or 'the winner of the 2009 Man Booker Prize' for 'the author of *Wolf Hall*'.

Now, Quine (1956) focused on the problem of 'quantifying into' such constructions, hence emphasising their structural ambiguity which Quine referred to as the ambiguity between the *relational* sense (where substitutivity holds) and the *notional* sense (where it does not). His tentative solution pertained to 'degrees of intensions' for quantifying into such contexts. On a distinction that is more relevant for our cognitive and pragmatic interests, we have the reading in (5a) according to which Charles ascribes to Lidia a belief in a particular, known individual, and the reading in (5b) on which the reporter says that the holder of the belief believes that there is someone to whom the description 'the author of *Wolf Hall*' correctly applies and about whom she predicates an upcoming visit to Cambridge. The latter report pertains to a belief about the proposition, *dictum*, and is called *de dicto*. (5a) reports on a belief about an intersubjectively identifiable individual or object (*res*) and is called *de re*.

It is immediately evident at this point that (5a) and (5b) fall short of presenting the pragmatic problem with reporting on cognitive attitudes. The mistaken identity scenario is not accounted for. In fact, it is not normally accounted for in the semantics of attitude reports because traditionally semantics has been understood as pertaining to the meaning of the sentence rather than utterance. In short, (5c) is not offered as a potential reading, where *m* stands for a proper name (and hence a directly referring expression) Michael Morpurgo.

(5c) $\text{Bel}_L \text{VC}(m)$

Neither are the mistakes and information deficiencies of the believer and the reporter accounted for. The semantic problems of the ambiguities *de re/de dicto* or transparent/opaque require considerable fine-tuning to reflect the complexity of the pragmatic problem. In brief, as far as utterance interpretation is concerned, we are not dealing here with the ambiguity of scope but with a much more complicated picture. If we wish to retain the concepts of *de re* and *de dicto* beliefs and *de re* and *de dicto* reports, the latter also making use of the transparent/opaque distinction, we have to add *res*₁ pertaining to correct referring and *res*₂ pertaining to incorrect referring, as well as the higher-level distinction into correct/incorrect referring by the holder of the belief vis-à-vis correct/referring by the reporter. This amounts

to a great deal of pragmatic information and a hefty dose of Gricean intention-based theory of utterance meaning (see Haugh and Jaszczolt, this volume).

Next, in addition to the *de re/de dicto* distinction, we also have to point out the distinction between *factive* and *non-factive* attitudes and the corresponding distinction between factive and non-factive attitude verbs. Factive verbs engender the entailment (or presupposition, depending on the theoretical assumptions) that the proposition expressed by the *that*-clause is true. ‘A knows that *p*’ entails (or presupposes) that the proposition *p* is true. Non-factive verbs, on the other hand, such as ‘believe’ or ‘think’, do not give rise to such a relation. For example, (6) reports on a factive attitude and (7) on a non-factive one.

(6) George knows that the Conservatives won the election.

(7) George believes that the Conservatives will win the election.

In addition, a third category of so-called *counterfactuals* (or *contrafactuals*) is sometimes distinguished whereby verbs belonging to this category entail the falsity of the embedded proposition. ‘Wish’ or ‘imagine’ are good examples of counterfactuals, as in (8).

(8) George wishes that the Liberal Democrats had won the election.

It goes without saying that it is the category of non-factives that poses a particular difficulty for semantics and therefore examples belonging to this category, and in particular the verb *believe* and the corresponding attitude of belief, are the most widely studied ones.

Attitude reports are an example of so-called *intensional contexts*. In intensional contexts (as contrasted with extensional context), two expressions that refer to the same individual (*coreferential expressions*) are not always substitutable for each other in that such a substitution may lead to altering the truth value of the sentence. From the point of view of pragmatic analysis, we therefore say that such a substitution cannot guarantee that the meaning of the attitude report will be preserved. From the traditional semantic point of view, the problem is that the law of substitutivity does not hold. In particular, the law of truth-preserving substitutivity (referred to in the literature as substitutivity *salva veritate*), attributed to Leibniz, does not hold. Leibniz’s Law says that two things are identical with each other if they are substitutable where this substitution preserves the truth of the resulting sentence. Or, after Frege, *Eadem sunt, quae sibi mutuo substitui possunt, salva veritate*. The law is also referred to as the *identity of indiscernibles*.

In short, belief reports are an example of an intensional context and intensional contexts are characterised by the lack of applicability of Leibniz’s Law. But there is a further distinction worth mentioning, namely that between two types of non-extensional contexts: intensional and hyperintensional. Belief constructions are also sometimes called *hyperintensional* in that referring expressions that are substitutable for one another in other types of intensional contexts, such as modal constructions, cannot always be substituted in belief (and other attitude) constructions. Hyperintensional constructions involve an added level of difficulty for a theory of meaning in that expressions that are used to refer to the subject of the attitude may have the same intension, and yet not be substitutable. Directly referring expressions, for example, behave differently in these two types of contexts. Coreferential proper names are substitutable *salva veritate* in modal contexts, while their substitution in an attitude context is not always truth-preserving. In what follows, however, we shall not make use of intensional/hyperintensional as a qualitative distinction but instead we are going to discuss a scalar approach to this opacity to substitution. We will consider the possibility that there are different degrees to which the human concept pertaining to the referent ‘obscures’ the semantics and makes these constructions non-extensional. This option

is preferred in a pragmatic approach to attitude reports for one very important reason: in analysing utterance meaning and speaker intentions, we want to emphasise the fact that substitution can *sometimes* go through rather than the fact that substitution cannot be guaranteed. It is a well researched fact of conversation that unless the interlocutors have indication to the contrary, they assume that they use referring expressions with compatible and mutually correctly assumed background information and thereby there are no obstacles to substitutions. In other words again,

From the pragmatic point of view, all constructions are ‘extensional’ unless the context indicates otherwise.

On the contrary, traditional minimal, pragmatically uncontaminated semantic theory, as assumed in the analytic tradition, focuses on the fact that substitutivity in such a context is not reliable and therefore, so to speak, does not hold *tout court*.

A word of warning is needed at this juncture in that when one browses through the more than century-long tradition in analytic philosophy of discussions on substitutivity, one can observe that the law has become somewhat distorted. Leibniz’s Law states that things (in our case: terms, or expressions) are identical if they have all properties in common. Meaning-preserving substitutivity is one such property. So, one can infer that since such substitution does not guarantee that the meaning is preserved, coreferring terms cannot be deemed identical. However, what is commonly invoked in philosophical discussion is not the *identity of indiscernibles* but rather the so-called *indiscernibility of identicals*: if two things are identical, then they have all properties in common. We owe this rather different implication to Quine and it should be properly referred to as Quine’s Law. Again, in the context of the discussion of belief reports, we rephrase it as: if two expressions have the same meaning, then they have all properties in common. In other words again, if two expressions have the same meaning, then all that can be predicated of an object referred to by one term can also be predicated of an object referred to by the other term. Anything that is true of one is also true of the other as is summarised formally in (9):

$$(9) \quad \forall x \forall y (x = y \rightarrow (F(x) \rightarrow F(y)))$$

The problem is, of course, that when we want our theory of meaning to stay close to speakers’ intuitions, then no two terms will ever fulfil this criterion: as soon as we have a different way of presenting an individual, we have a different way of thinking associated with it. Equally, as soon as we consider two different people, or even one person on two different occasions, holding a belief expressed by one and the same sentence, we may have different thoughts associated with the subject of the belief. While some semantic theories find ingenious ways of ignoring these complications, the pragmatic problem with attitude report retains them as its core. Equally, any semantic theory of a contextualist orientation, that is a semantic theory that allows for a substantial intrusion of pragmatic inference into the truth-conditional content, will have them as its core. In what follows, I shall be making use of the law of the indiscernibility of identicals, remembering that this is not the same as the original Leibniz’s Law.

3. Attitude reports and pragmatics-rich semantics

Reporting on people's beliefs and various other mental states has generated a plethora of philosophical and formal semantic solutions. However, more and more frequently philosophers turn to the practice of conversation and to commonsense intuitions on the matter of substitutivity of coreferential expressions and on the content of the semantic representation of intensional constructions. In this section I briefly present some approaches which are associated with, or compatible with, the pragmatic problem with propositional attitudes, that is the approaches which do not shun complicating semantics and attempt to account for 'intuitive meaning', intended speaker meaning, at the cost of making the boundary between semantics and pragmatics less sharp.

Let us return to example (5), repeated below.

(5) Lidia believes that the author of *Wolf Hall* is visiting Cambridge this spring.

(5a) $\exists x (AoWH(x) \wedge \forall y (AoWH(y) \rightarrow y = x) \wedge Bel_L VC(x))$

(5b) $Bel_L \exists x (AoWH(x) \wedge \forall y (AoWH(y) \rightarrow y = x) \wedge VC(x))$

To repeat, (5a) is transparent to substitution of coreferential terms such as 'Hilary Mantel' or 'the winner of the 2009 Man Booker Prize', while (5b) is opaque. When one's theoretical objective is to develop a semantic theory that takes the possibility of this opacity into account, one may want to try to incorporate this difference in the *way of thinking about x* into that semantics. In more familiar terms, one may want to introduce the *mode of presentation* or *sense* (*guise* under which the belief is held) into the semantic representation. Before we proceed, we have to assume that whatever kind of semantic theory we formulate in the end, it has to fulfil the criterion of compositionality. I shall assume that a theory of meaning which does not observe this principle for some relevant unit of analysis or at some relevant level is inherently flawed. We will leave aside for the moment the essential question as to whether this unit has to mean a sentence, or perhaps an entire act of communication which relies not only on the uttered sentence but also on other channels of conveying information.

The received argumentation is this. The failure of truth-preserving substitutivity suggests that we have two options in semantics: we can either (i) abandon the assumption that semantics has to be compositional, or (ii) incorporate contextual information in semantic theory. We have just rejected the first option as it pours the semantics out with the bath water of compositionality. We will briefly review some ideas pertaining to this rejected solution later on in this section and explain why they are of no interest to a pragmaticist. Within the domain of the second option, various solutions have been proposed, beginning with Frege (1892), who suggests that in intensional contexts the role of *reference* (*Bedeutung*) is taken by sense (*Sinn*). *Sinn* is an interesting theoretical construct in that it is not the same as the individual guise or private idea or concept under which the referent is thought about but rather pertains to an intersubjective way of construing the referent that can be shared by different individuals. In other words, it is a mode of presentation of the object and this mode can (i) affect the truth value of the sentence and (ii) be shared, intersubjectively.

It has to be pointed out that Fregean solutions, albeit suitably 'pragmaticky' in spirit, are not without problems. In (10), it would be difficult to incorporate information from the mode of presentation of the referent (henceforth MoP) into the semantics in that the quantifier is insensitive to the individual MoPs.

(10) Many people believe that the author of *Wolf Hall* has many more novels up her sleeve.

It seems that in order to preserve the Fregean outlook, one would have to have a concept of a, so to speak, ‘second-order sense’ that would ensure some pragmatic/contextual/cognitive compatibility of the individual senses – or perhaps just a non-committal concept of sense which is not as rich as the intersubjective, albeit psychological, MoP. We will leave the proposed solutions and speculations aside.

The anti-Fregean solutions start with the premise of so-called *semantic innocence* (see Davidson 1968). Assuming that the category of attitude verbs includes the construction with ‘say + *that*-clause’, attitude constructions should succumb to Davidson’s *paratactic account* according to which the demonstrative ‘that’ takes the utterance following it as its referent. The essence of Davidson’s semantic innocence view is that an expression embedded in an attitude report contributes exactly the same content as it does in an ordinary extensional context. Next, the main block of solutions that is standardly (although arguably no longer legitimately, as I point out in the next paragraph) contrasted with neo-Fregeans is that of neo-Russellians in that both, unlike Davidson, assume a structured proposition but differ in their assumptions concerning the semantic content. Russell’s theory gave the name to the latter direction in that he proposed that beliefs can be directly about individuals. Logically proper names contribute only the individual to the meaning of the sentence. Approaches advocating semantic innocence ignore truth-value judgements made by participants in the discourse, and in particular they would ignore the subject’s dissent from the report about his/her attitude, but focus instead on the sentence itself. In other words, the identity of reference suffices for the identity of meaning. In more theoretical terms, neo-Russellians deny that sense or MoP could contribute to the semantics of such constructions (see e.g. Salmon 1986; Soames 1987, 1995). The semantic content of a sentence is a so-called *singular proposition* (after Kaplan 1989a). Neo-Russellians can therefore be naturally associated with the current orientation of semantic minimalism in that the semantic content on this account allows for only minimal admixture of pragmatics in the form of resolving the reference of indexical terms – or perhaps not even that much. (On the debate between semantic minimalism and contextualism and on different orientations within minimalism see e.g. Borg 2004, 2007 and this volume; Cappelen and Lepore 2005a, 2005b; Recanati 2005).

More pragmatics-driven developments include Richard’s (1990, 1995) proposal that the verb ‘believe’ is context-sensitive and therefore indexical. On this view a sentence expresses a so-called Russellian annotated matrix (RAM) which, while growing out of the Russellian outlook, becomes quite Fregean and ‘pragmaticky’; linguistic expressions pair up with interpretations to form the so-called annotations and matrices to serve as the semantic content as well as the content of the attitude. In a somewhat related argumentation, Pelczar (2004, 2007) argues as follows. The fact that a speaker holds a belief about water expressed in (11) but at the same time does not hold the belief in (12), is not a problem with the *objects* of belief but instead a problem with the properties we assign to the *attitude* of belief.

- (11) Water is in short supply.
- (12) H₂O is in short supply.

What this means is that instead of following Kaplan, Perry or Schiffer in attempts to explain the objects of believing, we should assume one single object of belief that can be referred to by a variety of suitable expressions and ‘complicate’ the belief relation instead. Belief is on this account a context-dependent, indexical predicate. ‘Context’ includes here the beliefs and knowledge of the interlocutors, the topic of the conversation, and co-text. It is clear from this crude summary that the account helps itself to a great deal of pragmatics in proposing the

solution: compositionality of attitude reports is preserved but at the expense of bringing in heavy context-dependence and indexicality of attitude expressions.

There are also more lexicon- and grammar-driven solutions to choose from. Larson and Ludlow (1993) suggest so-called *interpreted logical forms* (ILFs) which are composed of linguistic forms and extra-linguistic objects named by these forms. By proposing ILFs they embrace *sententialism*: they assign theoretical importance to the expression that was actually used to perform the referring function in the sentence. For Stanley (2002a), the contextual factors that affect truth conditions are traceable to elements of the syntactic structure, the so-called *unarticulated constituents*. The origin of the latter orientation is the topic to which I now turn.

There have been various attempts to incorporate the MoP in the logical form of attitude reports, to mention only the hidden-indexical theory (see e.g. Schiffer 1992, 1996). Let us begin with John Perry. In his early work, Perry (1977), focusing on demonstratives, distinguishes between the *content* of an attitude and the *role*, the latter understood as being akin to Fregean sense but taking the addressee from the context to the content. My belief ‘I am in Cambridge’ and Keith’s belief ‘I am in Cambridge’ have different belief content because the indexicals are resolved differently, but the belief states are the same for me and for Keith: each of us holds a first-person belief about being in Cambridge at the time when the belief is held. Our beliefs then have the same *role*. This distinction parallels the one between content and character of demonstratives proposed by Kaplan (1989a), where the content of the pronoun *I* is the referent and its character is the linguistic meaning: the speaker or the writer of the utterance. Within this orientation, Crimmins and Perry (1989) and Crimmins (1992) proposed a so-called ‘notion’, an unarticulated constituent of the proposition (see also objections by Clapp 1995, among others).

From the perspective of current debates we can say that their insistence that all this conceptual content is not part of the proposition makes these approaches difficult to classify. While they are standardly categorised as neo-Russellian (e.g. by McKay and Nelson 2005), when we assume a slightly different approach to the semantics/pragmatics interface, the solutions can equally fall under the Fregean label. For example, in his later work, Perry (2001) acknowledges the following:

If there is some aspect of meaning, by which an utterance *u* of *S* and an utterance *u'* of *S'* differ, so that a rational person who understood both *S* and *S'* might accept *u* but not *u'*, then a fully adequate *semantics* should say what it is.¹ (Perry 2001: 9)

He does so by complicating the notion of content and distinguishing different types of it, notably the referential (‘official’) content and the reflexive one, where the latter accounts for the linguistic expression, linguistic MoP.

In short, the unarticulated constituents view of Crimmins and Perry (1989) and Crimmins (1992), seems to sit mid-way. While often dubbed neo-Russellian, it can easily be reanalysed and domiciled as contextualist. Although sentences with coreferring terms such as (5a) and (5b) express the same singular proposition, the Fregean ways of thinking about the referents do have their input and this input can be construed as the ‘semantic’ input when we adopt the contextualist view of semantic content. Perry’s (2001) distinction between different types of content make the possibility of such a (somewhat subversive) reanalysis even more diaphanous. In other words, semantics can easily be enriched by the MoP of the referent

¹ My emphasis.

conceptualised as an unarticulated constituent, irrespective of the author's original intent because an unarticulated constituent can be regarded as an orientation-independent tool. To give an analogous example, truth conditions are now considered as a tool for a contextualist, leading to what is sometimes called truth-conditional pragmatics (Recanati 2002). Approached from this angle, the debate reduces from the semantics/pragmatics boundary dispute to the debate internal to contextualism and concerning the provenance of disambiguating/enriching information, with the two stances represented by (i) syntax-driven, bottom-up enrichment and (ii) syntax-independent, top-down, 'free' enrichment.

Now, what neo-Russellians say in effect is that although our conversational experience tells us that substituting other terms for an individual may alter the meaning of the sentence, for the purpose of semantic theory substitution does not alter the meaning: the truth value of the sentence after a substitution of a coreferential expression remains the same. Neo-Fregeans opt for a more psychologically immersed semantics and endorse the fact that substitutions may intuitively change the meaning of the sentence as a *semantic fact*. But then, how does one represent the logical form of the sentence?

Let us now move to Schiffer's proposal and the debate it gave rise to and see how it can be reinterpreted in the light of the current cutting-edge question of 'How much pragmatics is there in semantics?' For Schiffer, the attitude of belief is a three-place relation holding among the believer, the proposition, and an MoP under which the person believes this proposition. In (14), Φ^*m stands for a contextually determined *type of mode of presentation*. $\langle \rangle$ mark the content of the intension.

- (13) Ralph believes that Fido is a dog.
 (14) $(\exists m) (\Phi^*m \wedge \text{Bel}(\text{Ralph}, \langle \text{Fido, doghood} \rangle, m))$

(from Schiffer 1992: 503). Φ^*m seems to be a useful and malleable unit. It is a *type* of MoP, is 'pragmaticky' through and through, and yet when we adopt the contextualist semantic outlook, we can easily domesticate it as a pragmatic intrusion, enrichment, modulation of the semantic representation (see Recanati 1994, 2004a; Carston 2002; Jaszczolt 2005). If Φ^*m is conceived of as 'pragmaticky', then the need to answer the question as to what kind of information falls under it becomes relaxed; pragmatic enrichment is free and often situation-driven.

Hidden-indexical theory tries to give a role to the MoP but giving it a *semantic* role would mean giving up compositionality. Hidden indices don't correspond to any grammatical units; they are added somewhat ad hoc. They are also added post hoc: having encountered the difference in interpretation we try to build it into the logical form. Now, looking at this problem from the perspective of the contextualism/minimalism debate in respect of the semantics/pragmatics interface that has flared up with new strength since around 2004 (e.g. Borg 2004; Cappelen and Lepore 2005a; Recanati 2005), a more constructive reinterpretation becomes available. As was briefly remarked above, either the hidden indices can belong to semantic representation understood in contextualist terms, or they are banned from it but pop up in pragmatics instead when semantics is kept minimal.

A less radical form of free enrichment has also been proposed. Jaszczolt (1999, 2000) suggests clear-cut degrees of semantic significance of the mode of presentation, depending on the default or non-default status of the interpretation of the attitude report. Instead of accepting that the relevant conceptual content, or psychological mode of presentation, always enriches the semantic representation of attitude reports 'top-down' (i.e. non-indexically, without regard to syntactic slots), we distinguish (i) situations where the mode of presentation is relevant; (ii) situations where semantics does not need it, so to speak, because substitution

can go through thanks to the well-tuned background information of the participants; and (iii) situations in which all we need is that part of the mode of presentation that will allow the representation to distinguish between correct and incorrect reference in the case of a referential mistake as in (5c). In (i), Φ^*m makes use of any background beliefs of the interlocutors that are relevant. In (ii), the value of Φ^*m is nil, or, alternatively, the logical form does not include a slot for it. In (iii), it normally reduces to the linguistic representation in that a correct or intended but mistaken referent is selected. A similar line of criticism is present in Ludlow's (1995: 105) discussion of Schiffer's Φ^*m , where he points out that the reporter on an attitude is often in a position to make only general claims such as (15) and (16).

(15) Ralph believes, *in a sense*, that Fido is a dog.

(16) Ralph believes, *so to speak*, that Fido is a dog.

The objection also bears some affinities with Forbes's (1990, 1997) so-called *modes of self-presentation*, or logophors, as in (17), where, to cut a Superman story short, Superman known to Lois under his other identity as Clark Kent is *not* believed to be able to fly.

(17) Lois has always believed that Superman can fly, *so-labelled*.²

(from Forbes 1997: 109). Extending this line of analysis further, this mystical constituent *in a sense*, *so to speak* or *so-labelled* need not necessarily be understood as a description held in the mind. Let us look at example (18).

(18) The Iron Lady was so-called because of her cold-blooded political decisions.

Since 'Iron Lady' is a popular nickname identifying the referent uniquely as Margaret Thatcher, a former Prime Minister of Britain, we should be able to substitute the name as in (19).

(19) Margaret Thatcher was so-called because of her cold-blooded political decisions.

Substitution fails, and the argument, Fregean in spirit, says that we have a complex concept here to the effect 'A so-believes that...' or 'A believes that B, so-labelled, Φ_s ' (cf. Forbes 1990, 1997). In a similar vein, in his later work Forbes (2006) suggests an opacity-inducing expression 'as such' whose role is to invoke the appropriate MoP and thereby adjust the extension of 'seeks' in (20), as represented in (21).

(20) Lois seeks superman.

(21) ((as(such))(seeks(superman)))(lois)



(adapted from Forbes 2006: 159). What is interesting for our discussion of pragmatic and semantic aspects of attitude reports is that Forbes seems to subscribe here to the contextualist view on the interface. When one draws the boundary between semantics and pragmatics in the contextualist way and allows for the output of pragmatics to contribute to the truth-conditional representation, it is the semantics of attitude reports that contains a covert constituent *as(such)* – irrespective of its provenance. Forbes also points out that a more 'syntacticky' explanation would be possible, according to which covert 'as such' is explained by ellipsis and thereby by the presence of a slot in the representation à la Stanley's (2002a) bottom-up enrichment, i.e. enrichment triggered by the logical form of the sentence.

² My emphasis.

Schiffer's Φ^*m engendered a debate on the adicity of belief reports (see Ludlow 1995, 1996; Schiffer 1996). Schiffer ends his seminal paper (1992) with a rejection of the logical form in (14) on the grounds that it lacks compositionality. Viewed from a current contextualist orientation, however, (14) can be rescued. Pragmatic compositionality, embraced in Recanati (2004a) and subsequently further developed in the theory of Default Semantics (Jaszczolt 2005, 2010c), is a view according to which interaction of information coming from various sources produces a compositional representation. Recanati calls it the representation of *what is said* in truth-conditional pragmatics, Jaszczolt calls it *merger representation* or a merged proposition pertaining to primary meaning in Default Semantics. The stance on compositionality is similar though: compositionality is not to be sought in the syntactic representation of the sentence uttered in discourse, but rather on the level of the intended primary meaning. What these two views mean by primary meaning differs substantially but this issue is tangential to the current purpose. Contextualist views on belief reports are also aptly discussed in Recanati 1993 and Bezuidenhout 1997, the latter engaging with Devitt's (1996) ambiguity view.

The two-dimensional account of attitude ascription proposed by Chalmers (e.g. 1996, 2006, forthcoming b) belongs broadly in the same Fregean orientation. For him, what sentences express is well represented by Fregean thoughts. The two dimensions of intensions work broadly similarly to Kaplan's and Stalnaker's construals: a primary intension is a function from scenarios to extensions, and a secondary intension is a function from possible worlds to extensions. The first one is epistemic, for example taking the meaning from the linguistic meaning of an indexical (Kaplan's 'character') to a referent in a world, and the second is modal, taking the meaning from possible worlds to referents. For example, 'Snowdon' and 'Yr Wyddfa' (which is the Welsh name for that mountain) have the same secondary intensions, leading to the highest mountain in Wales. The substitutivity problem can be ascribed to the primary intension. 'Scenarios' are here formal equivalents of context but it is important to emphasise that context is understood very differently from Gricean context: scenarios, also called 'centred worlds' – 'centred' on an individual and a time; they are ordered triples of (i) worlds, (ii) individuals, and (iii) times (see Chalmers forthcoming b: 4, also Brogaard, this volume) – are very different from the Gricean construals of situations of discourse triggered by the recognition of the speaker's intentions, be it inferential or conventional.

Now, the importance of the primary intension as well as the extension for substitutivity leads to the reanalysis of the notion of a proposition. Chalmers proposes here a so-called 'enriched proposition' (or 'enriched intension') which is an ordered pair of the primary intension and the extension of an expression. The question arises at this point as to whether this enriched proposition, which happens to share the term 'enrichment' with Gricean pragmatics, also shares with the latter the *concept* of enrichment. It can be said with certainty that it will not share the procedure of enrichment in that post-Gricean enrichment is intention-and-inference-driven (see Haugh and Jaszczolt, this volume). But it is very likely that it shares with it the output, the consequence of making the proposition sensitive to the individual's epistemic state, familiarity with modes of presentation, suitability of these modes in a situation, and so forth (captured by Chalmers's idea of *appropriateness*, founded on the individual's *endorsement* of a proposition that is *coordinated* with the expressed proposition in a given context – where all three emphasised concepts are technical terms used to capture the intricate and varied sensitivity to the primary intension in addition to the sensitivity to the singular (Russellian) content).

Next, if this role of context permeates into semantics, that is, if Chalmers-enriched propositions, just as Post-Gricean, say, Recanati-enriched propositions, are the semantic

content and are, say, the input to the truth-conditional analysis, then we can classify Chalmers's account as a contextualist account in the same sense as the contextualist accounts discussed above. Differences of assumptions and methods notwithstanding, it seems justified, and advantageous, to do so. Truth and falsity for Chalmers are the domain of intuitive judgements (forthcoming b). Like modes of presentation in hidden-indexical theory (e.g. Schiffer 1992, discussed above), primary intensions collect those aspects of the meaning of the sentence that are indispensable for substitutivity *salva veritate* to work. As for a hidden-indexicalist, so here we have a problem of what to do with these aspects of meaning when we want to adhere to the assumption that semantics is compositional. Here, just as in post-Gricean accounts, we adopt so-called pragmatic compositionality (Recanati 2004a, 2010; Jaszczolt 2005, 2010). In the two-dimensional account Chalmers proposes a version of the 'composition of senses', that is the composition of his enriched propositions. The compatibility of this suggestion with the post-Gricean theory of Default Semantics, where compositionality is sought on the level of the merger of information about meaning coming from different sources, will become apparent in Section 5.

4. Beyond substitutions

It has been famously pointed out that puzzles with beliefs arise even when substitution does not take place. Moreover, they arise equally with proper names and with definite descriptions, although the first, unlike the latter, arguably refer directly. Kripke's (1979) puzzle challenges the *principle of translation* which says that if a sentence in one language is true, its translation into another language is also true. It also undermines the *principle of disquotation* which says that if a speaker assents to 'p', then he believes that *p*. On Kripke's scenario, Pierre, who lives in France and speaks French, holds a belief about a city called Londres, but otherwise unknown to him, that it is pretty, as in (22).

(22) Londres est jolie.

We should be able to report on (22) in English as in (23):

(23) Pierre believes that London is pretty.

But Pierre subsequently moves to London, finds it unattractive, and acquires a belief, now expressed in English, as in (24).

(24) London is not pretty.

He does, however, still earnestly hold his belief expressed in (22) without engendering a contradiction. By means of this example Kripke points out the fact that the problem of attitude reports arises independently of substitutivity. Pierre can hold both beliefs, and even associate identical sets of identifying properties with the proper names London and Londres, and yet not succumb to a contradiction.

Kripke's other example is even more striking: even when we consider only one language and only one proper name, the puzzle may still arise. (25) can be regarded as true and false at the same time by someone who does not realise that the Polish politician Ignacy Paderewski was the same person as the famous pianist Ignacy Paderewski.

(25) Ignacy Paderewski had musical talent.

Kripke comes very close to the core of the pragmatic problem with attitude reports: the real puzzle is not about the lack of substitutivity *salva veritate* in intensional contexts, neither is it about the relative scopes of the referring term and the belief operator. It concerns instead the

question as to how to capture the truth-makers for such sentences when uttered by speakers. Kripke modestly says that he does not offer a solution. However, in a sense, he *is* pointing us towards one, and this solution is not incompatible with contextualism: in order to provide a solution to the ‘puzzle’ with belief reports we have to look at speaker’s meaning. Sentence meaning only stops posing problems when we reconcile it with speaker meaning. Needless to say, this is where the theoretical problem with attitude reports meets the folk explanations of ‘what really happens there’.³

5. Representation of attitude reports

On many accounts discussed in the previous sections, in order to avoid contradictions, we dress proper names with an MoP or its functional equivalent which has a semantic role to play either in virtue of Frege’s stipulation or in virtue of the subsequent contextualist stipulation that pragmatically derived information contributes, on occasions (or according to some authors always), to the semantic representation (see Recanati 2004a; Jaszczolt 2005). Pragmatic components of this kind have also been accounted for in formal, dynamic approaches to meaning. In Discourse Representation Theory (DRT; see e.g. Kamp and Reyle 1993), proper names are ‘anchored’, so to speak, to objects (Asher 1986; Kamp 1990). These objects can be real or conceptual, which accounts for the *de re/de dicto* distinction.⁴

This is, in brief, how beliefs and other attitudinal states can be represented in DRT. First, the language of DRT makes use of discourse referents and discourse conditions which make up discourse representation structures (DRSs, represented formally as K). Next, there are mode indicators (MOD), such as for example belief (BEL), desire (DES) or intention (INT). Discourse referents can be anchored and an anchor is represented as $[ANCH, x]$. Finally, an attitude description is a pair $\langle MOD, K \rangle$. There can be two types of anchors: external and internal. $\langle [ANCH, x], K \rangle$ is an internal anchor for x , while an external anchor (EA) is a function whose domain is given by the set of internally anchored discourse referents in the DRS K , and the range by a set of referents that do not occur in K . External anchors are important in that a DRS has to be ‘affixed to’ entities of the conversational domain in order to stand for a singular proposition (see also Kamp 1990, 1996, 2003).

The language of DRT contains a predicate *Att* (‘attitude’) in order to represent attitudinal states s : $Att(x, K, EA)$ (adapted from Kamp 2003). Using this language, sentence (3), repeated below as (26), can be represented by the DRS in Fig. 1.⁵

(26) Lidia believes that the author of *Wolf Hall* is visiting Cambridge this spring.

³ Kripke 1977 points out that speaker’s reference can evolve historically into semantic reference. He considers this fact to be a plausible candidate for ‘one of the facts needed to clear up some puzzles in the theory of reference’ Kripke (1977: 407). See also his 1972.

⁴ See also Maier 2009 on a DRT account of *de re*, *de dicto* and *de se* belief reports. *De se* refers to beliefs about oneself.

⁵ In order to capture only relevant aspects of the representation, this is a *partial* DRS in which the representation of the temporality of the event and of the indexicality of ‘this spring’ are omitted. On representing time in DRT see Kamp and Reyle 1993. On representing time in a more pragmatic offshoot of DRT, Default Semantics, see Jaszczolt 2009. On the foundations for representing indexicals see Kaplan 1989a.

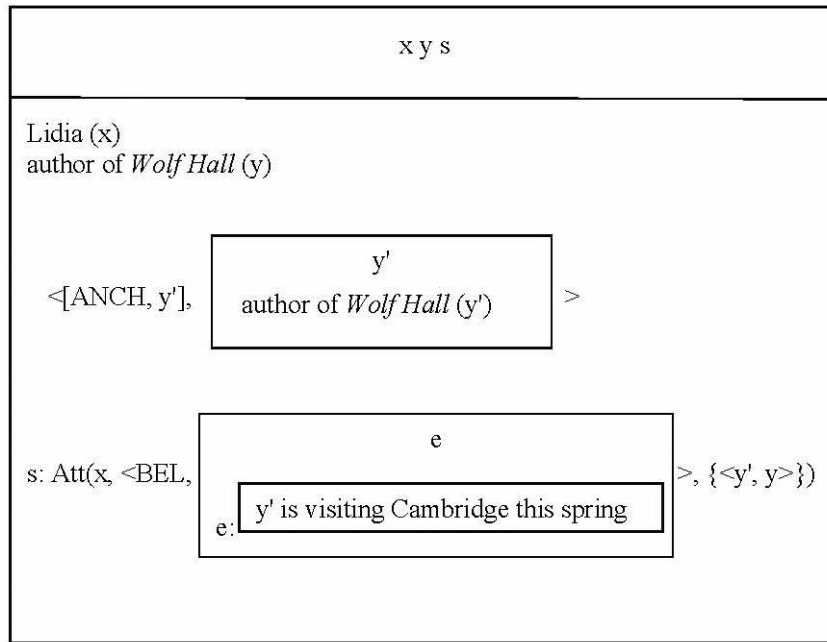


Fig. 1: Partial DRS for example (26), after Kamp 2003.

In Fig. 1, y' , standing for ‘the author of *Wolf Hall*’, is both internally and externally anchored. In other words, there is both a concept and an intersubjectively identifiable individual that correspond to the discourse referent y' . What it means is that on this representation ‘the author of *Wolf Hall*’ is used referentially and the reading can be called *de re*.⁶

Next, Default Semantics (henceforth DS: Jaszczolt, e.g. 2005, 2010c) amends and extends the language of DRT and uses it for a more pragmatics-rich object. Classified as a post-Gricean, radical contextualist approach, its aim is to represent the meaning intended by the Model Speaker and recovered by the Model Addressee. It represents the result of the interaction of meaning-giving information that comes from the sources identified in the theory and yielding the following components in processing (on the revised 2009 version):

- (i) combination of word meaning and sentence structure (WS)
- (ii) conscious pragmatic inference from situation of discourse, social and cultural assumptions, and world knowledge (CPI)
- (iii) cognitive defaults pertaining to the universal operations of the human brain (CD)
- (iv) social, cultural and world-knowledge defaults (SCWD).

The processes operate on an equal footing, which means that the resulting representation may on some occasions depart from the structure of the uttered sentence that is processed through WS. The resulting representation is called a *merger representation* (Σ) in that it merges information coming from a set of identified sources and produced through an interaction of some or all of the above processes.⁷ Σ is assumed to be compositional, where

⁶ N.B., there are ample arguments in the literature that the *de re/de dicto* distinction is misleading at the least. The DR-theoretic semantics of belief reports does not rely on it and is equally compatible with rejecting the dichotomy, as Jaszczolt’s approach summarised in this section exemplifies.

⁷ For a more comprehensive introduction to the theory see Jaszczolt 2010c.

compositionality is understood as a methodological principle. It applies not to the level of structure and word meanings (WS) but rather on the higher level of utterance meaning, the level of the merged proposition represented as Σ .⁸ The processing model for Σ s is given in Fig. 2.

Primary meaning:

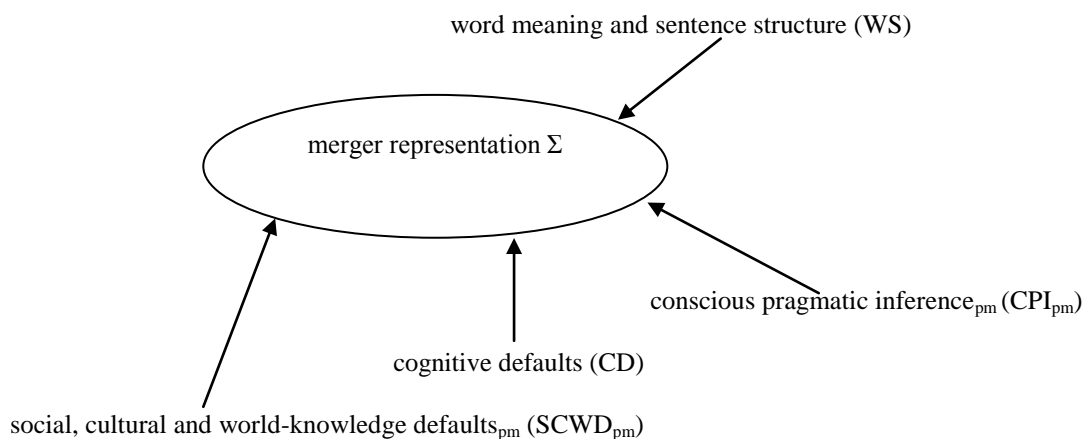


Fig. 2: Primary meaning according to the *processing model* of the revised version of Default Semantics (adapted from Jaszczołt 2009).

Using example (26) again, we can now make use of discourse referents to represent not only sentence meaning and the ambiguities associated with the definite description, but also any other aspect of utterance meaning which, on the contextualist view, appears in the semantic representation through a pragmatic route – via pragmatic inference or via speaker’s and addressee’s default assumptions. Asher (1986: 129) uses an apt metaphor, saying that discourse referents are ‘pegs’ on which the addressee ‘hangs’ the properties given by DRS conditions. Analogously, in DS, discourse referents are ‘pegs’ whose properties are given by a variety of linguistic and non-linguistic sources, and are collected through the interacting processes specified in Fig. 2. We are now in the Gricean domain of intended meanings and therefore we also want to represent mistaken reference and the situation where a referent cannot be assigned by the speaker. Assuming, as can be recalled from the readings (5a)-(5c) of sentence (5) in Section 2, that ‘the author of *Wolf Hall*’ can refer correctly, incorrectly, or not refer at all, we obtain the discourse conditions in (27). For this purpose, the scenario for (26) is that, according to the speaker, Lidia (a) may hold a belief about the actual author of the novel, Hilary Mantel; (b) may use the description attributively; or (c) may be mistaken and think about, say, Michael Morpurgo.⁹ Square brackets stand for the content on which the process operates and the subscripts for the name of the process.

⁸ See Groenendijk and Stokhof (1991: 93). For a stronger claim that compositionality should be an empirical assumption about the nature of possible human languages see Szabó 2000.

⁹ This argument is adapted from Jaszczołt 2005, Section 5.3.

(27)

- (i) [Hilary Mantel]_{CD}(y)
- (ii) [the author of *Wolf Hall*]_{CPI}(y)
- (iii) [Michael Morpurgo]_{CPI}(y)

Next, DS proposes that a belief report is represented as $\text{Bel}(x, \mathcal{C})$, standing for ‘ x believes that \mathcal{C} ’, meaning that on a particular interpretation the individual x has the cognitive state \mathcal{C} . The Σ s for the three readings of (26) incorporating the senses in (27) are presented in Figs 3-5 respectively. The sources CD and CPI are responsible for the difference in reading.

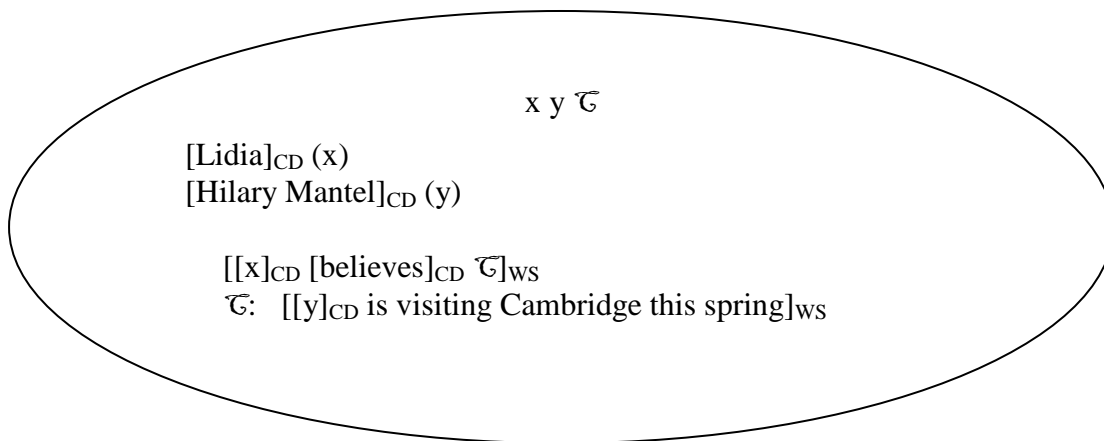


Fig. 3: The correct referential reading of the definite description in (26). Partial Σ .

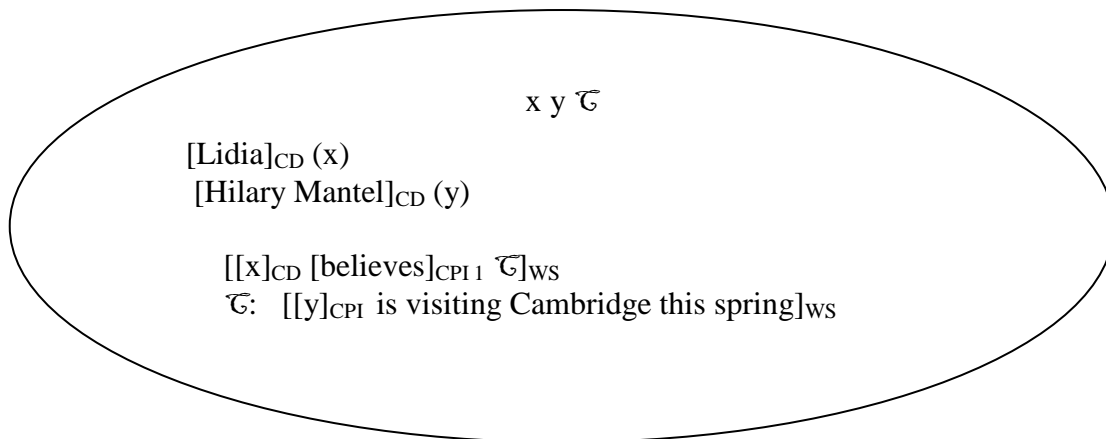


Fig. 4: The attributive reading of the definite description in (26). Partial Σ .

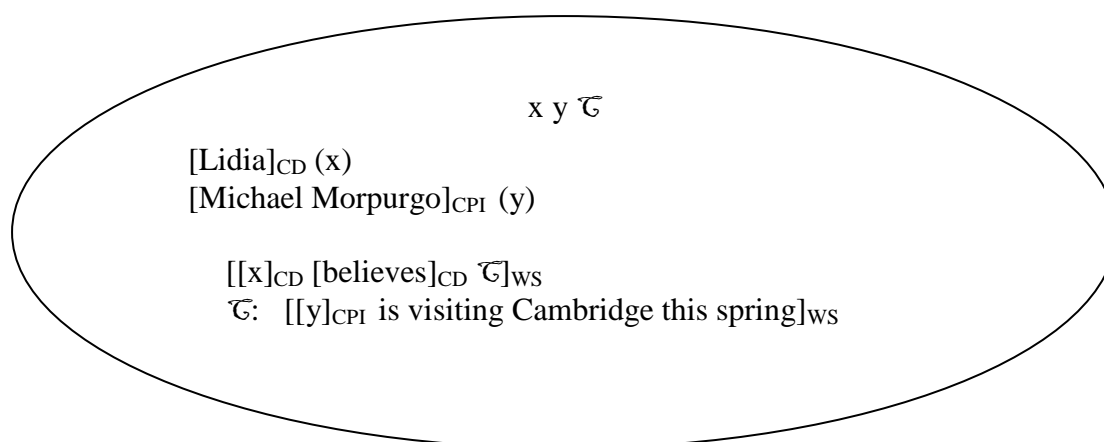


Fig. 5: The mistaken referential reading of the definite description in (26). Partial Σ .

These two types of analysis, in DRT and in DS, demonstrate that pragmatic information is essential for an adequate representation of attitude reports, but at the same time it can be incorporated in it and constitute an integral part of the semantic theory. DRT subsumes anchoring under the dynamic semantics of discourses; DS, on the other hand, seeks compositionality on a more pragmatics-rich level where even information provided by the lexicon and grammar can alter without constraints other than those imposed by speaker's intention and addressee's intention recognition. In other words, Σ may end up modelling an indirect speech act when the primary intended meaning happens to be expressed indirectly.

In brief, the semantics of attitude reports in the framework of DS is compositional but to be compositional it has to be radically contextualist. The question arises at this point as to whether we can still call it a semantics of English in that Σ s draw not only on the processing of English sentences but also on the output of other sources. It is possible that the answer to this question is Fodorian. This is the topic of Section 5.

5. Mentalese, compositionality, and attitudes

Fodor (e.g. 2008: 14-15) uses the logical form of attitude reports 'A believes *that p*' to vindicate Cartesian priority of thought to action. He uses it in two different ways. Firstly, knowing *that p* has to precede knowing how to change *p*. Secondly, if we distinguish the content of mental states, i.e. objects of *that*-clauses, we can pinpoint the relations between them. For example, desiring *p*, combined with the premise that *p* if and only if *q*, leads to an action that brings about *q*.

For Fodor, semantics has to be kept simple. It has to be the semantics of Mentalese, the language of thought. As he says, '[t]here may be no good reason for supposing that English has a semantics at all; perhaps the only thing that does is Mentalese' (Fodor 2008: 219). He argues that Frege was wrong to say that semantics requires the notion of sense; it is precisely because we introduced murky concepts such as senses into the semantics that propositional attitudes continue being a puzzle. Instead, he says, we have to adopt the assumption that compositionality holds only on the level of referring properties. Semantics has to be referential, and look for a solution to the substitutivity problem elsewhere. For referentialists, (28) and (29) stand for the same belief and they differ only in *causal powers* (cf. Fodor 2008: 69).

(28) Cicero is tall.

(29) Tully is tall.

The way it works is this. Whenever people have different mental representations, the causal powers of their mental states also differ. So, although the semantics of the English sentences (28) and (29) is the same because semantic theory is referential, the substitutivity problem in attitude reports obtains a solution from causal powers. Causal powers are the domain of the computational theory of mind, not the representational, semantic one. They are sensitive to the syntax of Mentalese. But, as Fodor surmises, it may be the case that Mentalese is compositional, while English is not.

Next, if Fodor's theory is on the right track, it also has to deal with cases of missing modes of presentation. In other words, since a person may have a concept of Ignacy Paderewski as a famous Polish politician but lack a concept of Ignacy Paderewski as a famous pianist, the substitutivity problem turns up in spite of an analytical truth and the identity of reference. Here again the solution comes from the claim that it is Mentalese, not English, that has a compositional semantics – indeed, any semantics at all. In Mentalese, the story goes (Fodor 2008: 72), there are two names that are translated into English as 'Paderewski'. This is how semantics is kept simple and referential, by kicking the problem up to computational states, or even higher into the physics of the brain.

Intentional states and processes are multiply realized by computational states; computational states and processes are multiply realized by neurological states (or whatever), and, for all I know, neurological states are multiply realized by biochemical states; and so on down to (but not including) basic physics. (Fodor 2008: 91)

Pragmatic compositionality of merger representations in DS introduced in the previous section is not incompatible with Frege's account. In DS, the question as to whether the composition of Σ takes place in Mentalese is an open question and therefore the compositionality of Mentalese offers a very plausible route to pursue. However, DS would not separate the levels of the semantics of English and the semantics of Mentalese in the Fodorian way. For a contextualist, elements of processing that do not bear directly on language as a closed system may bear directly on the use of the system, and it is the use of the language that calls for a compositional account. This is the route pursued in DS and this is how merger representations are to be understood: they draw on the lexicon and grammar of a natural language in which the utterance was expressed, but also on other sources of information about meaning, without commitment to the language of processing used there. In other words, whether we think and perform our inferences in English or in Mentalese will not change the fact that for a contextualist such a pragmatics-rich semantics is still a semantics of natural language.

To sum up, Fodor's proposal offers a captivating view on processing but what remains is to show that it indeed constitutes a solution to our problem. Even if we adopt the compositionality of the language of thought, whatever Mentalese turns out to be, what do we do with the semantic problem of substitutivity of coreferential expressions in propositional attitude constructions *in English*? Fodor's answer seems to be that we do nothing. English may not have a semantics, it may not be compositional. Suppose we adopt this view and assume that English does not have a compositional semantics (and hence, it becomes fair to say it has no semantics whatsoever). Then the translation of sentences of Mentalese into English would have to be independently motivated.

By this token, Mentalese for (30) is very different from (30) itself.

(30) Paderewski is Paderewski.

The big problem with Fodor's solution is that in rejecting compositional semantics of English it shuns pragmatics, while it is by now widely accepted that semantics must not stray from pragmatics. Meaning in language must not be taken in isolation from meaning in communication. Otherwise we obtain a semantics that is psychologically implausible.¹⁰ We stipulate that (30) does not pose a problem because it is not an analytical truth for any rational agent who is prepared to think or say it. We follow with the stipulation that propositional attitude reports in (31) and (32) have the same semantics because semantics is referential, but different syntax and different computational properties – or, better, that they do not have any semantics at all, only their Mentalese equivalents do.

(31) Paul believes that Cicero is tall.

(32) Paul believes that Tully is tall.

All is well when one focuses on the syntax and semantics of *sentences* and on mental states with their representational and computational properties. But in the study of communication the problem is that the impacts of (31) and (32) may differ. The fact that there is no one-to-one correspondence between an expression in Mentalese and an expression of English constitutes an explanation and part of the solution for Fodor's problems. At the same time, it is *the* problem itself for a pragmaticist. It is an assessment of this pragmatic problem to which I now turn in the final section.

5. Concluding remarks: The pragmatic perspective

To come back to example (1), Lidia's belief that the author of *Wolf Hall* is visiting Cambridge may be reported in the three different ways represented in (5a)-(5c), and in fact in an infinite number of different ways. Some of the reports would produce Lidia's consent but others would make her object. This fact of conversation has nothing to do with correct or incorrect referring: Lidia may be convinced that Michael Morpurgo, her favourite author, wrote *Wolf Hall*, but equally well she may simply not know who wrote the novel and dissent from the report in (2), just as she may not know that the author of *Wolf Hall* won the Man Booker Prize for 2009 and therefore dissent from (33).

(33) Lidia believes that the winner of the Man Booker Prize for 2009 is visiting Cambridge this spring.

We will call this interpersonal difference in background information corresponding to the referent *the pragmatic problem*. To begin with, it is necessary to observe that while the semantic problem with substitutivity *salva veritate* of coreferential expressions is a genuine theoretic issue, the pragmatic problem is much less diaphanous. Normally, all goes well in communication and the speaker formulates the utterance in such a way that its meaning can be recovered by the addressee without creating ambiguities or mismatches between the intended meaning and the recovered meaning. In other words, on normal scenarios, rational communication does not fail. Moreover, rational communication is well accounted for in various Gricean approaches that emphasise the role of intentions in a theory of utterance meaning or speaker meaning (see Haugh and Jaszczołt, this volume). So, what is left to explain is only exceptions caused by misjudging of the addressee's informational state on the part of the speaker. This is a much more modest task than having to develop the entire

¹⁰ See the debates between contextualists and semantic minimalists, e.g. in Recanati 2005 and this volume; Borg 2004, 2007 and this volume; and an overview in Jaszczołt 2010a.

pragmatics of propositional attitude reports. One may object here that the situation is analogous in semantics in that substitutivity *sometimes*, and even quite often, goes through and only *sometimes* is problematic. But this would be mixing the inner-theoretic problem that has exercised a Parnassus of minds at least since the Middle Ages, namely the *de re/de dicto* ambiguity, with a practical problem found, albeit rarely, in conversation. So, are these problems interrelated?

To recapitulate, the semantics of attitude reports can be repaired by the aid of a neo-Fregean device such as an MoP or its derivative, or it can be left simple and counter-intuitive. Or, Schiffer's rejection of Φ^*m can be put more strongly and natural languages can be denied a semantics à la Fodor. To repeat, what we called 'the pragmatic problem' is the fact that interlocutors' background knowledge may on occasion differ and that they may have different kinds of assumptions, or different sets of assumptions, at their disposal when using the same description or name. Now, to repeat, it is still a hotly debated issue as to whether semantics should be kept minimal and pertain just to sentence meaning as semantic minimalists claim (e.g. Borg 2004, 2007; Cappelen and Lepore 2005a, 2005b, or even more radically Bach 2006a), or to pertain to the meaning that reflects the speaker or writer's intended content as contextualists have it (e.g. Sperber and Wilson 1986; Carston 1988, 2002; Recanati 1989, 2004a, Travis 2008, Jaszczolt 2005, 2010a).¹¹

Additional fuel is provided by the question 'Whose perspective?', namely the question as to whether semantics should model speaker's intended meaning or the addressee's recovered meaning. At this point we enter the debate between contextualists and relativists. According to the latter, newly reignited orientation, belief reports should be subjected to an analysis *not* from the position of the intended meaning but rather from the position from which the belief is *assessed* (see e.g. MacFarlane 2005, forthcoming). This perspective alters the conception of context; it allows for different truth values of a belief report, depending not only on the context of use but also on the context of assessment. This is not a place to pursue this debate; suffice it to say that the pragmatics of propositional attitude reports should acknowledge relativism but at the same time utilise it with caution. Norms of rational conversational behaviour guarantee that in most cases discourse progresses smoothly; the meaning intended by the speaker and the meaning recovered by the addressee coincide, at least to the degree that is relevant for the purpose at hand. Seen in this light, relativism offers a dimension that is useful for deviations from the norms but the contextualism/relativism debate as such remains tangential to the problem of constructing a theory of meaning of utterances expressing propositional attitude reports. In contrast, the minimalism/contextualism debate is at the heart of the problem and as long as it continues, the *pragmatics* of attitude reports will be at the heart of the discussions concerning their *meaning*.

References

- Asher, N. 1986. 'Belief in Discourse Representation Theory'. *Journal of Philosophical Logic* 15. 127-89.

¹¹ The topic of the minimalism/contextualism debate is a vast and important one but it cannot be covered here. Suffice to say that Bach is 'even more radical' than other minimalists because his semantics does not require propositions and truth conditions but operates directly on even sub-propositional outputs of syntax, while at the other end of the spectrum Jaszczolt is 'even more radical' than other contextualists because her semantic representations can depart from the logical form of the sentence not only by extending it but also by overriding it. See also Bach, this volume; Horn, this volume; Borg, this volume; Carston, this volume.

- Bach, K. 2006. 'The excluded middle: Semantic minimalism without minimal propositions'. *Philosophy and Phenomenological Research* 73. 435-42.
- Bezuidenhout, A. 1997. 'How context-dependent are attitude ascriptions?' In: D. Jutronic (ed.). *The Maribor Papers in Naturalized Semantics*. Maribor: University of Maribor. 269-84.
- Borg, E. 2004. *Minimal Semantics*. Oxford: Clarendon Press.
- Borg, E. 2007. 'Minimalism versus contextualism in semantics'. In: G. Preyer and G. Peter (eds.). *Context-Sensitivity and Semantic Minimalism*. Oxford: Oxford University Press. 339-59.
- Cappelen, H. and E. Lepore. 2005a. *Insensitive Semantics: a Defense of Semantic Minimalism and Speech Act Pluralism*. Oxford: Blackwell.
- Cappelen, H. and E. Lepore. 2005b. 'A tall tale: In defense of Semantic Minimalism and Speech Act Pluralism'. In: G. Preyer and G. Peter (eds.). *Contextualism in Philosophy: Knowledge, Meaning, and Truth*. Oxford: Clarendon Press. 197-219.
- Carston, R. 1988. 'Implicature, explicature, and truth-theoretic semantics'. In: R. M. Kempson (ed.) *Mental Representations: The Interface Between Language and Reality*. Cambridge: Cambridge University Press. 155-81.
- Carston, R. 2002. *Thoughts and Utterances: The Pragmatics of Explicit Communication*. Oxford: Blackwell.
- Chalmers, D. J. 1996. *The Conscious Mind: In Search of a Fundamental Theory*. Oxford: Oxford University Press.
- Chalmers, D. J. 2006. 'Foundations of Two-Dimensional Semantics. In M. García-Carpintero and J. Macià (eds) *Two-Dimensional Semantics: Foundations and Applications*, Oxford: Oxford University Press. 55-140.
- Chalmers, D. J. forthcoming. 'Propositions and attitude ascriptions: A Fregean account'. *Nous*.
- Clapp, L. 1995. 'How to be direct and innocent: A criticism of Crimmins and Perry's theory of attitude ascriptions'. *Linguistics and Philosophy* 18. 685-711.
- Crimmins, M. 1992. *Talk about Beliefs*. Cambridge, Mass.: MIT Press.
- Crimmins, M. and J. Perry 1989. 'The prince and the phone booth: Reporting puzzling beliefs'. *Journal of Philosophy* 86. 685-711.
- Davidson, D. 1968. 'On saying that'. *Synthese* 19. 130-146. Reprinted in: P. Ludlow (ed.). *Readings in the Philosophy of Language*. Cambridge, Mass.: MIT Press. 817-31.
- Devitt, M. 1996. *Coming to Our Senses: A Naturalistic Program for Semantic Localism*. Cambridge: Cambridge University Press.

- Fodor, J. A. 2008. *LOT 2: The Language of Thought Revisited*. Oxford: Clarendon Press.
- Forbes, G. 1990. 'The indispensability of Sinn'. *Philosophical Review* 99. 535-63.
- Forbes, G. 1997. 'How much substitutivity?' *Analysis* 57. 109-13.
- Forbes, G. 2006. *Attitude Problems: An Essay on Linguistic Intensionality*. Oxford: Clarendon Press.
- Frege, G. 1892. 'Über Sinn und Bedeutung'. *Zeitschrift für Philosophie und Philosophische Kritik*, 100. 25-50. Transl. as: 'On sense and reference' in P. T. Geach and M. Black (eds.). 1960. *Translations from the Philosophical Writings of Gottlob Frege*, Oxford: Blackwell. Second edition. 56-78.
- Groenendijk, J. and M. Stokhof. 1991. 'Dynamic Predicate Logic'. *Linguistics and Philosophy* 14. 39-100.
- Jaszczolt, K. M. 1999. *Discourse, Beliefs, and Intentions: Semantic Defaults and Propositional Attitude Ascription*. Oxford: Elsevier Science.
- Jaszczolt, K. M. 2000. 'The default-based context-dependence of belief reports'. In: K. M. Jaszczolt (ed.). *The Pragmatics of Propositional Attitude Reports*. Oxford: Elsevier Science. 169-85.
- Jaszczolt, K. M. 2005. *Default Semantics: Foundations of a Compositional Theory of Acts of Communication*. Oxford: Oxford University Press.
- Jaszczolt, K. M. 2009. *Representing Time: An Essay on Temporality as Modality*. Oxford: Oxford University Press.
- Jaszczolt, K. M. 2010a. 'Semantics-pragmatics interface'. In: L. Cummings (ed.), *The Routledge Pragmatics Encyclopedia*. London: Routledge. 458-62.
- Jaszczolt, K. M. 2010b. 'Propositional attitudes'. In: L. Cummings (ed.), *The Routledge Pragmatics Encyclopedia*. London: Routledge. 388-9.
- Jaszczolt, K. M. 2010c. 'Default Semantics'. In: B. Heine and H. Narrog (eds.). *The Oxford Handbook of Linguistic Analysis*. Oxford: Oxford University Press. 193-221.
- Kamp, H. 1990. 'Prolegomena to a structural account of belief and other attitudes'. In: C. A. Anderson and J. Owens (eds.). *Propositional Attitudes: The Role of Content in Logic, Language, and Mind*. Stanford; CSLI Publications. 27-90
- Kamp, H. 1996. 'Some elements of a DRT-based theory of the representation of mental states and verbal communication.' Forthcoming as Chapter 3 of H. Kamp and U. Reyle, *From Discourse to Logic II*.
- Kamp, H. 2003. 'Temporal relations inside and outside attitudinal contexts'. Paper presented at the workshop *Where Semantics Meets Pragmatics*, LSA Summer School, University of Michigan, July 2003.

- Kamp, H. and U. Reyle. 1993. *From Discourse to Logic: Introduction to Modeltheoretic Semantics of Natural Language, Formal Logic and Discourse Representation Theory*. Dordrecht: Kluwer.
- Kaplan, D. 1977/1989. 'Demonstratives'. In: J. Almog, J. Perry, and H. Wettstein (eds.). *Themes from Kaplan*. New York: Oxford University Press. 481-563.
- Kripke, S. A. 1972. *Naming and Necessity*. In: G. Harman and D. Davidson (eds.). *Semantics of Natural Language*. Dordrecht: D. Reidel. Reprinted in 1980 by Oxford: B. Blackwell. Second edition.
- Kripke, S. A. 1977. 'Speaker's reference and semantic reference'. In: P. A. French, T. E. Uehling Jr., and H. K. Wettstein (eds.). *Studies in the Philosophy of Language. Midwest Studies in Philosophy 2*. Minneapolis: University of Minnesota Press. Reprinted in: P. Ludlow (ed.). 1997. *Readings in the Philosophy of Language*. Cambridge, Mass.: MIT Press. 383-414.
- Kripke, S. A. 1979. 'A puzzle about belief'. In: A. Margalit (ed.). *Meaning and Use*. Dordrecht: D. Reidel. 875-920. Reprinted in: P. Ludlow (ed.). 1997. *Readings in the Philosophy of Language*. Cambridge, Mass.: MIT Press. 239-83.
- Larson, R. K. and P. Ludlow. 1993. 'Interpreted logical forms' *Synthese* 95. 305-55. Reprinted in: P. Ludlow (ed.). 1997. *Readings in the Philosophy of Language*. Cambridge, Mass.: MIT Press. 993-1039.
- Ludlow, P. 1995. 'Logical form and the hidden-indexical theory: A reply to Schiffer'. *Journal of Philosophy* 92. 102-7.
- Ludlow, P. 1996. 'The adicity of "believes" and the hidden-indexical theory'. *Analysis* 56. 97-101.
- MacFarlane, J. 2005. 'Making sense of relative truth'. *Proceedings of the Aristotelian Society* 105. 321-39.
- MacFarlane, J. forthcoming. 'Relativism and knowledge attributions'. In: S. Bernecker and D. Pritchard (eds.). *Routledge Companion to Epistemology*. London: Routledge.
- McKay, T. and M. Nelson. 2005. 'Propositional attitude reports'. In: E. N. Zalta (ed.). *Stanford Encyclopedia of Philosophy*. <http://plato.stanford.edu/>
- Maier, E. 2009. 'Presupposing acquaintance: A unified semantics for *de dicto*, *de re* and *de se* belief reports. *Linguistics and Philosophy* 32. 429-74.
- Neale, S. 1990. *Descriptions*. Cambridge, Mass.: MIT Press.
- Pelczar, M. W. 2004. 'The indispensability of *Farbung*'. *Synthese* 138. 49-77.
- Pelczar, M. W. 2007. 'Forms and objects of thought'. *Linguistics and Philosophy* 30. 97-122.
- Perry, J. 1977. 'Frege on demonstratives'. *Philosophical Review* 86. 474-97. Reprinted in:

- P. Ludlow (ed.). *Readings in the Philosophy of Language*. Cambridge, Mass.: MIT Press. 693-715.
- Perry, J. 2001. *Reference and Reflexivity*. Stanford, CA: CSLI Publications.
- Quine, W. V.O. 1956. 'Quantifiers and propositional attitudes'. *Journal of Philosophy* 53. 177-87. Reprinted in: A. Marras (ed.). 1972. *Intentionality, Mind and Language*. Urbana: University of Illinois Press.
- Recanati, F. 1989. 'The pragmatics of what is said'. *Mind and Language* 4. Reprinted in: S. Davis (ed.). 1991. *Pragmatics: A Reader*. Oxford: Oxford University Press. 97-120.
- Recanati, F. 1993. *Direct Reference: From Language to Thought*. Oxford: Blackwell.
- Recanati, F. 1994. 'Contextualism and anti-contextualism in the philosophy of language'. In: S. L. Tsohatzidis (ed.). *Foundations of Speech Act Theory: Philosophical and Linguistic Perspectives*. London: Routledge. 156-66.
- Recanati, F. 2002. 'Unarticulated constituents'. *Linguistics and Philosophy* 25. 299-345.
- Recanati, F. 2004. *Literal Meaning*. Cambridge: Cambridge University Press.
- Recanati, F. 2005. 'Literalism and contextualism: Some varieties'. In: G. Preyer and G. Peter (eds.). *Contextualism in Philosophy: Knowledge, Meaning, and Truth*. Oxford: Clarendon Press. 171-96.
- Recanati, F. 2010. *Truth-Conditional Pragmatics*. Oxford: Oxford University Press.
- Richard, M. 1990. *Propositional Attitudes: An Essay on Thoughts and How We Ascribe Them*. Cambridge: Cambridge University Press.
- Richard, M. 1995. 'Defective contexts, accommodation, and normalization'. *Canadian Journal of Philosophy* 25. 551-70.
- Russell, B. 1905. 'On denoting'. *Mind* 14. 479-493. Reprinted in: B. Russell. 1956. *Logic and Knowledge: Essays 1901-1950*. London: Allen and Unwin. 49-56.
- Russell, B. 1919. 'Descriptions'. From: *Introduction to Mathematical Philosophy*. London: Allen and Unwin. 167-80. Reprinted in: A. P. Martinich (ed.) *The Philosophy of Language*. Oxford: Oxford University Press. 213-19.
- Salmon, N. 1986. *Frege's Puzzle*. Cambridge, Mass.: MIT Press.
- Schiffer, S. 1992. 'Belief ascription'. *Journal of Philosophy* 89. 499-521.
- Schiffer, S. 1996. 'The hidden-indexical theory's logical-form problem: a rejoinder'. *Analysis* 56. 92-7.
- Soames, S. 1987. 'Direct reference, propositional attitudes, and semantic content'. *Philosophical Topics*. 15. 44-87. Reprinted in: N. Salmon and S. Soames (eds.) 1988. *Propositions and Attitudes*. Oxford: Oxford University Press. 197-239.
- Soames, S. 1995. 'Beyond singular propositions?'. *Canadian Journal of Philosophy* 25. 515-49.

- Soames, S. 2002. *Beyond Rigidity: The Unfinished Semantic Agenda of Naming and Necessity*. Oxford: Oxford University Press.
- Sperber, D. 1985. 'Apparently irrational beliefs'. In: *On Anthropological Knowledge*. Cambridge: Cambridge University Press. 35-63.
- Sperber, D. 1996. *Explaining Culture: A Naturalistic Approach*. Oxford: Blackwell.
- Sperber, D. and D. Wilson 1986. *Relevance: Communication and Cognition*. Oxford: Blackwell.
- Stanley, J. 2002. 'Making it articulated'. *Mind and Language* 17. 149-68.
- Szabó, Z. G. 2000. 'Compositionality as supervenience'. *Linguistics and Philosophy* 23. 475-505.
- Travis, C. 2008. *Occasion-Sensitivity: Selected Essays*. Oxford: Oxford University Press.