I DON'T EXPECT YOUR REACTION TO BE
‘WHY FUSS ABOUT THESE QUIRKS OF THE VERNACULAR?’
1
Non-standard accounts of propositional attitudes in Prior's Nachlass

In English, we use a sentence like
Arthur believes that natural language is messy
in order to speak about what Arthur believes. For this sentence, we have what we can call the standard theory. Arthur Prior was the first to show that the standard theory is at odds with some linguistic data (§I). Because of these data, some non-standard accounts were proposed by both Prior and Peter Geach. The purpose of this paper is to understand whether their non-standard accounts fare any better than the standard theory. Unfortunately, I will show that they do not (§II-III). But Prior and Geach did not fill all the logical space. In following their method in dealing with natural language, we may end up with another non-standard account which seems indeed to fare better (§IV).

I. THE STANDARD THEORY AND ITS PROBLEMS

The standard theory of propositional attitude sentences, such as
Arthur believes that natural language is messy
Arthur fears that natural language is messy,
is the conjunction of the following theses:
1) ‘that’-clauses are syntactic units
2) they are singular terms
3) they always denote the same entity
4) that entity is a proposition

From the four theses, it follows that according to the standard theory in both sentences the ‘that’-clause ‘that natural language is messy’ denotes the proposition that natural language is messy. The proposition is usually taken to be what Arthur believes and fears, so that the sentences are taken to express a relation between Arthur and that proposition. The theory was originally suggested in order to account for some syllogisms, but it immediately became also the standard theory for natural languages. Since then, philosophers mostly tried to understand what exactly propositions are, without calling the theory into question. Geach and Prior are among the few exceptions to this general historical trend and they developed their non-standard accounts not independently of the theory, but exactly because of their dissatisfaction with it. As Prior himself (1971: 14-16) as first noted and as it has been stressed again recently, the standard theory is in fact at odds with some linguistic data. Both Prior and Geach thought that linguistic data should be handled carefully and it is not obvious that they always constitute reliable guides to a correct semantic account. For example, in English we say
Arthur hopes that Peter agrees
but when ‘to hope’ is not followed by a ‘that’-clause, a ‘for’ is grammatically needed. But Geach and Prior both thought that these data merely show, as Prior put it, “minor idiosyncrasies” (1961, 106). They do not explain further why they dismiss the datum, but the reason seems clear. Even if ‘Peter’s agreement’ and ‘that Peter agrees’ were both singular terms, they would nonetheless have different syntactic properties and the grammaticality of a sentence also depends on merely syntactic features of terms. Even if some data show according to Geach and Prior mere idiosyncrasies, they thought that this is not true of all kinds of data. For example, they both thought that ‘to fear’ leads to a genuine problem (Prior 1971: 14-6):

No Substitutivity salva veritate
i) According to the standard theory, in
Arthur fears that natural language is messy
the ‘that’-clause ‘that natural language is messy’ denotes the proposition that natural language is messy;
i) Thus, ‘that natural language is messy’ and the definite description ‘the proposition that natural language is messy’ denote the same entity;

1 Geach 1961.
If no grammatical issues arise, singular terms having the same denotation can be substituted without change in the truth conditions: a singular term’s denotation is its contribution to the meaning of the sentence it occurs in. Then why would substituting it with a term having the very same denotation change the meaning of the sentence?

With ‘to fear’, no grammatical issues arise: the following

Arthur fears the proposition that natural language is messy

is a perfectly grammatical sentence.

The following sentences,

Arthur fears that natural language is messy
Arthur fears the proposition that natural language is messy,

would therefore have to share their truth conditions.

But they do not: the first ascribes to Arthur a fear that natural language is messy, the second an unusual instance of propositional phobia, and the first may be true even if Arthur is perfectly at peace with propositions.

Because of problems like this one, Geach and Prior both thought that at least one of the theses that constitute the standard theory had to be rejected. They discussed the theory several times over the years and while they completely agreed with each other on the need to reject the theory, they disagreed about how to do that. Let us start from Geach’s proposals.

II. GEACH’S NON-STANDARD ACCOUNTS

Of the theses constituting the standard theory, Geach always endorsed theses

1) ‘that’-clauses are syntactic units
2) they are singular terms,
so that his rejection of the theory had to do with theses

3) they always denote the same entity
4) that entity is a proposition.

But there is a difference in how he rejected these theses in the published work and in the letters to Prior. So let us start from the familiar Geach. As it is well-known, in his published works (1957: 75-92), Geach accepted 3) but denied 4), holding that in Arthur fears that natural language is messy
the ‘that’-clause refers to the sentence “Natural language is messy”. As Prior noticed (1971: 14-5), this account is obviously subject to the No Substitutivity salva veritate problem. For sentences

Arthur fears the cat is on the mat
Arthur fears the sentence ‘The cat is on the mat’

have different truth conditions: as Prior puts it,

“A man might perhaps in some odd mood or condition fear sentences as he fears dogs – if Robinson Crusoe had seen not a footstep but the inscription ‘The cat in on the mat’ written in the sand, it might have set him trembling – but this is quite a different matter; such a man might fear the sentence without knowing what it means; and even if he did, he might fear the sentence ‘The cat is on the mat’ without fearing that the cat is on the mat’.

Therefore, Geach’s sententialist departure from the standard theory does not seem to be in a better position than the standard theory itself. But in his letters to Prior, Geach rejected the standard theory in a different way. In the letters, he focused on

3) they always denote the same entity
and rejected it by repeating several times that “there is a gear-change” (1963a; 1963b; 1966a; 1966b) in the contribution of the ‘that’-clause in

Arthur believes that natural language is messy
Arthur fears that natural language is messy.

According to the Geach of the letters, ‘that’-clauses are ambiguous and denote different kinds of entity when they follow verbs of different kinds: propositions with knowledge, states of affairs with will. Thus this Geach solves the problem of No Substitutivity salva veritate. For it is in accordance with his account that the two sentences involved in the problem,

Arthur fears that natural language is messy
Arthur fears the proposition that natural language is messy,
have different truth conditions. For according to Geach in the second, so to say, the wrong kind of entity has been chosen. If a factual entity is chosen, in fact, the sentences have the same truth conditions:

Arthur fears that natural language is messy.

Arthur fears the state of affairs/the eventuality/ … that natural language is messy.

But is this overall a good account, one that is able to be in accordance with all the linguistic data that need to be taken as genuine data to be accounted for? Unfortunately, the answer seems ‘no’, since it is, together with the standard theory, at odds with the following datum: ‘that’-clauses do not behave like singular terms in identity statements. The following, in fact, is not grammatical:

That natural language is messy is that natural language is messy.

This datum does not seem to merely show an idiosyncrasy of language. While in general grammaticality issues are unable to establish whether an expression is a singular term, identity is what we take to be the primary grammatical test for singular terms. In general, singular terms of any kind can flank identity predicates:

Arthur is Arthur
He is Peter
The philosopher called ‘Prior’ is Prior,

Secondly, the role of singular terms is to provide us with objects. Therefore it is to be expected that any singular term should be able to flank identity. Therefore ‘that’-clauses, insofar as they cannot flank identity, create the following problem for Geach’s account:

Ungrammaticality of identity statements

i) Identity is the test for singular terms

ii) According to the Geach of the letters (and to the publish Geach and the standard theory, for that matter), ‘that’-clauses are singular terms (even if they denote different entities in the context of different verbs);

iii) Thus, if Geach were right, it would have to be possible for ‘that’-clauses to flank identity;

iv) Since ‘is’ is, among other things, an identity predicate in English, the following would then have to be grammatical:

That natural language is messy is that natural language is messy;

v) But this identity statement is not grammatical. ‘That’-clauses cannot flank the identity predicate ‘is’.

Because Geach did not consider this Ungrammaticality of identity statements problem, he did not recognise that of the theses constituting the standard theory, the problematic thesis is primarily

2) they are singular terms,

not

3) they always denote the same entity.

Prior, even if he did not consider the problem created by identity statements, famously rejected a very radical departure from the standard account, which implies, among other things, precisely a rejection of 2). So to Prior’s account.

III. PRIOR’S NON-STANDARD ACCOUNT

Prior was primarily interested in building a logic, not in accounting for natural language, and if it is true that Prior never published anything whose primary aim was an account of English, it is also true that in 1964 he gave to a bunch of friends a typescript, which is now published as *Objects of Thought*, and in which he clearly focused on natural languages and aimed at providing an account for propositional attitude sentences. As it is famous, he rejected the standard theory in the most radical possible way, since he rejected even thesis

1) ‘that’-clauses are syntactic units

He maintained that in carving a sentence like

Arthur believes that natural language is messy

at its syntactic joints, we do not obtain ‘that natural language is messy’ as a syntactic unit. According to Prior the *essential trick* (1971: 24) is to hold that ‘that’ should be taken to go with the verb:
Arthur believes that natural language is messy. He maintained that 'believes that' is to be considered as a predicate on the left side - predicking belief of Arthur - and as a connective on the right side - connecting to the sentence 'Natural language is messy.' Therefore, Prior suggested, the sentence following the 'that' does not designate anything at all, exactly as it does not designate anything in

Logic is rigorous and natural language is messy. Therefore the sentence does not express a relation between Arthur and anything whatsoever, “for what goes on to the other end of this expression isn't a name- neither the name of a form of words nor the name of a " proposition "” (1963c: 116).

Is this account any better than the standard theory or Geach’s proposals? It is clear that on this account the No Substitutivity salva veritate problem does not arise. In the sentences involved in the problem, i.e.

Arthur fears that natural language is messy

Arthur fears the proposition that natural language is messy,

we have, according to Prior, ‘to fear that’+SENTENCE in the first and ‘to fear’+OBJ in the second. The second sentence is thus not the result of replacing a singular term with one having the same denotation and there are no reasons why preservation of truth conditions is to be expected. Moreover, Prior’s account is safe from the Ungrammaticality of identity statements problem. For according to Prior ‘that’-clauses are not syntactic units and it is no surprise that bits of language that are not syntactic units cannot flank ‘is’. The following, for example, is similarly ungrammatical:

Gave me while is gave me while.

But is Prior’s account an overall acceptable account of English propositional attitude sentences? Whether or not it may be logically correct, I think we should conclude that it cannot be correct as an account of natural languages. His account is obviously and notoriously subject to the problem that everything in the syntax of English speaks against rejecting thesis 1). So here is the problem for Prior’s account:

**Butcher’s work**

i) In general, there are some constraints on how the passive form of a construction can be built and what may be moved back and forth in a sentence. These constraints are strictly connected with what the syntactic units are that occur in the sentence: in

John likes his friends

for example, 'his friends' is taken to be a unit because if it were not, then it would be possible to somehow separate the different bits, but it is not: the following are ungrammatical

His John likes friends

His are liked by John friends

His are liked friends by John.

ii) If we follow Prior, in

Arthur believes that natural language is messy

‘that natural language is messy’ is not a unit, while ‘believes that’ is;

iii) But then why can ‘believes’ and ‘that’ be kept apart, as shown by the grammaticality of

That natural language is messy is believed by Arthur

What Arthur believes is that natural language is messy,

and actually should be so kept apart, considering that the following

Natural language is messy is believed that by Arthur

What Arthur believes that is natural language is messy

are ungrammatical?

iv) To use an expression Geach used in another context (1962b), cutting propositional attitude sentences as in accordance with Prior’s account is thus a butcher’s, not surgeon’s, work.

Thus thesis 1) seems indeed true, and Prior’s account, in relying on its rejection, seems thus inadequate as an account of English. Is it then impossible to cut propositional attitude sentences like a surgeon would, without having to face the problems? Geach and Prior did not exhaust the alternatives and there still is an undiscussed spot in the logical space.
IV. ANOTHER OPTION IN THE LOGICAL SPACE

The standard theory is composed by, among others, the following theses:

1) ‘that’-clauses are syntactic units
2) they are singular terms

Geach rejected the theory, but endorsed both these theses. Prior instead rejected them both. As we saw, because of the ungrammaticality of identity statements involving ‘that’-clauses, it seems we need to reject 2). But in order to reject it, it is not necessary to reject 1) as well, as Prior did, taking an extreme and unnecessary step further. Thus we may consistently reject only thesis 2).

According to this non-standard account, therefore, ‘that’-clauses are unity, but not singular terms. What are they then? Here is a proposal to that end: in

Arthur fears that natural language is messy

the ‘that’-clause is a predicative syntactic unit, whose function is not to provide us with the object Arthur fears, but to characterize that object. According to an account of this kind, the sentence may be taken as tantamount to

\[ \exists x (\text{natural language is messy} (x) \wedge \text{fear}(\text{Arthur, } x)) \]

i.e. as a quantified sentence in which it is said that Arthur fears something characterized by the predicate ‘natural language is messy’. Of course, providing an analysis of its meaning is not an easy task, and maybe the account breaks there, but it is clear that taking ‘that’-clauses as predicates solves all the problems we saw. The first problem we encountered was the No Substitutivity salva veritate problem, i.e. the problem that

Arthur fears that natural language is messy
Arthur fears the proposition that natural language is messy

have different truth conditions. This problem is now perfectly solved. According to this account, ‘that’-clauses are not singular terms, so that in the two sentences we do not have two singular terms with the same denotation. Moreover, predicates cannot be generally substituted with definite descriptions or other singular terms. The following is one of the endless examples in which the substitution of a singular term for a predicate does not preserve truth conditions:

Arthur is smart
Arthur is the property of being smart
Arthur is smartness.

The second problem was the Ungrammaticality of identity statements. Also this is not anymore a problem. In general, predicates cannot flank identity:

Fears is fears.

Finally, we saw the problem that Prior’s account leads to butcher’s cuts. This of Prior’s problems is due to his having rejected 1), i.e. that ‘that’-clauses are syntactic units, not to his rejection of 2), i.e. the thesis that they are singular terms. In taking ‘that’-clauses as non-singular terms, but still as units, it is perfectly accounted for why

That natural language is messy is believed by Arthur
What Arthur believes is that natural language is messy,
are grammatical and the following
Natural language is messy is believed that by Arthur
What Arthur believes that is natural language is messy
are not: the former keep together the syntactic units, among which is the ‘that’-clause, while the latter do not.

Thus we may conclude that in following Geach and Prior in questioning the standard theory, even if it has a pedigree which goes back 2000 years, we may have found a good candidate for the analysis of propositional attitude sentences. Taking ‘that’-clauses as predicates seems both to respect the vernacular and to dominate its messiness with the precision of a surgeon.
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