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Propositional Attitude Predicates and ‘That’-Clauses

The so-called *face-value* theory of propositional attitude sentences, i.e.

(The Face-Value Theory)

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;

(ST) ‘That’-clauses are singular terms;

(P) ‘That’-clauses denote propositions,

is often endorsed without even discussing the plausibility of its tenets. As Schiffer (2003: 11) holds, it is “the default theory that must be defeated if it’s not to be accepted” and in fact he himself spends but a handful of lines discussing it. Surely, it is the default theory, considering that it originated more or less two thousand years ago, and since then in philosophy it has mostly been taken for granted. But this does not make it necessarily true, and all alternative theories *must be defeated if they are not to be accepted*. The aim of this paper is to defeat the alternatives for what at stake with theses (RP) and (ST). As we will see, although we cannot prove that these theses are true, all the different data that need to be accounted for can be more elegantly and more easily explained if the two theses are endorsed. Thus we will conclude that there really is something face-value in the theses, and that an account that endorses them is to be preferred to the alternatives.

Propositional attitudes sentences; ‘that’-clauses; relational predicates; singular terms; the face-value theory.

Take a sentence like

(1) Dave loves Laura.

If Dave loves Laura, then there is somebody, namely Laura, who is loved by Dave. Furthermore, if Dave loves Laura and Gabriel likes Laura, then there is somebody, namely Laura, whom Dave loves and Gabriel likes. In our

sentence, then, the predicate seems to designate a relation, and the *relata* seem to be the denotations of ‘Dave’ and ‘Laura’.¹ Now take a sentence like

(2) Olga believes that Cicero is smart.

If Olga believes that Cicero is smart, then there is something, namely that Cicero is smart, that is believed by Olga. Furthermore, if Olga believes that Cicero is smart and Gabriel knows that Cicero is smart, then there is something, namely that Cicero is smart, that Olga believes and Gabriel knows. On the basis of the similarities between our two sentences, it seems obviously correct to conclude, firstly, that ‘to believe’, like ‘to love’, designates a relation and, secondly, that the *relata* of the relation designated by ‘to believe’ in (2) are the denotations of ‘Olga’ and ‘that Cicero is smart’. These theses are in fact part of the so-called *face-value theory* of propositional attitude sentences,² which can be put as follows:

(The Face-Value Theory)

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;

(ST) ‘That’-clauses are singular terms;

(P) ‘That’-clauses denote propositions.

The theory is so widely endorsed that it is often simply assumed without even discussing the plausibility of its tenets. The aim of this paper is discuss what at stake with theses (RP) and (ST). We will start with (RP), and we will find genuinely good reasons to endorse this thesis. But these reasons *pro* seem counterbalanced by some evidence *contra*. We will conclude that it is better to save (RP), and to explain the apparently conflicting data away (§1). These

¹For singular terms, I follow Donnellan 1966: 54-55, and use the term ‘denotation’ for the relation, whatever it is, that a singular term bears to its worldly correlate, in order to be neutral and thus to allow that different expressions (such as proper names and definite descriptions) may function in different ways while ultimately designating the same thing. For predicates, I will instead follow Liebesman 2015, and use ‘to designate’ as the relation, whatever it is, that a predicate bears to its worldly correlate. Finally, I will use ‘to express’ for the relation, whatever it is, that a sentence or an utterance of a sentence bears to its meaning. For those who prefer to see two meanings, one at the level of senses and the other at the level of references, denotation and designation are at the level of references, while expression should be taken to be the relation between a sentence and its sense. These are purely terminological choices, and should be taken to carry no substantive theory. Moreover, for ease, I will speak simply of sentences and not of pairs of sentences or clauses and contextual factors or indexes, or of utterances.

² Bach 1997: 221-224; Bealer 2002: 86; Burge 1980: 55; Fara 2013: 250-251; Fodor 1981: 178; King 2014: 7; Moltmann 2003: 12-14; Recanati 2004: 229; Richard 1990: 7; Rosefeldt 2008: 301-302; Salmon 1983: 5-6; Schiffer 2003: 12-14; Soames 1988: 106; Stalnaker 1987: 140-141; Wettstein 2004: 165-166.

(RP) and (ST) are often conflated, and the good reasons for endorsing (RP) are generally also taken to be good reasons for endorsing (ST). But I will show that actually these reasons only support (RP), and so (ST) will still have to be discussed. We will then see that it is in fact better to endorse (ST) and that an objections that can be raised against it can and should be explained away (§2). The conclusion will be that there really is something face-value in theses (RP) and (ST), and that an account that endorses them is to be preferred to the alternatives.

1 Propositional Attitude Predicates as Relational Predicates

In order to assess

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations,

we need a workable characterization of when a relational predicate occurs in a sentence, and in §1.1 we will provide one. By relying on that characterization, we will see in §§1.2-1.3 that there are indeed some good reasons why we should take (RP) to be true. But these reasons *pro* seem counterbalanced by some evidence *contra*. We will discuss this contrary evidence in §1.4. We will conclude that it is better to save (RP), and to explain the apparently conflicting data away by holding, together with others, that propositional attitude predicates are ambiguous.

1.1 A Workable Characterization

When is it that a relational predicate occurs in a sentence? Unfortunately, we do not have an obviously correct answer, but in order to find one we can start by our fairly clear example of a sentence in which a relational predicate occurs:

(1) Dave loves Laura.

In (1) there are two open argument positions – *() loves ()*. Thus, one may try to suggest that a predicate that designates an *n-place* relation occurs in a sentence iff we can detect *n* open argument positions. But, clearly, this is not enough. Take

(3) Dave is asleep and Laura is awake.

We can obtain $()$ and $()$, but we obviously do not want to hold that ‘and’ designates a relation. In the usual way, we can then try to hold that a predicate that designates an *n-place* relation occurs in a sentence iff we can detect *n* open argument positions into which we can substitute an English existential quantifier. For from (3) we cannot move to

(4) *Dave is asleep and something.³

Thus the move of requiring that the open position can be filled by an English existential quantifier is promising, but it is still not enough. For according to this definition, ‘is’ designates a relation, given that from

(5) Dave is excellent

we can detect two positions, and

(6) Dave is something, i.e. excellent

is grammatical. We would like to have, so to say, the right kind of quantifiers, but distinguishing those we want is not easy and defining relational predicates on the basis of quantifiers counts as an explanation of *obscura per obscuriora*. Another option is the following. Take

(5) Dave is excellent

(7) Dave exemplifies excellence.

According to our tentative insufficient characterization, a relational predicate occurs in both, since we can obtain both $()$ is $()$ and $()$ exemplifies $()$ and

(8) Dave is something

(9) Dave exemplifies something.

One way to characterize our notion of a relational predicate such that (5) is excluded, as desired, would be to say that (5) is to be ruled out because ‘excellent’ is not a singular term. But this would give us wrong results: ‘some books’ is not a singular term, but in

³ Following Prior 1955-1956: 200-201, we can build a mixture of English and Mathematics in which we in fact have sentential quantifiers, such as his *thether*, in which we can translate the English *Every statement has the same truth-value as itself* as *If and only if anywhere then thether*. Moreover, we can even hold that in fact we would be better off if we introduced such a quantifier (Künne 2003: 356-373). But this does not change the fact that English, as it stands, is not like that. In English, (4) is indeed ungrammatical.

(10) Dave bought some books

‘to buy’ intuitively designates a relation. Thus we are holding that a predicate designating an *n-place* relation occurs in a sentence only if we can detect *n* open argument positions into which we can substitute an existential quantifier. We are now looking for further conditions, and we need to rely on something different than quantifiers and singular terms. Something a bit less obscure is, I think, the notion of a relation itself. Relations do raise various kinds of metaphysical problem, but even if the metaphysics of relations is complex, there is a characteristic of relations that I think we can exploit here: relations are tightly connected with other relations. For example, if Dave loves Laura, then Laura is loved by Dave, and if Dave is as old as Gabriel, then Gabriel is as old as Dave. Let us then take again

- (5) Dave is excellent
- (7) Dave exemplifies excellence.

With (7), we can designate the inverse relation, as in

(11) Excellence is exemplified by Dave.

But with (5) we cannot: it is not even clear what sentence would purport to express that. In natural language, the inverse of a non-symmetric relation is generally designated via the change in the voice from active to passive or vice-versa. With equivalence relations, instead, only the roles of the arguments get switched: from

(12) Dave is as old as Gabriel

we obtain

(13) Gabriel is as old as Dave,

where the predicate is not in the passive form, but the roles of the arguments have been switched. Given this, we may try to hold that a predicate designating an *n-place* relation occurs in a sentence iff we can detect *n* open argument positions into which we can quantify *and* we can build a sentence in which we switch the roles of the arguments and the truth-value of the two sentences is the same. But we are unfortunately still in trouble. Take

(14) Dave weighs 80kgs.

We can obtain $(x) \textit{ weighs } (y)$ and

(15) Dave weighs something,

in accordance with the first condition, and we can also obtain

(16) 80kgs is the weight of Dave,

in which the roles of ‘80kgs’ and ‘Dave’ have arguably changed, so that also the second condition is met. But we would hardly accept that this sentence expresses the holding of a relation. What would the *relata* be? In order to rule these cases out, we can rely on the special connection that relational predicates have with questions and ask the questions to be, so to say, of the right kind. Let us take again our

(1) Dave loves Laura.

If we put a variable in place of one of the arguments, we obtain $x \textit{ loves Laura}$; $\textit{ Dave loves } y$. We can build the corresponding question, which asks what the missing *relatum* is:

(17) Who loves Laura?

(18) Whom does Dave love?.

Given this relation between relational predicates and questions, we can then rely on the intuitive idea that questions like ‘Who?’, ‘What?’, ‘Which?’ point to something different than what questions like ‘How?’ point to. In asking whom Dave loves, I am asking who is one of the *relata* in the relation of love. But with

(14) Dave weighs 80kgs.

80kgs is, in fact, not *what*, *who*, *which*, *whom* Dave weighs, but *how much* he weighs. In order to rule out cases like (14) we can then add the following extra requirement: all the arguments, so to say, answer questions like ‘Who?’, ‘Which?’, ‘What?’, and not ‘How?’ or ‘How (much)?’, etc.⁴ Putting everything together, we have the following characterization:

⁴ Matthews 2007 has recently defended a *measurement account* of propositional attitude attributions, according to which propositional attitude sentences are in fact similar to (14). In support of his account, Matthews says that for both ‘that’-clauses and ‘80kgs’ we can “form

in a sentence an n -place relational predicate occurs iff

(RP1) We can detect n open argument positions into which we can quantify, and such that each argument answers a question like ‘What?’, ‘Which?’, ‘Who?’;

(RP2) We can build a sentence in which the roles of some of the n arguments have been switched, and the truth-value of this and the original sentence is the same.

This is not a definition of when in a sentence a relational predicate occurs, given that there is a pretty obvious circularity: the notion of *role of an argument*, for example, cannot be defined without relying on the notion of relational predicate. Moreover, in order to specify what are the *questions like ‘What?’, ‘Which?’, ‘Who?’*, the notion of relational predicate would surely be needed. But, however sloppy, however open to counterexamples, and however imprecise it is, I take it still to be a workable characterization that we can employ for our purposes.

1.2 (RP1) and the Validity of Some Inferences

With this characterization of when in a sentence a relational predicate occurs, let us see whether we can find some good reasons in favour of the thesis that we are primarily interested in, i.e.

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

The first condition in the characterization just provided, i.e. that an n -place relational predicate occurs in a sentence if

(RP1) We can detect n open argument positions into which we can quantify, and such that each argument answers a question like ‘What?’, ‘Which?’, ‘Who?’,

is surely satisfied. In

(2) Olga believes that Cicero is smart

we can detect more than one open argument position, $()$ *believes* $()$, and we can quantify into both positions:

wh-questions” (150). But while this is certainly the case, the kinds of questions are intuitively very different, one being a ‘what’-question, the other a ‘how much’-question.

- (19) Somebody believes that Cicero is smart
 (20) Olga believes something.

Moreover, Olga is *who* believes that, while that Cicero is smart is *what* she believes. Holding that in propositional attitude sentences we have more than one position into which we can substitute an English quantifier makes it easy to account for the validity of some inferences, and the validity of such inferences is actually the reason that is most commonly put forward in support of the conjunction of

- (RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;
 (ST) ‘That’-clauses are singular terms.⁵

The inferences whose validity are relevant are those like the following:

Olga believes that Cicero is smart
Gabriel believes everything Olga believes
Thus, Gabriel believes that Cicero is smart.

For according to the conjunction of theses (RP) and (ST), the inference enjoys the following clearly logically valid simple pattern:

$B(oc)$
 $\forall x(B(ox) \rightarrow B(gx))$
 $\therefore B(gc).$

Thus, if the theses are endorsed, firstly, the explanation of the validity of the inference does not need to go beyond the usual rules of first order classical logic. Secondly, the quantifiers can be interpreted as the usual objectual quantifiers. But it should be noted that even though often presented as such, these considerations are not really in favour of the conjunction of theses (RP) and (ST), but just of the first. Let us see this with an example that has nothing to do with propositional attitudes. Take the following two inferences

Dave loves Laura
Gabriel loves everything Dave loves
Gabriel loves Laura;

⁵ Bealer 1982: 23-25; Braun 2015: 144; Crawford 2014; King 2014: 7; Recanati 2000: 6; 33-39; Salmon 1983: 5-6; Schiffer 2003: 12-14.

Dave loves a girl
Gabriel loves everything Dave loves
Gabriel loves a girl.

Although the second is more complex, both inferences have a straightforward correct form, and we can account for the validity of both without having to go beyond first order logic with objectual quantifiers (in the case of the second, we would have to add premises, but the argument could still instantiate a valid pattern⁶). So let us go back to our original inference

Olga believes that Cicero is smart
Gabriel believes everything Olga believes
Thus, Gabriel believes that Cicero is smart.

Its validity, and the fact that we want to account for it without going beyond usual first order logic with objectual quantifiers, do not establish whether the inference is similar to the first or the second in our example. Put differently, in order to straightforwardly account for the validity of our inference, the thesis

(ST) ‘That’-clauses are singular terms

is not needed. If we reject it and take, for example, ‘that Cicero is smart’ not as a singular term, but as a quantified phrase similar to ‘a girl’, everything is still explained in the way we want. Thus the validity of these inferences does not show the truth of (ST), and we will have to discuss it separately below in §2. If these inferences are a reason at all, therefore, they are only a reason in favour of

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.

But is the validity of those inferences a *good* reason in favour of (RP)? Of course, holding (RP), and thus having the possibility of taking the quantifiers as objectual, is not the only way in which the validity of the inference can be explained. Nonetheless, it is clearly the easiest one, in particular considering

⁶ Obviously,
Dave loves a girl
Gabriel loves everything Dave loves
Gabriel loves a girl

also has another reading, in which Dave and Gabriel do not love the very same girl, but two different girls. This is irrelevant for our purposes. It is the reading we considered in the main text that shows that the validity of the inferences does not support (ST).

that, differently from what some have held (Aune 1985: 63-65) the quantifiers occurring in that kind of inference cannot be interpreted substitutionally (Moltmann 2003: 80). For if these quantifiers were substitutional, the substituents would have to be of the right syntactic category; but this is not necessarily so. Take

(21) Olga imagined something Gabriel never thought about.

If what Olga imagined, and what Gabriel never thought about, is that Cicero is smart, then, according to a substitutional interpretation of the quantifiers,

(22) *Olga imagined that Cicero is smart and Gabriel never thought about that Cicero is smart

would have to be grammatical; but it is not. In contrast with a substitutional interpretation of the quantifier, ‘something’ is acceptable even though it would require a ‘that’-clause with respect to ‘imagined’ but something different with respect to the preposition ‘about’. Since the substitutional interpretation of the quantifiers seems incorrect, if (RP), and thus the thesis that the quantifiers are objectual, are denied, then a third type of quantifier should be introduced. This is in fact exactly what Hofweber (forthcoming), Prior (1963: 117-118); Recanati (2000: 33-39), Rumfitt (2003b), Rosefeldt (2008) and Schiffer (1987: 288) suggest. Recanati and Schiffer do not explain how these quantifiers would work and what they mean; Rumfitt (2003b: 462-463) instead suggests that these quantifiers can “be Englished using the non-nominal quantificational forms ‘however things may be’ or ‘however things may be said or thought to be’”. Hofweber (forthcoming) argues instead that these quantifiers concern inferential roles:

the quantified sentence inferentially relates to quantifier free sentences ... we want to inferentially relate the sentence we uttered to any instance of the quantifier. In fact, we are thereby endorsing every instance.

Rosefeldt (2008: 318-325) accounts for them within a type theoretic account. As these authors themselves admit, the way in which they characterize their quantifiers hardly constitutes a full account. Moreover, I think the fact that there are so many different approaches sheds some doubts on our having an intuitive grasp of how these quantifiers would work and thus on how easy defining them properly would be. So, however these quantifiers that are neither objectual nor substitutional are characterized, it seems indisputable that endorsing

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations

is a much easier way to explain the validity of some inferences involving propositional attitude sentences. *Other things being equal*, as they say, I think we should conclude that endorsing (RP) is the best explanation.

1.3 (RP2) and the Passive Voice

As we saw in §1.1, there are two conditions a predicate occurring in a sentence should meet in order to be considered as a relational predicate. We just saw that the first condition is met by predicates occurring as main predicates in propositional attitude sentences, and we can now see that these predicates also seem to meet the second condition (Künne 2003: 68-69; White 1972: 80), i.e.

(RP2) We can build a sentence in which the roles of some of the n arguments have been switched, and the truth-value of this and the original sentence is the same.

For from

(2) Olga believes that Cicero is smart

we can move to the passive voice:

(23) That Cicero is smart is believed by Olga.

Surely, the passive voice is a good strong datum in favour of taking a sentence to be one in which a relational predicate occurs. For in the passive transformation, we change the role of some *relata*, so that the patient(s) becomes the agent(s) and vice versa, and only if a predicate designates a relation among some *relata* do we have some *relata* to change the role of. Thus, it seems that we can easily conclude that in propositional attitude sentences, given that they meet both conditions (RP1) and (RP2), relational predicates occur. But things are not that easy. For one can deny that propositional attitude sentences really meet condition (RP2) (Harman 2003: 175; Rundle 1979: 280; 313). For example, Rundle holds that (23) is not really the passive voice of (2), but should be taken as the result of an inversion and ellipsis for ‘it’ in

(24) It is believed by Olga that Cicero is smart,

which is itself tantamount to

(25) It is believed by Olga: Cicero is smart,

where 'it' is a structural device that has no semantic import, as when it occurs in something like

(26) It is raining.

Thus there seem to be other accounts of the alleged passive voice, and so the occurrence of this alleged passive voice is not a proof that in propositional attitude sentences relational predicates occur. But, first of all, explanations of this kind are extremely complicated and unnatural. Moreover, it is not clear that there really is some similarity between (25) and (26). For, as we have already seen, with the first we can ask

(27) What is believed by Olga?

while we cannot ask

(28) *What is raining?

I think, therefore, that we can rather safely advance the thesis that, again *other things being equal*, sentences like (24) are genuine passive voices. But then propositional attitude sentences satisfy both conditions (RP1) and (RP2). Thus, *other things being equal*, it seems correct to hold that relational predicates occur in propositional attitude sentences, as in accordance with

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations.⁷

Before moving on to other considerations, let us note that the datum that propositional attitude sentences allow the passive voice does not also suggest, together with the truth of (RP), the truth of

⁷ Those we saw are not the only data in support of (RP). Others concern extraposition, i.e. the fact that we can move from *Olga believes that Cicero is smart* to *Olga believes it that Cicero is smart*. If 'to believe' was not a relational predicate, then there would be, so to say, no space for 'it'. But I think it is better to leave considerations of this kind out. For these constructions with the expletive 'it' are considered to be syntactically very complex, and too many different syntactic factors would have to be taken into consideration. Luckily, the data we have considered seem already sufficient.

(ST) ‘That’-clauses are singular terms.

For our ability to construct the passive voice depends merely on whether or not the predicate is transitive, no matter whether or not we have singular terms occurring in the original active sentence. Since ‘to love’ is a transitive predicate, for example, being it followed by a singular terms like ‘Laura’, or by something like ‘girls’, ‘someone’, etc., it in fact allows the passive voice.

1.4 An Alleged Reason Against

Let us take stock. We have found two good reasons in favour of (RP), i.e. the intuitive validity of certain inferences and the fact that propositional attitude sentences allow the passive voice construction. Neither of these considerations, nor their conjunction, constitutes a proof that (RP) is true, since other explanations of the data are available. Endorsing (RP) still seems, *other things being equal*, to be the best option. But, as we will see now, there are some considerations that seem to show that *other things are not equal*.⁸ For ‘to know’ admits of singular terms, as shown by the perfectly grammatical

(29) Olga knows Laura.

Given this, if propositional attitude predicates occurring in propositional attitude sentences are relational, no matter what the semantic function of ‘that’-clauses is, if it has been stipulated that ‘Bob’ is the name of a *relatum* in

(30) Olga knows that Cicero is smart

then one would expect

(31) Olga knows Bob

to be true if (30) is. But the truth of (30) does not in fact guarantee that (31) is true. Olga may know that Cicero is smart, so that (30) is true, but not be acquainted with Bob, be it a sentence, a proposition, a fact, Cicero, a property or what have you. Now, since we found some good reasons for taking

⁸ These data were firstly presented by Prior 1971: 3-21, Rundle 1979: 293-298 and Vendler 1972: 101. More recently, they have been discussed by Asher 1993: 21-22; 31-32; 210-213; Bach 1997: 224-225; Boër 2009; Harman 2003; Hofweber: 2006: 215-217; King 2007: 137-163; Küne 2003: 258-263; McKinsey 1999: 529-531; Merricks 2009; Moffett 2003; Moltmann 2003; Pietroski 2005: 218-241; Pryor 2007; Recanati 2000: 31-33; Rosefeldt 2008; Rundle 2001; Sainsbury 2002: 185-188 and Schiffer 2003: 93-96.

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations

to be true, we have good reasons to try to explain the datum away, and there seem to be two main routes one can take here. The first strategy is pure dismissal. Schiffer (2003: 93-96), for example, has quickly dismissed the examples, taking them as just showing a quirk of Indo-European languages. But, firstly, the phenomenon is pervasive: it does not concern only English or ‘to know’, but many other languages and predicates as well (King 2007: 154; Rosefeldt 2008: 305). Moreover, there is a criterion for establishing whether something is *only a point of usage*, and if we take the criterion as correct, our examples do not come out as mere points of usage. Together with Schnieder (2006), let us imagine a language in which we do not use ‘to eat’ for princesses, but only use ‘to dine’. In that language a sentence like

(32) The princess did not eat

does not express that the princess lacks a certain property and the negation is metalinguistic. The sentence expresses something like

(33) “The Princess ate” is not in accordance with usage.

If we take Schnieder’s criterion as correct, the examples we are concerned with do not come out as mere points of usage. For

(34) Olga does not know Bob

surely does not express what

(35) “Olga knows Bob” is not in accordance with usage

expresses. Furthermore, a test for establishing whether the negation is metalinguistic is the impossibility of morphologically incorporated negation, so that, for example,

(36) Warpe did not wop up his voice, he spoke with an Italian accent

comes out as having metalinguistic tones, considering that

(37) *Warpe unwopped his voice, he spoke with an Italian accent

is ungrammatical (Predelli 2013: 106). While, as Predelli remarks, the test is not conclusive, we can note that our case seems not to pass the test and thus seems to come out as not having a metalinguistic tone. The not identical, but still arguably relevant

(38) Bob is unknown to Olga

is in fact perfectly grammatical. Thus the data are pervasive, and they do not seem reducible to mere points of usage. They should be accounted for. Let us then move to the second strategy, which is the most commonly endorsed (King 2007: 153-155; Kühne 2003: 259-260; Pietroski 2005: 217-241; Stanley 2011: 64-65). It consists in holding that some propositional attitude predicates, such as our ‘to know’, are ambiguous and have different meaning in constructions like

(30) Olga knows that Cicero is smart

(31) Olga knows Bob.

Roughly, the first sentence is taken to express that Olga has a piece of knowledge which is characterised in some way or other by the ‘that’-clause, while the second expresses that Olga has Bob as one of the things she is acquainted with. This strategy is clearly successful: if the relations contributed by the predicates are different in the two sentences, it is to be expected that the truth-conditions of the sentences are different. But, as always, we want some reasons for thinking that it is really the case that the predicates are ambiguous. Here are the two reasons that are generally put forward (King 2007: 156-162; Kühne 2003: 260). The first kind of evidence that has been provided is the fact that the predicates pass the usual *zeugma test* for ambiguity. According to the test, since from (30) and (31) we cannot move to

(39) *Olga knows that Cicero is smart and Bob,

it follows that ‘to know’ makes different contributions as it occurs in the two original sentences. Unfortunately, it is well known that the test is not completely reliable, since the possibility of deleting one occurrence of a term seems to have to do with many different factors, ambiguity being only one of them. For example, since from

(40) Emanuel’s dissertation is thought provoking

(41) Emanuel’s dissertation is yellowed with age

we cannot move to

(42) Emanuel's dissertation is thought provoking and yellowed with age,

the test tells us that 'dissertation' is ambiguous. But when we complicate things just a little bit, as in

(43) Emanuel's dissertation is *still* thought provoking *although* yellowed with age,

we actually obtain a perfectly grammatical sentence (Lewandowska-Tomaszczyk 2007: 143). The second kind of evidence in favour of the ambiguity of propositional attitude predicates is that they pass the usual *translation test* for ambiguity. The datum is that while in English both

(30) Olga knows that Cicero is smart

and

(31) Olga knows Bob

are grammatical, in other languages, such as French, German and Italian, two different predicates should be used in the two different kinds of construction. In Italian we have 'sapere' and 'conoscere', in German 'wissen' and 'kennen' and in French 'connaître' and 'savoir'. Translation is a traditional test for ambiguity but unfortunately, as strong as this may look as a test, it too can be called into question. First of all, one may raise here a general Quinean scepticism concerning the thesis that there is something like *the* translation of a sentence. Moreover, only 'to know' shows such a solid difference in translation in other languages, and, as we have seen, the phenomenon is instead pervasive. Thus, the reasons usually put forward in the literature are not sufficient in order to support the thesis that some propositional attitude predicates are ambiguous. Should we reject it, then? I think we should not. For predicates like 'to know' are already ambiguous before we consider 'that'-clauses, or at least have a complex and multifarious meaning. We do not even need to go into the details of a conceptual analysis of knowledge, for it is sufficient to take a dictionary. Here are some of the different meanings *The Oxford Dictionary* distinguishes for 'to know':

- *To have information*, as in "The cause of the fire is not yet known";
- *To realize*, as in "She knows a bargain when she sees one";

- *To be familiar*, as in “I’ve known Olga for 31 years”;
- *To think that somebody/something is a particular type of person or thing or has particular characteristics* as in “It’s known as the most dangerous part of the city”;
- *To give name* as in “The drug is commonly known as *Ecstasy*”;
- *To distinguish*, as in “We have taught our children to know right from wrong”;
- *To experience*, as in “He has known both poverty and wealth”.

The same holds for the other predicates that lead to the datum we are concerned about. Take ‘to accept’: accepting a present or an invitation is not like accepting a conclusion or a theory, unless we are in quite an unusual context in which conclusions are given to us. Sometimes, moreover, the way in which we phrase things puts constraints on the available meanings. For example, ‘some bargain’ and ‘a bargain’ can be read as having the same meaning. But whereas in

(44) I know a bargain when I see it

‘to know’ can be taken as having the recognition meaning, this is not the case with

(45) I know some bargain.⁹

Since the predicates are at least polysemous even before ‘that’-clauses are considered, we can rather safely assume that they are so also when we consider ‘that’-clauses. Endorsing the thesis that some propositional attitude predicates, such as our ‘to know’, are ambiguous seems the best strategy in order to save

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations

from some evidence that seems to show that (RP) cannot be correct. The choice is between rejecting (RP) or endorsing the claim that some predicates

⁹ On the basis of the fact that ‘that’-clauses and noun phrases belong to different syntactic categories, King 2007:154 argues that the ambiguity of propositional attitude predicates is best explained by arguing that the syntactic category of the complement of the predicate determines which relation the predicate contributes. But this thesis is subject to some serious objections (Boër 2009: 552-553; Moffett 2003: 82-84; Rosefeldt 2008: 315-316) and, moreover, this sharp correlation between semantics and syntax is actually unmotivated and unnecessary.

are ambiguous. As we have seen, we have some strong good reasons to take (RP) as true. It is true that we do not have absolutely incontestable arguments for the ambiguity of the predicates. But neither do we have absolute arguments for the univocity of those predicates. Moreover, even though they are weak, some arguments can be put forward in support of ambiguity, arguments that are independent of ‘that’-clauses and propositional attitude sentences. I think, therefore, that we should conclude that we seem much more justified in holding that the predicates are ambiguous than in rejecting (RP). All things considered, we can finally conclude that we had better endorse (RP).

2 ‘That’-Clauses as Singular Terms

Theses

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;

(ST) ‘That’-clauses are singular terms

are often conflated, and the reasons in favour of (RP) just discussed are usually taken to be reasons for both (RP) and (ST). But, as we saw, this is incorrect: both the validity of some inferences and the possibility of building the passive voice leave open the possibility that ‘that’-clauses are not singular terms. Thus we still need to establish whether it is better to endorse that ‘that’-clauses are singular terms. But what are *singular terms*? Unfortunately, we notoriously do not have an uncontroversial definition. Nonetheless, whatever the details are and however the difficult cases are to be accommodated, we can characterize singular terms in the following way. The difference between syntactic units and non-syntactic units is the difference between names, descriptions, predicates on the one hand and something like ‘ ’s reason is’, ‘and nice’, ‘gave me while’ on the other. Singular terms are, roughly, those syntactic units that purport to denote one thing. Thus, for example, in this sense proper names and definite descriptions are singular terms, in that they purport to denote some thing. Singular terms are therefore a special kind of syntactic unit, and in order to assess (ST) it should first of all be established whether ‘that’-clauses are syntactic units. In §2.1 we will see that we had better hold that they are. But it will still be open whether ‘that’-clauses are singular terms or quantified phrases not reducible to singular terms. We will then see in §2.2 that it is in fact better to endorse (ST) and that an objection that seems to show that (ST) is false is better explained away.

2.1 Syntactic Units

Let us start by trying to establish whether ‘that’-clauses are syntactic units. As many have remarked and as Künne (2003: 69) puts it, everything in syntax speaks in favour of holding that in carving a sentence like

(2) Olga believes that Cicero is smart

at its syntactic joints, we do obtain ‘that Cicero is smart’ as a unit. For, in general, there are some constraints on how the passive form of a construction can be built and how we can grammatically rearrange the bits of a sentence. These constraints are predictably connected with the syntactic units that occur in the sentence. For example, in

(46) Olga likes her friends

‘her friends’ is taken to be a unit because, if it were not, it would be possible to rearrange the different bits so that ‘her’ and ‘friends’ get separated; but this is not possible. Cutting (2) so that the ‘that’-clause is not a unit violates those constraints. Let us take Prior’s account (1963) as an example. According to Prior, we should cut the attribution as follows: *Olga / believes that / Cicero is smart*. Thus ‘that Cicero is smart’ is not a unit, while ‘believes that’ is. But then why *can* ‘believes’ and ‘that’ be kept apart, as shown by the grammaticality of

(47) That Cicero is smart is believed by Olga,

and actually *should* be so kept apart, considering that

(48) *Cicero is smart is believed that by Olga

is ungrammatical? Surely, as always, these problems for accounts that do not take ‘that’-clauses to be syntactic units are not without replies. For example, it should be recognized that in our natural languages there are cases in which bits of languages which are undoubtedly syntactic units can be kept apart. For example, we have the phenomenon of *tmesis*, in which, as Quine (1987: 3) puts it, there is the sandwiching of one word in another. As he reports, *tmesis* is actually possible in English: in

(49) A whole nother ball game,

for example, ‘another’ is sandwiched with ‘whole’. Moreover, while in English the phenomenon is pretty rare, it is pervasive in some other languages, such as German, where it concerns all the aptly called *separable verbs*. Data on separability alone, therefore, do not seem able to settle the question of whether ‘that’-clauses are syntactic units. But these are not the only kinds of data we can rely on in assessing whether ‘that’-clauses are syntactic units. Another datum that is relevant here is that, for example, we can substitute *singular* pronouns and demonstratives, as in

- (50) Olga believes it
 (51) Olga believes that,

and we can say that both Olga and Gabriel know the same thing, not the very same *things*. Certainly these are not conclusive data; but it is also the case that from

- (2) Olga believes that Cicero is smart,

we can obtain

- (52) Olga believes something, namely that Cicero is smart
 (53) Olga believes something, i.e. that Cicero is smart.

Since there *is* something Olga believes, it really seems that the quantifier is *singular*. Furthermore, the quantifier seems singular, even forgetting about the fact that the predicate goes in the singular. Some have suggested that, forgetting about natural language, the quantifier would in the end be best analysed as plural (Jubein 2001: 57). But those sentences enter in inferences like those we have seen in §1.2, and, as Crawford (2014: 183-187) has shown, it does not seem that the validity of those inferences can be accounted for in terms of plural quantifiers. Let us take the following valid argument,

Olga believes that Dave admires Laura
Gabriel believes everything Olga does
 So, *Gabriel believes that Dave admires Laura.*

If the quantifier is plural, then the second premise in the argument might be taken to have the following form (where *xx* stand for plural variables bound by a plural quantifier):

$$\forall xx[(BEL(o, xx) \rightarrow BEL(g, xx))].$$

But from it and

Olga believes that Dave admires Laura

it does not follow that Gabriel believes that Dave admires Laura: Olga and Gabriel might be related to the same *relata*, as in accordance with the second premise, and Olga might believe that Dave admires Laura, as in accordance with the first premise, but there is still space for it not to be the case that Gabriel believes that Dave admires Laura. For the second premise does not ask Gabriel to be related to the *relata* in the same way in which Olga is related, and therefore it can be that Gabriel believes that Laura admires Dave, without it being the case that he believes that Dave admires Laura back. One may try to put this constraint on order into the argument, so that the second premise become analogous to

For any propositional relata, if Olga stands in the belief relation to them in any specific way, then so does Gabriel,

as Jubien in fact suggests (2001: 57). But, firstly, even though we might be able to construe a *logic* of plurals in which we can take care of order, by following the path initiated by Taylor and Hazen (1992: 389-390), and thus find a way to specify the *connexions* between the constituents, this is not how the *natural language* of plurals work. For example, suppose Laura says

(54) My first, second, and third choices are daffodils, pizza, and gnomes.

While her sentence might suggest that her first choice is daffodils, it does not seem that this belongs to what the sentence expresses. For example, she can in fact add:

(55) Now guess which is my first choice,

and if she wanted to tell us this in the first place she would probably add ‘in this order’ or ‘respectively’, as we tend to do in these cases. Secondly, even forgetting about natural language, adding order is not going to make the inference valid. For in

For any propositional relata, if Olga stands in the belief relation to them in any specific way, then so does Gabriel,

we are quantifying over *specific ways* of being related to *relata*; but no reference to a way of believing is present in the first premise

Olga believes that Dave admires Laura

or in the conclusion

Gabriel believes that Dave admires Laura

so that the argument does not have the form

$$\begin{array}{l} A \\ A \rightarrow B \\ \therefore B \end{array}$$

which would make it valid. Thus, given the validity of the inferences in which sentences like

(52) Olga believes something, namely that Cicero is smart

occur, the quantifiers occurring in those sentences are best taken to be singular. But if the quantifiers are singular, we can then conclude that it is better to take ‘that’-clauses to be syntactic units.

2.2 Singular Terms

Putting everything together, ‘that’-clauses are syntactic units in a position open to English singular objectual quantifiers. But this still does not show that

(ST) ‘That’-clauses are singular terms

is true, because it is still open whether ‘that’-clauses are, in accordance with (ST), syntactic units purporting to denote one thing, as proper names and definite descriptions are, or quantified phrases not reducible to singular terms, as, for example, ‘a girl’ as it occurs in

(56) A girl is loved by Dave

is. In fact, Shier (1996), Bach (1997) and Recanati (2004) have all suggested that we should account for ‘that’-clauses by taking them to be existentially

quantified phrases. As Shier puts it, according to these authors ‘that Cicero is smart’, as it occurs in

(2) Olga believes that Cicero is smart,

“is used to *characterize*, though not to *specify*, the content of the belief” (1996: 227). But ‘that’-clauses do not seem to be quantified phrases. For, first of all, if that were the case, they would behave like other quantified phrases, which they do not. In particular, it would be possible to make sense of the substitution of more complex existentially quantified phrases or of the universal quantifier for the existential quantifier. Let us take

(57) Dave loves a girl.

It may well be false that Dave loves all girls, or that he loves exactly 6 girls, but we can still make perfect sense of it. With ‘that’-clauses the situation is rather different. Let us take again (2). What would it mean that Olga believes every Cicero is smart? At all times, in any way? Secondly, ‘that’-clauses do not seem quantificational phrases also for another reason. Dummett (1981: 59-69), and then others, most recently Hale (2013: 40-46), suggested some tests in order to establish whether a bit of language is a singular term. Here is a version of the tests (Hale: 2013: 42-43):

- ‘*a*’ functions as a singular term in a given sentence ‘*A(a)*’ iff
- I. It shall be possible to infer the result of replacing ‘*a*’ by ‘it’ and prefixing the whole by ‘There is something such that ...’;
 - II. For some sentence ‘*B(a)*’ it shall be possible to infer from ‘*A(a)*’ and ‘*B(a)*’ ‘There is something such that *A(it)* and *B(it)*’;
 - III. For some sentence ‘*B(a)*’, the inference is valid from ‘It is true of *a* that *A(it)* or *B(it)*’ to the disjunction ‘*A(a)* or *B(a)*’.

The tests were developed exactly in order to exclude quantifiers and quantified phrases from the category of singular terms. Singular terms have a uniqueness, an identifying flavour, since they purport to denote exactly one thing. This is not the case with the quantifiers not reducible to singular terms. Let us take a not too controversial intuitive case of singular term, i.e. the proper name ‘Cicero’ as it occurs in

(58) Cicero is smart.

In accordance with test II, from (58) and

(59) Cicero is wise

we can infer

(60) There is something such that he/she/it is smart and wise.

This is not the case with the quantifiers, and the test is in fact able to rule ‘something’ and cognates out: we have no guarantee that from

(61) Somebody is smart

and

(62) Somebody is wise

we can infer

(63) There is somebody such that she/he is smart and wise.

Thus, if ‘that’-clauses were quantificational and not reducible to singular terms, they would fail test II, but they do not: from

(2) Olga believes that Cicero is smart

(64) Gabriel said that Cicero is smart

we can obtain

(65) There is something such that Olga believes it and Gabriel said it.

The only way in which the derivation would be valid on the quantificational account is if the existentially quantified phrase has a uniqueness clause and is therefore a definite description. But this means that ‘that’-clauses are in fact singular terms, as syntactic units that purport to denote some thing. Thus the quantificational account is in accordance with the fact that ‘that’-clauses pass test II only if it is taken to be not an alternative, but actually a version of

(ST) ‘That’-clauses are singular terms.¹⁰

¹⁰ It should be noted that ‘that’-clauses do not actually pass all the tests smoothly. In particular, test III cannot even be applied, since the premise needed to apply the test is ungrammatical: nothing of the form *It is true of that Cicero is smart that A(it) or B(it)* is grammatical. But Hale 2013: 42 himself holds that this is not the way in which we should

The tests can be criticised on several possible grounds (Rumfitt 2003a: 197-207), so that they surely do not prove that a quantificational account according to which ‘that’-clauses are not reducible to singular terms is false. Still, the account has some problems and we really miss a reason why we should take it to be true. While Recanati does not provide us with reasons why we should accept his quantificational account, he asks us “Why not?” (2004: 231). But I think that the question is somehow misplaced: we seem more justified in questioning the claim that ‘that’-clauses are quantified phrases not reducible to singular terms, than in questioning the claim that they are reducible to singular terms. Only if the alternative of taking them to be singular terms failed would we be justified in considering the quantificational option, and I think that taking ‘that’-clauses to be singular terms does not in fact fail. It is true that there is a consideration that seems to show that

(ST) ‘That’-clauses are singular terms

cannot be correct, but, as we will now see, it can be easily rejected. The consideration is that ‘that’-clauses seem unable to grammatically flank the identity sign, given that

(66) That Cicero is smart is that Tully is smart

is odd (Hossack 2011: 150; Moltmann 2015; Mulligan 2010: 572-573). But, first of all, as Hofweber (2006: 216-217) remarks, the grammaticality of a sentence depends also on merely syntactic factors. So it is not clear why we should take a consideration on grammaticality as able to show that ‘that’-clauses do not purport to denote some thing, i.e. as able to show something about the semantic characteristics of ‘that’-clauses. But Frege famously held that identity is special, in that it is the criterion for singular terms¹¹, and if Frege is right, with identity the gap between syntax and semantics is bridged, and the ungrammaticality of identity sentences would then be able to threaten

interpret the tests, so we should not fuss about the grammatical details. And in that case ‘that’-clauses do pass the tests smoothly. Let us take again *Olga believes that Cicero is smart* and *Gabriel said that Cicero is smart*. We saw that test II is passed. Moreover, clearly, we can obtain *There is something such that Olga believes it*, as in accordance with test I. Finally, as in accordance with test III, the inference is valid from *It is true of that Cicero is smart that Olga believes it or Gabriele said it* to the disjunction *Olga believes that Cicero is smart or Gabriel said that Cicero is smart*.

¹¹ Relying on his distinction between objects and concepts, and on the thesis that singular terms mean objects while predicates mean concepts, in 1884/1953 Frege says: “Now for every object there is one type of sentence which must have sense, namely the recognition statement” (116). In 1892-1895/1979 he repeats: “[T]he relation of equality, by which I understand complete coincidence, identity, can only be thought of as holding between objects, not concepts” (120).

(ST). Nonetheless, the consideration can be easily rejected. First of all, there are in fact endless counterexamples to Frege's thesis that identity is the sign of singular terms. As Oliver (2005: 184) notes, for example,

(67) *Cicero is I

is not grammatical, and even though

(68) Being smart is the property of being smart

is fine, the following is not:

(69) *The property of being smart is being smart.

Moreover, it is not obvious that 'is' is the English predicate for identity, and 'that'-clauses seem perfectly able to occur grammatically in sentences in which identity is asserted, such as

(70) That Cicero is smart is nothing but that Tully is smart.

Finally, it is not obvious that

(66) That Cicero is smart is that Tully is smart

is ungrammatical. While I think it should be recognized that we would hardly use that sentence, it is not difficult to imagine a scenario in which we would probably be happy to employ it. For example, let us suppose that with a friend we engaged in the enterprise of counting facts. Our friend says that we have the fact that Cicero is smart and then the fact that Tully is smart. If we disagree we can shout:

(71) That Cicero is smart is (just) that Tully is smart, do not double-count!

Thus this consideration on identity statements does not seem able to threaten

(ST) 'That'-clauses are singular terms.

We then do not have reasons to think that (ST) fails, and we saw that 'that'-clauses do not behave like quantified phrases that are not reducible to singular terms. I think that we can finally conclude that an account that endorses (ST) is to be favoured.

Conclusion

The so-called *face-value* theory of propositional attitude sentences, i.e.

(The Face-Value Theory)

(RP) Propositional attitude predicates occurring in propositional attitude sentences designate relations;

(ST) ‘That’-clauses are singular terms;

(P) ‘That’-clauses denote propositions,

is often endorsed without even discussing the plausibility of its tenets. As Schiffer (2003: 11) holds, the theory is “the default theory that must be defeated if it’s not to be accepted” and in fact he himself spends but a handful of lines discussing it. Surely, it is the default theory, considering that it originated more or less two thousand years ago, and since then in philosophy it has mostly been taken for granted (Boh 1993). But this does not make it necessarily true, and all alternative theories *must be defeated if they are not to be accepted*. In this paper I tried to defeat the alternatives for what is at stake with theses (RP) and (ST). As we saw, we cannot prove that the theses are true and that the alternatives necessarily fail, but all the different data that need to be accounted for can be more elegantly and more easily explained if the two theses are endorsed. Thus there really is something face-value in these theses, and we can quite safely conclude that an account that endorses them is to be preferred to the alternatives.

References

- Asher, N. (1993). *Reference to Abstract Objects in Discourse*. Dordrecht: Kluwer Academic Publishers.
- Aune, B. (1985). *Metaphysics. The Elements*. Minneapolis: University of Minnesota Press.
- Bach, K. (1997). “Do belief reports report belief?”. *Pacific Philosophical Quarterly* 78(3): 215-241.
- Bealer, G. (1982). *Quality and Concept*. Oxford: Oxford University Press.
- (2002). “Modal epistemology and the rationalist renaissance”. In: Gendler, T.S. and J. Hawthorne (eds.), *Conceivability and Possibility*. Oxford: Oxford University Press. 71-125.
- Boër, S.E. (2009). “Propositions and the substitution anomaly”. *Journal of Philosophical Logic* 38(5): 549-586.
- Boh, I. (1993). *Epistemic Logic in the Later Middle Ages*. London: Routledge.
- Braun, D. (2015). “Desiring, desires, and desire ascriptions”. *Philosophical Studies* 172(1): 141-162.
- Burge, T. (1980). “The content of propositional attitudes”. *Noûs* 14(1): 53-58.
- Crawford, S. (2014). “Propositional or non-propositional attitudes?”. *Philosophical Studies* 168(1): 179-210.

- Donnellan, K.S. (1966). "Reference and definite descriptions". *The Philosophical Review* 75(3): 281-304.
- Dummett, M. (1981). *Frege: Philosophy of Language*. 2nd Ed. London: Duckworth.
- Fara, D.G. (2013). "Specifying desires". *Noûs* 47(2): 250-272.
- Fodor, J.A. (1981). "Propositional attitudes". *The Monist* 61(4): 501-523.
- Frege, G. (1884). *Die Grundlagen der Arithmetik*. Breslau: W. Koebner. Translated by J.L. Austin as *The Foundations of Arithmetic*. 1953. Oxford: Blackwell.
- (1892-1895). "Comments of sense and meaning". Translated by Long, P. and R. White. In: Frege, G. 1979. *Posthumous Writings*. Chicago: University of Chicago Press. 118-125.
- Hale, B. (2013). *Necessary Beings*. Oxford: Oxford University Press.
- Harman, G. (2003). "Category mistakes in M&E". *Philosophical Perspectives* 17(1): 165-180.
- Hofweber, T. (2006). "Schiffer's new theory of propositions". *Philosophy and Phenomenological Research* 73(1): 211-217.
- (forthcoming). "From Remnants to Things, and back again". In: G. Ostertag (ed.), *Meanings and Other Things*. New York: Oxford University Press.
- Hossack, K. (2011). "Replies to comments". *Dialectica* 65(1): 125-151.
- Jubien, M. (2001). "Propositions and the objects of thought". *Philosophical Studies* 104(1): 47-62.
- King, J.C. (2007). *The Nature and Structure of Content*. Oxford: Oxford University Press.
- (2014). "What role do propositions play in our theories?". In: King, J.C., Soames, S. and J. Speaks *New Thinking about Propositions*. Oxford: Oxford University Press. 5-8.
- Künne, W. (2003). *Conceptions of Truth*. Oxford: Oxford University Press.
- Lewandowska-Tomaszczyk, B. (2007). "Polysemy, prototypes and radial categories". In: Geeraerts, D. and H. Cuyckens (eds.), *Handbook of Cognitive Linguistics*. Oxford: Oxford University Press. 139-169.
- Liebman, D. (2015). "Predication as ascription". *Mind* 124(494): 517-569.
- Matthews, R.J. (2007). *The Measure of Mind*. Oxford: Oxford University Press.
- McKinsey, M. (1999). "The Semantics of belief ascriptions". *Noûs* 33(4): 519-557.
- Merricks, T. (2009). "Propositional attitudes?". *Proceedings of the Aristotelian Society* 109: 207-232.
- Moffett, M.A. (2003). "Knowing facts and believing propositions: A solution to the problem of doxastic shift". *Philosophical Studies* 115(1): 81-97.
- Moltmann, F. (2003). "Propositional attitudes without propositions". *Synthese* 135(1): 77-118.
- (2015). "Truth predicates in natural language". In: Achourioti, D., H. Galinon and J. Martinez (eds.), *Unifying the Philosophy of Truth*. Berlin: Springer Verlag. 57-83.
- Mulligan, K. (2010). "The truth predicate vs the truth connective. On taking connectives seriously". *Dialectica* 64(4): 565-584.
- Oliver, A. (2005). "The reference principle". *Analysis* 65(287): 177-187.
- Pietroski, P.M. (2005). *Events and Semantic Architecture*. Oxford: Oxford University Press.
- Predelli, S. (2013). *Meaning Without Truth*. Oxford: Oxford University Press.
- Prior, A.N. (1955-1956). "Definitions, rules and axioms". *Proceedings of the Aristotelian Society* 56: 199-216.
- (1963). "Oratio obliqua". *Proceedings of the Aristotelian Society, Suppl.* 37: 115-126.
- (1971). *Objects of Thought*. P. Geach and A.J.P Kenny (eds.). Oxford: Oxford University Press.
- Pryor, J. (2007). "Reasons and that-clauses". *Philosophical Issues* 17(1): 217-244.

- Quine, W.V.O. (1987). *Quiddities*. Cambridge, Mass.: Harvard University Press.
- Recanati, F. (2000). *Oratio Obliqua, Oratio Recta*. Cambridge, Mass.: The MIT Press.
- (2004). “‘That’-clauses as existential quantifiers”. *Analysis* 64(283): 229-235.
- Richard, M. (1990). *Propositional Attitudes*. Cambridge: Cambridge University Press.
- Rosefeldt, T. (2008). “‘That’-clauses and non-nominal quantification”. *Philosophical Studies* 137(3): 301-333.
- Rumfitt, I. (2003a). “Singular terms and arithmetical logicism”. *Philosophical Books* 44(3): 193-219.
- (2003b). “Contingent existents”. *Philosophy* 78(4): 461-481.
- Rundle, B. (1979). *Grammar in Philosophy*. Oxford: Oxford University Press.
- (2001). “Objects and attitudes”. *Language & Communication* 21(2): 143-156.
- Sainsbury, R.M. (2002). *Departing from Frege*. London: Routledge.
- Salmon, N. (1983). *Frege’s Puzzle*. Cambridge, Mass.: The MIT Press.
- Schiffer, S. (1987). *Remnants of Meaning*. Cambridge, Mass.: The MIT Press.
- (2003). *The Things We Mean*. Oxford: Oxford University Press.
- Schnieder, B. (2006). “‘By Leibniz’s law’: Remarks on a fallacy”. *The Philosophical Quarterly* 56(222): 39-54.
- Shier, D. (1996). “Direct reference for the narrow minded”. *Pacific Philosophical Quarterly* 77(3): 225-248.
- Soames, S. (1988). “Substitutivity”. In: J.J. Thomson (ed.), *On Being and Saying*. Cambridge, Mass.: The MIT Press. 99-132.
- Stalnaker, R. (1987). “Semantics for belief”. *Philosophical Topics* 15(1): 177-190.
- Stanley, J. (2011). *Know How*. Oxford: Oxford University Press.
- Taylor, B. and A.P. Hazen (1992). “Flexibly structured predication”. *Logique et Analyse* 139-140: 375-393.
- Vendler, Z. (1972). *Res Cogitans*. Ithaca and London: Cornell University Press.
- Wettstein, H. (2004). *The Magic Prism*. Oxford: Oxford University Press.
- White, A.R. (1972). “What we believe”. In: N. Rescher (ed.), *Studies in the Philosophy of Mind*. Oxford: Blackwell. 69-84.