**Sententialism and Higher-order Attitude Attributions**

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Stephen Schiffer has recently offered a clever objection to sententialist theories of attitude reports that focuses on higher-order attitude attributions.[1] The objection, I will argue, turns out to be a double-edged sword that nicks the propositionalist at the same place that it cuts the sententialist—and whatever solution there is to the problem it raises for the propositionalist is equally available to the sententialist. This carries some interesting lessons beyond the dispute between the sententialist and propositionalist about the semantics of attitude attributions.

I

Sententialist theories of attitude reports treat attitude verbs as relating their subjects to sentences. I sketch briefly a sententialist theory of (1) to have a definite version to work with.[2]

(1) Galileo believed that the earth moves.

We treat 'that the earth moves' as a referring term referring to the contained sentence. Thus, where '$\phi$' ranges over sentences of English, the general rule is given in (R).

(R) $(\phi)(\text{Ref}(\ulcorner\text{that } \phi\urcorner) = \phi)$

Then (1) is given context relative truth conditions, as in (1a), where '*S*' is a variable ranging over

[1] Stephen Schiffer, *The Things We Mean* (Oxford: Oxford University Press, 2003).

[2] I draw on the account in Kirk Ludwig and Greg Ray, "Semantics for Opaque Contexts," in *Language, Mind, and Ontology*, ed. James Tomberlin, *Philosophical Perspectives* (Cambridge: Blackwell, 1998).

speakers, '*s*' is a variable ranging over states, and '*t*' and '*t′*' are variables ranging over times (henceforth I will omit the quantifiers for '*S*' and '*t*').

(1a) (*S*)(*t*)('Galileo believed that the earth moves' is true taken as if spoken by *S* at *t* iff (∃*t′*: *t′* < *t*)(∃*s*)(*s* is a belief state of Galileo at *t′* and interpreted relative to *S* at *t* that the earth moves indicates-the-content-of *s*)).

The introduction of a quantifier over states is motivated independently of the question of what expressions of the form 'that *p*' refer to by the need to handle adverbs such as 'firmly' in a systematic way on analogy with how adverbs for event verbs are handled. Henceforth I will abbreviate '*s* is at *t* a belief state of *x*' as 'belief(*s, t, x*)'. Similarly, I abbreviate 'is true taken as if spoken by *S* at *t*' as 'is true(*S, t*)'.

I will say that an attitude report is first-order if its complement sentence is not an attitude report. For present purposes I will include under 'attitude reports' also reports of indirect discourse. An attitude report is second-order if its complement sentence is a first-order attitude report, and so on. The relation expressed by '*x* interpreted relative to *S* at *t* indicates-the-content-of *y*' in the first order case requires that *x* have the same representational content as *y*. We will return to higher-order reports in due course. I will abbreviate 'indicates-the-content-of' as '≅', and further abbreviate 'interpreted relative to *S* at *t* that the earth moves ≅ *s*' as '≅(*s*, that the earth moves, *S*, *t*)'. (1a) may thus be rewritten as (1b).

(1b) 'Galileo believed that the earth moves' is true(*S*, *t*) iff (∃*t′*: *t′* < *t*)(∃*s*)(belief(*s*, *t′*, Galileo) and ≅(*s*, that the earth moves, *S*, *t*)).

The expression ‘that the earth moves’ we take as a term that refers to a sentence but not as a quotation name, for it has a special feature which quotation names lack. One can understand a quotation name without understanding the expression which it names.[3] However, one is not treated as understanding the noun phrase ‘that the earth moves’ unless one understands the sentence ‘the earth moves’. This is because the function of the term in the language depends on auditor’s understanding the embedded sentence, even though this does not figure in the truth conditions. For example,

‘La Terre si muove’ in Italian means that the earth moves

is true just in case the sentence embedded in the complement means the same as the sentence named by the subject noun phrase, but its function requires that the auditor understand the embedded sentence. Certain uses of quotation marks, for example, to represent dialogue in a novel, or to indicate that one is quoting another’s words, function similarly.

II

These points suffice to meet some standard objections to sententialist theories of attitude reports. First, relativizing the interpretation of the contained sentence to the speaker and time of utterance meets the objection that relating believers to sentences that are context sensitive cannot give the

[3] This point has been urged also by Tyler Burge, "Self-Reference and Translation," in *Meaning and Translation*, ed. Guenthner and Guenthner-Reutter (London: Duckworth, 1978), 137-156, James Higginbotham, "Belief and Logical Form," *Mind and Language* 6, no. 4 (1991): 344-369, and "Sententialism: The Thesis that Complement Clauses Refer to Themselves," *Philosophical Issues* 16, *Philosophy of Language* (2006): 101-119, and Michel Seymour, "A Sentential Theory of Propositional Attitudes," *Journal of Philosophy* 89, no. 4 (1992): 181-201.

contents of beliefs because context sensitive sentences are not in themselves true or false. Second, it meets the objection that one can understand a standard belief report on the sententialist view without knowing intuitively what it is that the subject of the report believes. This objection is met by noting the point about sentential complements of the form 'that *p*' requiring understanding '*p*' to understand the referring term. One could think of this as an aspect of the mode of presentation of the sentence by the term 'that *p*'.

A third important objection is that sententialist theories cannot handle quantifying into the complements of attitude reports, as in 'Everyone believed that he had lost his luggage'. However, this can be handled in a relatively straightforward way, which I will not go into here.[4]

A fourth important objection is that sententialist analyses fail the Church-Langford translation test, according to which the translation of the analysans must be the analysis of the translation of the analysandum.[5] In the present case, the charge is that translation preserves reference, but the analysis, for example, of the English sentence, 'Galileo said that the earth moves' involves in specifying the truth conditions (relative to a context) reference to an English sentence, while the corresponding analysis of the Italian translation 'Galileo detto che la Terra si muove' involves a reference not to an English sentence but to an Italian sentence.

By now, however, it is well-known that this objection relies on an assumption that is not generally true, namely, that translation, in the ordinary sense in which it is accepted that 'Galileo detto che la Terra si muove' translates 'Galileo said that the earth moves', invariably preserves the referents of singular terms. This point was made long ago by Tyler Burge, who observed that in sentences such as 'This sentence is false' and in translation of dialogue often the purposes of

[4] See Ludwig and Ray, p. 150, and, for a different approach, Higginbotham, "Sententialism," pp. 104-5.

[5] See Alonzo Church, "On Carnap's Analysis of Statements of Assertion and Belief," *Analysis* 10 (1950): 97-99.

translation require translations that do not preserve the referents of referring terms.[6] The case of the translation of dialogue is an especially apt comparison in the present case. When we report dialogue, we use direct speech, not indirect speech, and so to report correctly we must report the actual words spoken. Yet in translation, we substitute the best word for word translation of the quoted material because the function of the original in its linguistic setting requires understanding the mentioned expressions, and in standard translation practices that function trumps the preservation of reference. So it is, the sententialist can urge, in the case of attitude reports, where the main function of conveying the content of a belief or other attitude is achieved by way of reference to a particular sentence, understood in context. Where there is a conflict between preservation of the main function and preserving reference, we let the reference go as we do in the case of translating dialogue.

III

The problem I want specifically to address in this paper involves reflection on what a sententialist account commits us to saying about the content of second-order attitudes. Schiffer proposes the problem in the following passage (p. 47):

> … while each version of sententialism will have its own unique flaws, there is one they all share, and I doubt that it is surmountable. A theorist who eschews contents in favour of things that merely have content must say that a person will believe one of those things S just in case she is in a belief state that has the same content as S. For example, if believing that the earth moves is standing in the belief relation to the sentence 'the earth moves', then my utterance of 'Galileo believed that the earth moves' will be true just in case Galileo was in a belief state whose content matched that of 'the earth moves'. The

[6] See Burge.

> problem every sententialist account of propositional attitudes confronts comes to this for the example at hand: no one can know that Galileo believed that the earth moves without knowing *what Galileo believed*, the content of his belief, but one (e.g., a monolingual speaker of Hungarian) can know that Galileo was in a belief state whose content was the same as the content of 'the earth moves' without having any idea of what Galileo believed, of the content of his belief.

Let us spell this out more fully, using our version of the sententialist account, in reference to sentences (1)-(4).[7] We stipulate that Zoltán is a monolingual speaker of Hungarian (and, hence, does not understand any sentences of English). We consider a particular time T and speaker Σ to fix contextual parameters.

(1) Galileo believed that the earth moves.

(2) Zoltán knows that Galileo believed that the earth moves.

(3) $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ that the earth moves, $\Sigma, \mathrm{T}))$

(4) Zoltán knows that $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ 'the earth moves', $\Sigma, \mathrm{T}))$.

We suppose further that someone has told Zoltán (in Hungarian, of course, let us say in writing with 'the earth moves' in quotation marks), and he has in consequence come to learn, that

[7] There is another worry that can be raised in regard to second-order attributions, which is that what (2) reports could be true though Zoltán has no beliefs about English sentences. I believe this objection can be met by an elaboration of the '≅'-relation. However, this is not the objection that Schiffer is raising in this passage, and I will not go into it further in this paper. See Ludwig and Ray, pp. 148-50.

[*] ($\exists t'$: $t' < \mathrm{T}$)($\exists s$)(belief($s$, $t'$, Galileo) and $\cong$($s$, 'the earth moves', $\Sigma$, T)).

We suppose that prior to this he has never been told, or otherwise learned, that Galileo believed that the earth moves.

Imagine token utterances of (1)-(4), which we refer to below with these labels, by $\Sigma$ at T. Let us use the expression 'expresses the same thing as' as holding between two token utterances (or two sentences or a token utterance and a sentence) just in case it would be appropriate to say that they express the same proposition—without presuming a commitment to the ontology of propositions. Then the argument against (3) being the correct analysis of an utterance of (1) goes as follows.

1. If (3) is the analysis of (1), then (4) expresses the same thing as (2).
2. If (4) expresses the same thing as (2), then (2) is true iff (4) is true.
3. (4) is true, though (2) is not.
4. Therefore, (4) does not express the same thing as (2). [by 2 & 3]
5. Therefore, (3) is not the analysis of (1). [by 1 & 4]

Premise 3 is supposed to be true because (4) reports the new knowledge that Zoltán acquires when he is told [*] but it does not seem, intuitively speaking, that learning what [*] expresses is sufficient for him to learn that Galileo believed that the earth moves, and he has not otherwise learned that.

As it stands, however, the argument is unsound, because (4) does not express the same thing as (2), on our analysis, and so premise 1 is false. The analysis of (2) is (5). However, the analysis of (4) is (6).

(5) $(\exists s)$(knowledge($s$, T, Zoltán ) and $\cong$($s$, that Galileo believed that the earth moves, $\Sigma$, T))

(6) $(\exists s)$(knowledge($s$, T, Zoltán ) and $\cong$($s$, that $(\exists t'\text{: } t' < \text{T})(\exists s)$(belief($s$, $t$, Galileo) and $\cong$($s$, 'the earth moves', $\Sigma$, T)), $\Sigma$, T))

Since (7) $\neq$ (8), (2) and (4) do not literally express the same thing since they involve references to different sentences on the sententialist account.

(7) that Galileo believed that the earth moves

(8) that $(\exists t'\text{: } t' < \text{T})(\exists s)$(belief($s$, $t'$, Galileo) and $\cong$($s$, 'the earth moves', $\Sigma$, T)

This is at best a temporary solace, however, if what (7) and (8) refer to (the embedded sentences), taken relative to $\Sigma$ and T, express the same thing, for then (5) is true iff (6) is true, and (6) is true iff (4) is true, and, hence, (2) is true iff (4) is true. The argument then can be repaired as follows.

1. If (3) is the analysis of (1), then (5) is the analysis of (2).
2. If (5) is the analysis of (2), then (2) is true iff (5) is true.
3. What (7) refers to expresses the same thing as what (8) refers to.

4. If what (7) refers to expresses the same thing as what (8) refers to, then (5) is true iff (6) is true.
5. If (3) is the analysis of (1), then (6) is the analysis of (4).
6. If (6) is the analysis of (4), then (4) is true iff (6) is true.
7. Therefore, if (3) is the analysis of (1), (2) is true iff (4) is true. [by 1-6]
8. (4) is true though (2) is false.
9. Therefore, (3) is not the analysis of (1). [by 7 & 8]

IV

It turns out that a version of the difficulty raised by Schiffer for second-order attitude attributions on the sententialist account arises also for propositionalist accounts of attitude reports.

The difference between a propositionalist approach and a sententialist approach comes down to treating expressions of the form 'that *p*' as referring to propositions rather than to sentences. A proposition in its traditional guise is a reified eternal sentence meaning. A use of an expression of the form 'that *p*' is taken to refer to the proposition expressed by '*p*' in that use. We can give the following reference clause for it:

[R′] $(\phi)(S)(t)(x)$(if $x$ is the proposition expressed by $S$'s use at $t$ of $\phi$ in ⌜that $\phi$⌝, then Ref(⌜that $\phi$⌝, $S$, $t$) = $x$)

The relativization to speaker and time and the use of the sentence in a term of the relevant form is required to handle context sensitivity in complement clauses. We take a term of the form 'that *p*' to refer directly to a proposition in use, even though what it refers to is the denotation of a

description formed from a reference to the embedded sentence and mention of its user and the time of use and the whole term itself. In this respect, it functions like Kaplan's 'dthat[the F]'.[8]

We can then analyze (1) as (1c).

(1c) 'Galileo believed that the earth moves' is true($S$, $t$) iff ($\exists t'$: $t' < t$)($\exists s$)(belief($s$, $t'$, Galileo) and $\cong$($s$, Ref(that the earth moves, $S$, $t$)).

Now, since 'that the earth moves' is a referring term, the question arises how it is that someone who is told 'Galileo believed that the earth moves' knows what Galileo believed, for he must not only grasp the proposition that Galileo is being related to but also know that it is that proposition he grasps that Galileo is being related to. The answer is that he understands the sentence used to pick out the proposition. Since the rule for determining the referent of an expression of the form 'that *p*' goes by way of the embedded sentence, and this is part of what (if the propositionalist is correct) we understand in understanding it, if we understand 'that the earth moves', then we know what proposition it picks out in a way that guarantees we both grasp it and know the one we grasp is what it picks out. Thus, we achieve the result that someone cannot understand (1) without knowing in the relevant sense what it is that Galileo is said to believe, i.e., as it is put, without grasping the proposition Galileo is said to believe and knowing of it as grasped that it is the one Galileo is said to believe.

Now we develop an argument against the propositionalist parallel to the argument against the sententialist. For simplicity, let me assume that 'that the earth moves' is not context

[8] David Kaplan, "Demonstratives: An Essay on the Semantics, Logic, Metaphysics, and Epistemology of Demonstratives," in *Themes from Kaplan*. (New York: Oxford University Press, 1989), 481-563.

sensitive. This allows us to discharge the relativized reference clause in (1c). First we observe that if (3') gives the interpretive truth condition for (1), as it does according to (1c), then it would seem that (5') gives the interpretive truth condition for (2).

(1) Galileo believed that the earth moves.

(2) Zoltán knows that Galileo believed that the earth moves.

(3') $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ that the earth moves)

(4') Zoltán knows that $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ dthat(the proposition expressed in English by 'the earth moves')).

(5') Zoltán knows that $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ that the earth moves).

(7') $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ that the earth moves))

(8') $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ dthat(the proposition expressed in English by 'the earth moves')).

(11) That the earth moves = dthat(the proposition expressed in English by 'the earth moves')

Now consider Zoltán again. Zoltán does not know (we want to say) that Galileo believed that the earth moves. Suppose, however, Zoltán is told, in Hungarian, and comes to know on that basis what is expressed by (8'). This then gives us (4'). Since (11) is true, it would seem that (7') and (8') express the same proposition. That allows us to infer (5') from (4'), and then (2) from (5'), on the assumption that (1c) provides the interpretive truth conditions for 'Galileo believed that the earth moves'. However, we agreed that in the circumstances (2) was false. By the same token, then, the propositionalist analysis of attitude reports is incorrect.

Let us now lay out the argument more fully, in a fashion that shows the parallel with the argument against the sententialist, before we turn to the various responses available to the propositionalist.

1'. If (3') is the analysis of (1), then (5') is the analysis of (2).

2'. If (5') is the analysis of (2), then (2) is true iff (5') is true.

3' . (7') expresses the same thing as (8').

4'. If (7) expresses the same thing as (8), then (4') is true iff (5') is true.

5'. Therefore, if (3') is the analysis of (1), (2) is true iff (4') is true. [by 1-4]

6' . (4) is true though (2) is false.

7'. Therefore, (3') is not the analysis of (1). [by 5 & 6]

1′-4′ here correspond to 1-4 in the argument at the end of section III, while 5′-7′ correspond to 7-9 in that argument.

## V

It is not surprising that the same difficulty arises for the propositionalist. The function of a sentence such as (1) is to inform us of how Galileo saw the world. It is clear that simply relating Galileo to an object in characterizing his belief state is insufficient for this, no matter what object it is, unless our way of picking out the object suffices for knowledge of the properties of it relevant to seeing how Galileo saw the world. A proposition may be picked out in different ways. Some of the ways in which it is picked out will not suffice for us to know in the relevant sense what proposition it is, that is, to grasp the proposition. We might say, somewhat figuratively, that for a term to do the right job it must present the proposition under a mode of

presentation which requires grasp of it. In one's own language, a term of the form 'that *p*' does the job because it picks out the relevant proposition by way of a sentence one understands, which requires grasp of the proposition expressed by it. The trouble is that prima facie that fact is not represented in what the term contributes to the propositions in which it appears.

The problem for the sententialist is similar. For reference to a sentence to suffice for conveying how Galileo saw the world it is not enough to pick it out in a way that fixes the properties of it that fix what Galileo represented, i.e., what it means. It must do so in a way that enables one to know what it means. We can say, as above, somewhat figuratively, that for a term to do the right job it must present the sentence under a mode of presentation which requires understanding of it. On the sententialist view as on the propositionalist view this goes by way of using an expression containing a sentence which one understands.

## VI

Perhaps the propositionalist will object that one cannot grasp the proposition expressed by (9) without grasping the proposition referred to by 'dthat(the proposition expressed by 'the earth moves' in English)' in thinking about it, and so knowing of the proposition thought about that it is the one grasped.[9] This requires, however, one to say that (4') is false, i.e., that even though Zoltán is told by an authority what (8') expresses he cannot come to know what he is thereby told. This is incompatible with our attribution practices, according to which Zoltán can come to know what (8') expresses by being told it, i.e., by way of a Hungarian speaker asserting the translation of (8') into Hungarian.

What the propositionalist needs is that you can believe certain propositions about propositions only if you grasp the referred to propositions and know they are the ones about

[9] I owe this suggestion to Michael Nelson.

which you are thinking. The trouble is that knowing propositions about propositions, even when they involve those propositions as objects, i.e., when they are about them *de re*, does not require grasping them. Suppose that I say: *that* proposition you are thinking of is most certainly false. I may surely believe what I say and the proposition I believe involves the proposition it is about as an object. But even so I may not in believing it both grasp the proposition referred to and know it is the one referred to.

This is reflected in the propositionalist analysis of 'Galileo believed that the earth moves'. The only role of 'that the earth moves', as far as the truth conditions go, is to introduce the proposition. The reason someone who hears it asserted both grasps the proposition referred to and knows at the same time that it is the one the term refers to is that he knows that the term 'that the earth moves' refers to the proposition expressed by 'the earth moves' and he understands 'the earth moves'.[10] If the proposition were picked out using a demonstrative, one could know what was said without knowing whether the proposition Galileo was related was any proposition one grasped.

VII

There are three basic options for the propositionalist. In terms of the argument laid out at the end of section IV, he must minimally reject premise (3'), reject premise (4′), or reject premise (6′).

(i) Rejecting premise (3′), repeated here, along with (7) and (8),

[10] Indeed, for a speaker of English who understands Kaplan's notation, the expression 'dthat(the proposition expressed by 'the earth moves')' functions in the same way as 'that the earth moves', and, assuming the propositionalist is right, they are interchangeable in attitude contexts for the relevant speakers without any loss of information about the content of the state of the believer. If Zoltán understood English, then, on the propositionalist account, he would learn from (9) exactly what an English speaker learns from (1) and in exactly the same way.

3' . (7') expresses the same thing as (8').

(7') $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ that the earth moves))

(8') $(\exists t'\colon t' < \mathrm{T})(\exists s)(\mathrm{belief}(s, t', \mathrm{Galileo})$ and $\cong(s,$ dthat(the proposition expressed in English by 'the earth moves')).

requires denying minimally that 'that the earth moves' and 'dthat(the proposition expressed in English by 'the earth moves')' contribute the same to what propositions are expressed by sentences containing them in corresponding argument places. Expressions of the form 'dthat(the F)' were introduced by Kaplan explicitly to be terms that merely introduce an object into the proposition expressed by sentences containing them. It will have occurred to some readers that trouble for the argument against the propositionalist lies precisely in the assumption that 'that the earth moves', like 'dthat(the proposition expressed in English by 'the earth moves')', contributes to propositions expressed by sentences containing it nothing more than the proposition that it is used to pick out.

There are different ways in which this can be cashed out. One is that 'that the earth moves' is to be construed as a description, for example, 'that the earth moves' might be taken to be equivalent to 'the proposition expressed by 'the earth moves'' (ignoring for now the need for relativization to context or utterance or language to fix the meaning of 'the earth moves'). There is an immediate difficulty with this, in the present context, which is that while it would suffice to show that (3′) is false, it would represent the proposition expressed by (1) as involving a reference to an English sentence, 'the earth moves', and any difficulties that the sententialist is supposed to face because of his representation of (1) as involving a reference to 'the earth moves' then would accrue to the propositionalist as well.

(ii) Rejecting premise (4′). If he takes the former option, then he must take the context following the attitude verb to involve a condition to the effect that, if the proposition referred to itself involves a proposition *x* which functions to give the content of the attitude, and *x* is presented using a term of the form 'that *p*' (or for other attitudes appropriately analogous terms), then the proposition, in being presented as giving the content of an attitude, is presented to the subject of the attitude sentence in a way that involves his grasp of it. This would require treating 'indicates-the-content-of' as having additional argument places for the subject, Z, and the time the subject is to have had the attitude, *t*′, '≅(*s*, *x*, Z, *t*′)'. However, this must be sensitive to not just the referent of the expression which appears in the place of '*x*' but also the expression used to refer. The position of '*x*' is then similar to that of 'Giorgione' in Quine's example, 'Giorgione is so-called because of his size'. It must play a dual role. That is, (i) it must treat the term that appears there as providing a proposition as an argument for the underlying relation and (ii) it must treat the term itself as an argument for another position in the underlying relation to ensure the subject grasps the proposition referred to in thinking of it as providing the content of the attitude, *provided that* the term is of a special sort. Thus, we could, as a schematic first run, explicate '≅(*s*, *x*, Z, *t*′)' as

≅(*s*, *x*, Z, *t*′) $=_{df}$ *x* gives the content of *s* and for every *y* in '*x*' such that *y* refers to a proposition *p* in a content-giving argument place in '*x*', Z apprehends *p* as referred to by

*y* at *t′* under a mode of presentation M(*y*) which is adequate to grasp *p* if *y* is a canonical term for referring to propositions[11]

where a canonical term is of the form 'that *p*' (or an appropriately analogous term for other sentential complements). The expression 'Z apprehends *p* as giving the content of s at *t′* under a mode of presentation M('*p*') which is adequate to grasp *p*' is meant not to convey a precise conception of the relation but rather to indicate the general form. Any adequate account along these lines would have to explain what this comes to at greater length. However it is done, it is clear that some reference must be made to the actual term itself, because whether substitutions preserve truth is sensitive to the term used, and it would be explained in terms of how using a term such as 'that *p*' enables us to grasp what proposition it refers to. What this shows is that even on a propositionalist account we must invoke a metalinguistic reference in the content of an attitude report in order to accommodate Zoltán 's not knowing that Galileo believed that the earth moves in the case described in the previous section.

(iii) Rejecting premise (6′). The other alternative is to reject the claim that (12) is false if (10) is true. In this case, the propositionalist needs a way of explaining away the intuition that in the circumstances described (12) is false though (10) is true. The natural, and perhaps only, way to do this is to argue that the intuition we have that (12) is false involves confusing the literal content of (12) with a standard conversational implicature of it which is not carried by (10). The account might plausibly run as follows. Suppose that (1c) gives the literal truth conditions for (1). The proposition expressed could be believed by someone who does not know, in the relevant sense, what Galileo believed—he does not know how Galileo saw the world. However, we know that anyone who asserts (1) will know what Galileo believed because he uses a term to pick out the proposition that gives the content of Galileo's belief that guarantees, given how its

[11] '*x*' here is of course to be treated as a schematic letter, not a variable.

referent is determined, that the speaker does grasp the proposition and that it is the proposition which gives the content of Galileo's belief. When we attribute beliefs to people, we tend standardly to attribute them using sentences which we believe they would use to express them, if this is possible. This is because (a) often what people say is one of our best sources of information about what they believe and (b) using the sentences they would use conveys useful information about them, for how they would express their beliefs often plays a role in our anticipations about what they will do in various circumstances, particularly in response to what others say. This is especially important when different directly referring terms may have different sorts of information associated with them, as in the case of proper names. Given this, in the case of a second-order belief attribution, we will standardly implicate that the subject would report his belief using the sentence (or a sentence constructed from it by systematically replacing indexicals to preserve reference across shifts in context) which we use in the complement, which, if he speaks our language, will in turn convey the information that he is in a position to know, in the relevant sense, what the content of the person's belief is. Now, in the case of an attribution to someone who does not share the language of the speaker, of course the implication that he would report it using the sentence the speaker uses (or a relevantly similar sentence in the speaker's language) will be canceled. However, minimally, it will be implicated that he would report it using a sentence which is the best translation of the sentence the speaker uses (appropriate adjustments being made in context sensitive terms), and this will include that he would report it using a sentence in his language in which the term that refers to the proposition plays the same semantic role as the term in the reporter's language. This then will carry the information that the other speaker knows, in the relevant sense, what the content of the person's belief is about which he has a belief. Thus, as this explanation goes, an utterance of (12) carries the information that

the speaker knows, in the relevant sense, what Galileo believes, while an utterance of (10) does not. When we judge that an utterance of (10) is true in the circumstances while an utterance of (12) is not, we are noting the difference in the truth values of the total content conveyed, including the implicatures, and, in particular, that an utterance of (12) will standardly convey that Zoltán knows, in the relevant sense, what Galileo believes, even though it does not state this as part of its literal content.

## VIII

I am not concerned to argue that one or the other of these two accounts represents the best response on behalf of the propositionalist. What I will argue is that a version of each is available to the sententialist.[12]

The options open to the sententialist in responding to the argument at the end of section III are to reject premise 3, 4 or 8, repeated here along with (5)-(8).

3. What (7) refers to expresses the same thing as what (8) refers to.

[12] Higginbotham, in "Sententialism" pp. 110-12, offers a response on behalf of the sententialist to Schiffer's objection. If I understand it correctly, it is that the relevant matching-in-content relation the sententialist needs can be construed so that 'that Galileo believed that the earth moves' does not stand in it to, to use Higginbotham's phrase, its target truth conditions, as given by the analysis. This would amount, I believe, to rejecting premise 4 in the argument. Perhaps the first of the options I consider is a version of what Higginbotham has in mind, for it likewise rejects premise 4. However, it works by treating the position of the complement as sensitive not only to what is referred to but also the term used to refer to it, and Higginbotham's suggestion appears to be that it is the relation between the referents alone that does the work. Higginbotham does not elaborate, however, and it remains unclear to me how he intends the relation and the relata are to be understood so that the right result is obtained.

4. If what (7) refers to expresses the same thing as what (8) refers to, then (5) is true iff (6) is true.

8. (4) is true though (2) is false.

(5) $(\exists s)$(knowledge($s$, T, Zoltán ) and $\cong(s$, that Galileo believed that the earth moves, $\Sigma$, T))

(6) $(\exists s)$(knowledge($s$, T, Zoltán ) and $\cong(s$, that $(\exists t'\colon t' < \mathrm{T})(\exists s)$(belief($s$, $t'$, Galileo) and $\cong(s$, 'the earth moves', $\Sigma$, T)), $\Sigma$, T))

(7) that Galileo believed that the earth moves

(8) that $(\exists t'\colon t' < \mathrm{T})(\exists s)$(belief($s$, $t'$, Galileo) and $\cong(s$, 'the earth moves', $\Sigma$, T)

Given how we characterized 'expresses the same thing as', namely, as capturing the idea of two sentences expressing the same proposition without the ontology of propositions, if we take 'that the earth moves' and 'the earth moves' to both be directly referring terms that refer to 'the'$^{\circ}$'earth'$^{\circ}$'moves', then, as long as we allow that the analysis of a sentence expresses the same proposition as the analysandum, fixing any contextual parameters needed for determining truth conditions, we must accept that premise 3 is true. This leaves for consideration premises 4 and 8. What we find is that rejecting 4 corresponds to the first option and rejecting 8 corresponds to the second option we considered above on behalf of the propositionalist.

Let us consider the implications of rejecting 4 first. If we reject 4, we must hold that we cannot intersubstitute in the place of '$x$' in '$\cong(s, x, S, t)$' on the basis of the arguments being alike in what they express, and we must explain this in a way that is connected with why (4) can be true while (2) is false. (2) is judged to be false because Zoltán intuitively does not know what Galileo believes. The difference in the terms used to refer to the sentences that fix the content

must somehow be involved in this. We can employ a maneuver here parallel to the one we employed for the propositionalist, though with one additional twist. If Zoltán were a speaker of English, we would say that, in asserting (2), we attribute to Zoltán a belief about the content of Galileo's belief to the effect that it is the same in content as the sentence 'the earth moves' taken relative to the context, but also that he is presented with the sentence that is the same in content with a belief state of Galileo's in a way that secures that he understands it, which then suffices for him to know in the relevant sense what Galileo believed. To generalize to the case in which Zoltán is not a speaker of English, however, we need to invoke a relation between the sentence we use and some sentence of Zoltán 's which serves likewise to fix the content of Galileo's belief and which is said to be presented to him in a way that secures his understanding of it. This will require additional argument places in '≅(*s*, *x*, *S*, *t*)' for Zoltán , Z, and a time, *t′*, '≅(*s*, *x*, *S*, *t*, Z, *t′*)'. As a first pass, then we can explicate '≅(*s*, *x*, *S*, *t*, Z, *t′*)' as

> ≅(*s*, *x*, *S*, *t*, Z, *t′*) =$_{df}$ *x* indicates the content of *s* and for every *z* in '*x*' that occupies a content-giving argument place, there is a sentence σ and a term *y* of Z's such that *y* refers to σ and ≈ (Ref(*z*), σ, Z) and Z apprehends σ as giving the content of *s* at *t′* under a mode of presentation M(*y*) which is adequate to understand σ (relative to Z and *t′*) if *z* is a canonical term for referring to sentences.[13]

[13] I want to emphasize that the use of 'mode of presentation' here is not meant to involve commitment to Fregean senses. It is a suggestive place holder for an account of how understanding a term used to refer to a sentence may suffice for its user to understand it. The explanation I gave in section I of how 'that *p*' works in the language on the sententialist account is one way of cashing this out. I do not see that the propositionalist can offer an account that does not similarly appeal to a speaker's understanding the sentence used in the complement clause. If that is right, then no Fregean sense, construed as an abstract object, could do the job required.

Here '≈ (*a*, *b*, *x*)' is true iff *a* in English translates *b* relative to *x*, in the ordinary sense of translation, which allows for shifts of various sorts to preserve the function of the original in the translation, as we noted at the end of section II. Again, the notion of apprehending a sentence as giving the content of an attitude under a mode of presentation adequate to understand the sentence will require further explanation, as in the case of the corresponding move on behalf of the propositionalist, but it is to be explained, as in the case of the propositionalist, in terms of the way in which a term of the form 'that *p*' enables the person using it to grasp/understand the proposition/sentence to which it is used to refer.

The other option is to reject premise 8. This requires giving an explanation of the intuition that (2) is false while (4) is true. As in the case of the corresponding move by the propositionalist, it seems that the natural, and perhaps only, way to do this is to argue that we are responding to a false implicature of (2) rather than its literal truth value. Again, there is a natural story to tell on the assumption that (1b) gives a correct account of the truth conditions of (1). Against a standard background practice of attributing beliefs to others using sentences they would use, or the best translations, all things considered, into our language of sentences they would use, there will be a standard implicature in the case of second-order belief attributions, e.g., of an assertion of (2), that the subject of the attitude knows, in the relevant sense, what Galileo believes, because it will be assumed that he would use a sentence in his language with a complement that functions semantically in the same way that 'that the earth moves' does in English and is otherwise a best translation of it, which would suffice for him to understand the sentence that is used to indicate the content of Galileo's attitude. Clearly this implicature will be absent in the case of an utterance of (4). Thus, we judge that what is conveyed in total by an utterance of (2) is false in the circumstances though what is conveyed by (4) is true. Yet, on this

account, the literal truth of (2) and (4) are the same, and the divergence in judgments arises from our attending to the whole content standardly conveyed and not just to the literal content.

## VIII

My purpose has not been to argue for sententialism as against propositionalism, or to urge one or another of these responses as the best for the sententialist (or propositionalist). Rather, it has been to urge that the difficulty which Schiffer raises for sententialism turns out to be a more general problem which afflicts the propositionalist as well as the sententialist, and, indeed, it can be seen, any other account of propositional attitude reports, and that, whatever routes are available for the propositionalist in responding, there are parallel routes open for the sententialist. The fact that it is a problem for both sententialists and propositionalists shows that there are unexplored difficulties in our understanding of the notion of knowing what someone believes (desires, etc.), for it shows that this cannot be captured simply by way of relating someone to a proposition (or sentence) that relates the believer (etc.) to any object as such, whether it has its "content" essentially or not. The same problem, it can be seen, arises in attributions of knowledge of meaning: what it is for someone to know what an expression means cannot be captured just by relating him to a proposition that relates an expression to any object as such.