

Chapter 2

‘Truth Predicates’ in Natural Language

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Abstract The aim of this paper is to take a closer look at the actual semantic behavior of what appear to be truth predicates in natural language and to re-assess the way they could motivate particular philosophical views. The paper will draw a distinction between two types of apparent truth predicates: type 1 truth predicates such as in English *true* and *correct* and type 2 truth predicates such as English *is the case*. It will establish the following points:

1. Type 1 truth predicates are true predicates, predicated of a representational objects of some sort, such as sentences, propositions, and entities of the sort of beliefs and assertions.
2. *That*-clauses with type 1 truth predicates do not act as referential terms, referring to propositions as truth bearers, but rather specify the content of contextually given attitudinal objects, such as ‘John’s belief that S’ or ‘Mary’s claim that S’.
3. Type 2 ‘truth predicates’ do not in fact act as truth predicates, but rather express the relation of truthmaking, relating a situation or ‘case’, to the content of a *that*-clause.

2.1 Introduction

The notion of truth has given rise to a great variety of philosophical views. Some of those views have been motivated by appeal to natural language, in particular the linguistic status and semantic behavior of what appear to be truth predicates, such as *true* in English. The aim of this paper is to take a closer look at the actual semantic behavior of apparent truth predicates in natural language and to re-assess the way they could motivate particular philosophical views.

True is not the only expression in English acting as an apparent truth predicate, and the paper will discuss other expressions in English (and German) as well that appear to convey truth. They include *correct* and *right* (in some of their uses), as well as *is the case*. Note that I call the relevant expressions ‘apparent truth predicates’ since it is

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controversial whether they really act as predicates predicating truth, and in fact only one among two types of expressions that I will discuss turns out to consist in actual truth predicates. The label ‘truth predicate’ will just serve to simplify the discussion.

The paper argues for a sharp distinction among two types of apparent truth predicates. *Is true* belongs to what I will call ‘type 1 truth predicates’; *is the case* belongs to what I will call ‘type 2 truth predicates’:

Type 1 truth predicates

(1) That S is true.

Type 2 truth predicates

(2) That S is the case.

The paper will also discuss *right* and *correct* as type 1 truth predicates, since *right* and *correct* despite their more general normative meaning convey truth with *that*-clauses as well as certain noun phrases. Type 2 truth predicates in English also include the predicates *occur* and *is so*.

The paper will establish several important points about the two types of truth predicates:

1. Type 1 truth predicates cannot be viewed as ‘operators’, ‘connectives’, or ‘anaphoric devices’, as has been claimed in some of the philosophical literature. Rather they are predicates predicated of a representational object of some sort. Such representational objects include sentences, propositions, beliefs, and assertions.
2. *That*-clauses with type 1 truth predicates do not act as referential terms, referring to a proposition as the truth bearer. Rather they have the function of specifying the content of a contextually given representational object. With *correct* and *right*, such objects cannot be sentences or propositions, but must be mind-dependent objects of the sort ‘John’s belief that S’ or ‘Mary’s claim that S’ (or perhaps kinds of such objects), that is what I call ‘attitudinal objects’ (Moltmann 2003a, 2013).¹ There is evidence that the same holds for *true*.

Point 2 is important since it would mean that propositions as abstract, mind-independent objects are not involved in the semantics of *that*-clauses with type 1 truth predicates, as on deflationist or ‘modest’ accounts of truth. Instead it opens the door for philosophical views tying the notion of truth primarily to the intentionality of mind-dependent objects, such as beliefs and claims.

Furthermore, the use of normative predicates such as *correct* to convey truth is at least compatible with a view according to which truth as constitutive of the normativity of beliefs (and related attitudinal objects) is a notion prior to the notion of truth applicable to sentences and propositions. The semantic behavior of other type 1 truth predicates that will be discussed is particularly suggestive of such a view.

¹ Note that attitudinal objects are not mental or illocutionary acts. They differ, most importantly, in that they have truth- or satisfaction conditions. They are thus proposition-like, but yet mind- and agent-dependent, see Moltmann (2003b, 2013).

3. Type 2 'truth predicates' do not in fact act as truth predicates, but rather express the relation of truth-making, relating a situation, or rather a 'case', to the content of a *that*-clause. Natural language thus does not just reflect the notion of truth, but also that of truth-making.

The appendix will briefly discuss two other apparent truth predicates in English, namely *is a fact* and *is the truth*. It will argue that they involve a more complex syntactic structure than what is apparent and do not serve to predicate truth.

2.2 Type 1 Truth Predicates

2.2.1 Basic Properties of Type 1 Truth Predicates

Is true is the truth predicate in English that has received the most philosophical attention. But there are other truth predicates that behave in relevant respects alike and thus classify as type 1 truth predicates. In particular, the normative predicates *is correct* and *is right* act as truth predicates when applied to *that*-clauses. We will later see that taking into account such predicates will be important for understanding truth predication in general.

In what follows, I will not discuss particular philosophical views about the status of *is true* in detail, but restrict myself to discussing the adequacy of a number of assumptions or claims that have been made in the philosophical literature about the linguistic status of *is true*.

Let us start with some very general linguistic properties of *is true*.² First, *is true* allows both for clausal subjects, as in (3a), and for extraposition, as in (3b):

- (3) a. That the sun is shining is true.
b. It is true that the sun is shining.

Moreover, *is true* allows for certain quantifiers and pronouns in place of *that*-clauses in subject position, such as *everything* and *that*:

- (4) a. Everything is true.
b. That is true.

This does not hold for extraposed clauses, though (as is always the case, whatever the predicate):

- (5) a. It is true that S.
b. * It is true everything/that.

The reason is that noun phrases (NPs) can never appear in that position.

² As can easily be verified, the negative truth predicate *is false* exhibits the very same properties.

Another important fact about *is true* is that it allows for referential NPs in subject position, namely NPs referring to entities such as propositions, sentences, beliefs, or claims:

- (6) a. The proposition that S is true.
- b. The sentence ‘S’ is true.
- c. John’s belief that S is true.
- d. John’s claim that S is true.

Related to that is the (often overlooked) fact that *true* can act as an adnominal modifier of those same NPs:

- (7) a. the true proposition that S
- b. the true sentence ‘S’
- c. John’s true claim that S

Various philosophers have developed views of the notion of truth focusing on the clausal structures in (3a, b). Some philosophers in particular have proposed views concerning the formal status of *true* in the clausal construction. Thus, Ramsey (1927) held that *is true* in that construction is simply redundant. That is, *that S is true*, on that view, means the very same thing as S. Grover et al. (1975) proposed that *is true* it is simply an anaphoric device. Roughly, on their view, *that is true* in the discourse context *It is raining. That is true.* is simply a device permitting re-use of the preceding sentence. Finally, there is the view according to which *is true* is an operator or connective (or part of an expression acting that way, an expression that would include *that*), a view recently defended by Mulligan (2010).

Such views all give priority to the clausal construction over the construction in which *is true* applies to a referential NP, or they focus entirely on the clausal construction. The operator/connective view of *is true* moreover gives priority to the extraposition structure. In the next sections, we will see that the assumptions that the clausal structure takes priority is untenable, as is the assumption that the extraposition structure takes priority over the subject clause structure.

2.2.2 *The Priority of the Clausal Construction*

True in predicate position accepts both *that*-clauses and ordinary referential or quantificational NPs in subject position, and it naturally occurs as an adjectival modifier of the latter. In general, it seems, type 1 truth predicates come both with clausal and nominal constructions, and if they involve an adjective (like *true*), the adjective will have an application as an adnominal modifier. There is no evidence for the priority of the clausal construction. Moreover, the semantic contribution of *true* appears exactly the same in the clausal and the nominal construction.

There are adjectives that like *true* can appear in predicate position with clausal subjects, but with which the clausal construction displays a distinctive ‘sentential’ semantics, unlike with *true*. Examples are the adjectives *possible* and *probable*.

Possible and *probable* in predicate position behave like sentence adverbials in two respects. First, *possible* and *probable* have adverbial counterparts that act as sentence adverbials. Thus (8a) and (8b) are equivalent:

- (8) a. Possibly/Probably, John will be late.
 b. It is possible/probable that John will be late.

Second, the subject *that*-clause with *possible* and *probable* cannot be replaced by an explicit proposition-referring NP without change in meaning:

- (9) The proposition that John will be late is possible/probable.

(9) does not mean what (8a) and (8b) mean. Rather it states that the existence of a proposition as an abstract object is possible/probable. Failure of substitution of a coreferential term is a good indication of the nonreferential status of a *that*-clause. With *possible* and *probable* as predicates, *that*-clauses do not act like singular terms referring to propositions and they do not specify the content of any object whatsoever to which *possible* and *probable* could apply as predicates. Rather, in predicate position, *possible* and *probable* appear to retain the very same semantic function that they have when acting as sentence adverbials.

The same two diagnostics for a sentence-adverbial function of an adjective in predicate position fail to apply to type 1 truth predicates. First of all, *true* lacks a sentence-adverbial counterpart, though it has an adverbial counterpart modifying the VP:

- (10) a. John truly believes that S.
 b. John truly said that S.

Given the common Davidsonian analysis of VP adverbials, *truly* here acts as a predicate, namely of the Davidsonian event argument of *believe* and *say*—or an entity closely related to it, an 'attitudinal object' of the sort of a belief or a claim, just as *true* does in (11a, b):³

- (11) a. John's belief that S is true.
 b. John's claim that S is true.

³ For a discussion of uses of *truly* as in (10a, b) see Aune (1967). In Moltmann (2013, Chap. 4), I argue that acts and states, such as a 'John's act of claiming' or 'John's state of believing' do not have truth conditions; only the corresponding attitudinal objects do, that is, entities of the sort 'John's claim' or 'John's belief'. This may be a problem for the Davidsonian account of *truly* in (10). The Davidsonian account appears problematic anyway, though, because the adverbial use of *truly* as in (10) does not seem to be available in all languages. For example, it is not available in German, which lacks an adverbial form of *wahr* 'true' with the right meaning. German has the adverbial form of *richtig* 'correctly'. But as an adverbial *richtig* cannot convey truth. Thus, (ia) is impossible, even though *richtig* can act as an adverbial with other predicates, as in (ib) and (ic):

- (i) a. ??? Hans glaubt richtig, daß es regnet.
 'John believes correctly that it is raining.'
 b. Hans hat das Wort richtig geschrieben.
 'John has written the word correctly.'
 c. Hans hat das Wort richtig verwendet.
 'John used the word correctly.'

Furthermore, with *true*, a replacement of the subject clause as in (12a) by a referential NP referring to a proposition (or another suitable object) as in (12b) is generally possible:

- (12) a. That S is true.
 b. That proposition that S is true.

There is another important difference between *probable/possible* and type 1 truth predicates. With *that*-clauses, *true* displays an *anaphoric effect* that *possible* and *probable* don't. Thus, (13) suggests that *that* S has been claimed or considered by someone in the context of discourse, whereas this is not the case for (14a, b):⁴

- (13) It is true that Mary is guilty.
 (14) a. It is possible that Mary is guilty.
 b. It is probable that Mary is guilty.

Unlike (13), (14a, b) are perfectly acceptable in a context in which 'Mary is guilty' was not under discussion or has not been entertained by anyone. The anaphoric effect indicates that *is true* is in fact predicated of a contextually given attitudinal object, let's say a claim, supposition or 'acceptance'.

There is also a somewhat weaker effect than a strictly anaphoric one that *is true* and *is correct* may convey, and that is a concessive effect. That is, (13) may just concede that Mary is guilty (continuing then with *but . . .*), without requiring that to have been maintained by someone in the context. This effect can be considered a special case of the anaphoric effect, involving accommodation rather than a link to the previous context of conversation. That is, it will involve adding a suitably general kind of attitudinal object to the 'common ground', of the sort 'the thought that Mary is guilty' (which need not require a particular agent to actually have entertained the thought that Mary is guilty). On this use, *is true* is predicated of a hypothetical supposition, which amounts to an act of conceding.

To summarize then, there *are* predicates allowing for *that*-clauses in English that display a distinctive 'sentential' semantics, but type 1 truth predicates do not belong to them.⁵

⁴ An anaphoric effect is also noticeable with *is possible* and *is probable* when the *that*-clause is in subject position:

- (i) That John is inexperienced is possible/probable.

A plausible explanation is that *that*-clauses do not actually occur in subject position, but only in topic position (Koster 1978) (see also Fn11).

⁵ Note that subject clauses with *possible* and *probable* allow for a replacement by *everything* or *that*, an indication that such quantifiers and pronouns do not go along with a referential function of the *that*-clause. See also Fn 10.

2.2.3 *Modifiers of Type 1 Truth Predicates*

A further argument against the priority of the clausal construction is the interpretation of modifiers of type 1 truth predicates. Modifiers such as *partly* and *to some extent* are equally applicable with *that*-clauses and with NPs in subject position:

- (15) a. That the students are intelligent is partly true.
 b. It is partly true that the students are intelligent.
 (16) a. That John is incompetent is to some extent true.
 b. It is to some extent true that John is incompetent.

The modifiers *partly* and *to some extent* are modifiers that relate to the part-whole structure of the object of which the predicate is predicated, in this case the content, in a suitable sense, of the *that*-clause.⁶ The semantics of such modifiers is hard to account for on a 'sentential' semantic analysis of the *is true*-construction.

2.2.4 *The Apparent Priority of the Extraposed Form and the Referential Status of the Subject Clause*

Since extraposed clauses cannot be replaced by quantifiers or anaphora, the extraposition structure seems to reflect the logical form of a sentence in which *true* plays the role of an operator or connective, rather than acting as a predicate (Mulligan 2010).^{7,8}

There is not much linguistic support for the extraposition structure being prior to the subject-clause structure, however. First of all, extraposition is always possible with (one-place) predicates allowing for a subject clause, regardless of the content of the predicate. This includes predicates such as *is interesting*, *is shocking*, or *was the subject of a great debate*, for which true predicative status is hardly implausible. Second, extraposition is equally available with infinitival clauses, which arguably do have the status of referential terms, unlike *that*-clauses. Unlike *that*-clauses, infinitival clauses can 'flank the identity sign', one of Frege's criteria for referential terms:

⁶ For an account of partial truth see Yablo (2014).

⁷ More precisely, *true* will have to be considered part of an expression acting that way, namely *is true that* (Mulligan 2010).

⁸ Sometimes *it is true (that)* cannot just be a connective, for example when it hosts tense, which may require a particular temporal interpretation, as well as temporal or modal adverbials:

- (i) a. This was true.
 b. This may be true.
 (ii) Last year it was still true that S.

True can go along with other copular verbs than *be*:

- (iii) That S became true/remained/seems true.

Thus, the view that *it is true* acts as an operator/connective may have to restrict itself to only part of the semantic function of that expression. But see the discussion in Grover et al. (1975).

- (17) a. * That John lives is that John works.
 b. To live is to work.

Infinitival clauses arguably stand for action types.⁹ As such, they are replaceable by explicit descriptions of actions, at least with predicates such as *correct*, *right*, and *wrong*. Below we see that those predicates allow for infinitival clauses both in subject position and extraposed:

- (18) a. To address Mike as ‘Sir’ is correct.
 b. It is correct to address Mike as ‘Sir’.
 (19) a. To take advantage of others is wrong.
 b. It is wrong to take advantage of others.

(20) shows the possibility of replacing the infinitival clauses by explicit descriptions of actions:

- (20) a. Actions of addressing Mike as ‘Sir’ are correct.
 b. Actions of taking advantages of others are wrong.

Clearly then, whether a clause is in subject position or extraposed does not bear on its referential status.

2.2.5 *The Referentially Dependent Status of that-Clauses*

Subject clauses can be replaced by certain quantifiers and pronouns, such as *something* or *that*. However, there is evidence that *that*-clauses in subject position, as elsewhere, are not themselves referential.^{10,11} In particular, in subject position *that*-clauses are not referentially independent. This is an important point, though generally not acknowledged in the semantic literature. First of all, a *that*-clause in subject position is not by itself a proposition-referring term. A *that*-clause in subject position can also stand for a fact or a possibility, and what kind of entity it stands for depends strictly on the predicate. This can be seen with the evaluative predicate *nice* below:

- (21) That S is nice.

(21) allows only for a reading on which *nice* evaluates a fact, even though *nice* could in principle evaluate a proposition (as in *the proposition that S is nice*) or a possibility (as in *the possibility that S is nice*). Only in the presence of a suitable predicate can

⁹ See, for example, Portner (1997) for such a view.

¹⁰ Quantifiers and pronouns like *everything* and *that* themselves in fact are not indicators of the referentiality of the expression they may replace. See Moltmann (2003a, 2004, 2013) for discussion.

¹¹ In fact, *that*-clauses in apparent subject position, it has been argued, are actually not in subject position but rather in topic position (Koster 1978). The topic position is not a referential position, as seen below, where *really happy* appears in topic position:

- (i) Really happy, he will never be.

a *that*-clause in subject position stand for a proposition, as in (22a), or a possibility, as in (22b):

- (22) a. That S/The proposition that S implies that S'.
 b. That John might get elected/The possibility that John might get elected is excluded.

This means that in subject position a *that*-clause does not on its own refer to a proposition, a possibility, or a fact. Rather it serves to only characterize a proposition, a possibility, or a fact depending on the predicate. The semantic role of a *that*-clause is that of specifying the content of a proposition-like object of the kind required by the predicate, an object to which the property expressed by the predicate can then apply.

The semantic role of subject clauses to only partially characterize the argument of the predicate goes along well with the account of the anaphoric effect of *is true* given earlier. With *is true*, a *that*-clause specifies the content of the relevant (contextually given or accommodated) attitudinal object (or kind of attitudinal object), of which *true* is then predicated.

2.2.6 Consequences for Deflationist View of the Content of True

One general issue in the philosophical discussion of truth is the question of the status of *true* as a predicate expressing a property. On the face of it, *true* appears no different from an ordinary predicate. Deflationists deny that *true* expresses a true property, but they do not necessarily make claims about the syntactic status of *true*. Thus, Horwich's (1990) version of deflationism is sufficiently carefully formulated so as to not make direct claims about the linguistic status of *true*. The view maintains only that what constitutes having the concept of truth is the knowledge of the equivalence schema below, where [] is a nominalization function (roughly corresponding to *that*):¹²

- (23) [S] is true iff S.

Yet some assumptions about the semantics of sentences with the predicate *is true* are made nonetheless. Most importantly, the account gives priority to the clausal construction: (23) is applicable only when *true* applies to a *that*-clause and not when it applies to a referential NP. (23) moreover treats a *that*-clause as a proposition-referring term (with the aim of giving justice to the possibility of replacing the *that*-clause by quantifiers like *something*, anaphoric pronouns like *that*, and descriptions of the sort *what John said*). Given (23), the application of the truth predicate amounts to the denominalization of the proposition-referring term (a *that*-clause) and the use of the sentence thus obtained.

¹² For a closely related view see Künne (2003).

In view of the lack of referential independence of *that*-clauses discussed in the preceding section, the deflationist view faces the problem that the subject clause by itself just could not stand for a proposition. This is not a serious problem, though, since in (23) just one particular nominalization function introducing propositions may have been chosen in the presence of the predicate *true*. More of a challenge is the anaphoric effect associated with *is true*, which indicates that it is not a proposition, but a contextually given or accommodated attitudinal object (or kind of attitudinal object) that *true* is predicated of. There is further support for such an account of *that*-clauses with *true* as a type 1 truth predicate and that comes from normative truth predicates such as *correct* and *right*. With *that*-clauses, normative truth predicates simply *could* not apply to propositions.

2.2.7 Normative Truth Predicates

Correct and *right* (as well as their negative counterpart *wrong*) act like truth predicates in some of their uses, but they obviously have a more general normative meaning. They differ in that respect from *true*, which I will call a *representation-related truth predicate*. The semantic behavior of normative truth predicates is significant in that it bears both on the analysis of *that*-clauses with truth predicates in general and on the question of the priority of different notions of truth.

Correct and *right* are predicates that appear to express truth with *that*-clauses (in subject position and when extraposed):

- (24) a. That John is the director is correct/right.
 b. It is correct/right that John is the director.

In that role, *correct* and *right* display the very same anaphoric effect as *true*, illustrated by the contrast with *possible* and *likely* below:

- (25) a. It is correct/right that John is inexperienced.
 b. It is possible/likely that John is inexperienced.

Correct and *right* also act as truth predicates with referential NPs referring to attitudinal objects such as beliefs and claims:

- (26) a. John's belief that S is right/correct.
 b. John's claim that S is right/correct.

Correct and *right* have a more general normative meaning, though. This is what allows *correct* and *right* to apply also to decisions, punishments, movements, proofs, and conclusions:

- (27) a. John's decision was right.
 b. John's punishment was right.
 c. The dancer's movements were correct.
 d. The proof was correct.
 e. The conclusion that Mary is guilty is correct.

With their more general meaning, *correct* and *right* express the fulfillment of the relevant norm (be it a moral value, a rule, an instruction, or logical validity).

The normative aspect is apparent also when *correct* and *right* are predicated of certain types of truth bearers such as explanations, and answers, in which case they do not simply predicate truth:

- (28) a. The explanation that Mary was tired was correct.
 b. The answer that Paris is the capital of France is correct.

For an explanation to be a correct explanation, it does not suffice for its content to be true; it also needs to explain what is to be explained. Similarly, for an answer to be a correct answer, it does not suffice for its content to be true; it also needs to respond to the question. In fact, *true* is not applicable to explanations, and in some languages, for example German, its counterpart does not apply to answers:¹³

- (29) a.?? The explanation that Mary was tired was true.
 b.?? Die Antwort, dass Paris die Hauptstadt von Frankreich ist ist wahr.
 'The answer that Paris is the capital of France is true.'

Like *true*, *correct* and *right* can also be predicated of sentences:

- (30) This sentence is correct/right.

However, when predicated of sentences, *correct* and *right* evaluate grammaticality rather than truth. This certainly is due to the more general normative meaning of *correct* and *right*. The norm associated with a syntactic object such as a sentence is grammaticality not truth.

An important (and related) observation is that *correct* and *right*, unlike *true*, cannot felicitously be predicated of propositions:

- (31)?? The proposition that it is raining is correct/right.

This has an important consequence for the semantic analysis of *that*-clauses with *correct* and *right* as predicates, and in fact for the semantics of *that*-clauses in general. A *that*-clause with *is right* or *is correct* as predicate could not serve to specify a proposition, but only an attitudinal object of the sort of a belief or a claim—or a kind of attitudinal object in the context of a concessive use.¹⁴

¹³ In fact, a linguistic act being an answer presupposes that it addresses the question. An answer may then be 'correct' or not depending on whether its content is true. Note that the extent to which an answer addresses the question cannot be conveyed by *correct*, but only by *good*. An answer that truly addresses the question may be considered a 'good answer', whereas an answer that evades the question a 'bad' one. Obviously, an answer cannot be identified with a proposition or an assertion: propositions and assertions have different normative profiles.

¹⁴ A concessive use involving accommodation of a kind of attitudinal object is actually harder to get with *right* and *correct* than with *true*, but it is not impossible, let's say in a suitable context with the sentence below:

- (i) It is right that John is inexperienced. Yet he should be given a chance.
 (ii) shows that *correct* and *right* can apply to kinds of attitudinal objects:
 (ii) The claim/The assumption that John is inexperienced is correct.

The fact that *that*-clauses with *correct* or *right* need to specify the content of an attitudinal object (or a kind of attitudinal object) but could not stand for a proposition is rather remarkable. The more familiar cases in which a *that*-clause could not stand for a proposition are those in which the *that*-clause is required to specify a fact (*nice*) or a possibility (*is excluded*). If *that*-clauses have to specify attitudinal objects or kinds of them with *correct* and *right*, then this makes it rather plausible that they will do that with *true* as well. It would in both cases explain the anaphoric effect. Moreover, it would go along well with philosophical views that consider the primary truth bearers to be mind-dependent objects of the sort of beliefs, rather than abstract propositions, that is, it would suit well philosophical views that tie truth to intentionality.

The use of *right* and *correct* as truth predicates displays a notion of truth according to which truth is constitutive of the norm associated with beliefs: if one ought to believe *p*, then *p*. (Boghossian 2003; Gibbard 2005). It is the notion of truth as the aim of belief just as the fulfillment of moral values is what certain actions and decisions should aim for. The notion of truth displayed by *true*, by contrast, is that of a property of representational objects: sentences, abstract propositions, as well as attitudinal object such as beliefs and claims.

Obviously, a deflationist account that invokes the denominalization of a proposition-referring *that*-clause is not applicable to *correct* and *right* when they are used as truth predicates with *that*-clauses. With *correct* and *right*, *that*-clauses could not stand for propositions but only for entities like beliefs and assertions. This need not be an objection to deflationism as such, though. In fact, it is not plausible that *correct* and *right* with objects like beliefs and assertions just convey truth. Rather, truth is treated as a consequence of the fulfillment of the norm associated with beliefs and assertions, a consequence of what ought to be believed or what ought to be asserted. If the content of a belief or assertion is separated from the belief or assertion itself, then the fact that the correctness of a belief or assertion implies the truth of its content is compatible with a deflationist view of truth.

There is an alternative view, however, according to which a truth-related norm is inseparable from the notion of content itself, with belief being in fact the most fundamental propositional attitudes related to the content of propositional attitudes in general (as suggested by Boghossian 2003). On such a view, the norm-related notion of truth conveyed by *correct* and *right* when applied to beliefs would not be explained in terms of the representation-related notion, but rather considered primitive, constitutive of the notion of mental content itself. The representation-related notion conveyed by *true* when predicated of sentences and abstract propositions would instead be explained in terms of the more primary normative notion. Roughly, *true* would hold of a proposition in virtue of that proposition making up the content of a (potential) belief fulfilling its norm. *True* would hold of a sentence in virtue of that sentence expressing a proposition of which *true* holds.

This is not the place for a more elaborate philosophical discussion of the two views. The purpose of the preceding remarks was mainly to clarify the philosophical options compatible with the linguistic facts. What we can certainly conclude from the linguistic facts that natural language as such does not support the priority of a notion of truth involving abstract propositions, as, for example, the deflationist

account would have it.¹⁵ The semantic behavior of representation-related and especially norm-related truth predicates does not go along well with the view that *that*-clauses act as proposition-referring terms. It gives much better support for the view that *that*-clauses with type 1 truth predicates serve to specify the content of contextually given or accommodated attitudinal objects (or kinds of them).

The distinction in English between the normative predicates *correct* and *right*, which can be used as truth predicates, and the representation-related truth predicate *true* raises the question of how general that distinction is. A quick look at two truth predicates of one other language (German) shows that the distinction is not very clear cut, which in turn suggests that the normative notion of truth should not be explained in terms of the representation-related one.

First, in German, there is only a single negative predicate for both the representation-related and the normative notion, namely *false*:

- (32) a. Die Schlußfolgerung ist falsch.
 'The conclusion is false/
 b. Der Satz ist falsch.
 'The sentence is false.'
 c. Die Behauptung ist falsch.
 'The claim is false'.
 d. Die Entscheidung war falsch.
 'The claim/The decision was wrong.'
 e. Die Tanzschritte waren falsch.
 'The dance steps were wrong.'

Interestingly, *falsch* when predicated of sentences as in (32b) is not ambiguous, but means only 'false', not 'grammatically wrong'. To convey ungrammatically requires explicitly negating *korrekt* or *richtig*:

- (33) Der Satz ist nicht richtig/nicht korrekt/inkorrekt.
 'The sentence is not right/not correct/incorrect.'

This indicates that *falsch* has a single meaning (which manifests itself as 'false' when applied to sentences), rather than being ambiguous between two meanings (though what exactly that meaning is remains to be spelled out).

Second, the German 'truth verb' *stimmen* 'be right', also a type 1 truth predicate, combines what appears to be a representation-related and a normative use. *Stimmen* conveys a very different norm-related notion, though, than *correct* and *right*.

Stimmen can be predicated of sentences as well as assumptions and assertions with the meaning 'true':

- (34) a. Der Satz stimmt.
 'The sentence is true.'
 b. Maria's Annahme/Anna's Behauptung stimmt.
 'Mary's assumption/Ann's claim is right'.

¹⁵ For a critique of abstract propositions as semantic values of *that*-clauses see also Boghossian (2010).

Stimmen also means ‘true’ with *that*-clauses:

- (35) Daß es regnet, stimmt.
 ‘That it is raining is right.’

Stimmen in addition applies to certain actions or their products, conveying that they conform to the relevant rules or conditions:

- (36) a. Die Tanzschritte stimmen.
 ‘The dance steps are right.’
 b. Der Beweis stimmt.
 ‘The proof is right.’

As such *stimmen* also applies to answers, conveying that their content is true:

- (37) Die Antwort stimmt.
 ‘The answer is right.’

However, *stimmen* does not apply to actions or decisions whose associated norms are moral values:

- (38) a.??? Maria’s Entscheidung stimmt.
 ‘Mary’s decision is right.’
 b.??? Anna’s Bestrafung stimmt.
 ‘Ann’s punishment is right.’
 c.??? Anderen zu helfen stimmt.
 ‘To help others is right.’

Stimmen generally cares only about fairly local conditions and not more general action-guiding moral values. This manifests itself also in the fact that *stimmen* is perfectly natural with statements of personal taste, with which *richtig* is infelicitous, as it is with *wahr* ‘true’ (Kölbel 2008):

- (39) a. Maria’s Behauptung, dass Skifahren Spaß macht, stimmt./?? ist richtig/??? ist wahr.
 ‘Mary’s claim that skiing is fun is right/correct/true.’
 b. Daß die Schokolade fantastisch schmeckt ist, stimmt/?? ist richtig/??? ist wahr.
 ‘That the chocolate tastes fantastic is right/correct/true.’

The general meaning of *stimmen* appears to be that of meeting rather specific conditions associated with the entities to which *stimmen* can apply. In the case of sentences, those conditions concern truth rather than grammaticality. In the case of assertions, they concern truth as well as intersubjective sharability.

Given these observations, we can conclude that there is no strict division among representation-related and norm-related truth predicates. German *false* and *stimmen* have both representation-related and norm-related uses, and they impose rather different requirements on the norms associated with the objects they can apply to. In both cases, though, truth is treated as the norm for sentences as well as beliefs and assertions.

2.2.8 *The Nominalization Truth*

A further important linguistic fact about the adjective *true* is that it has a nominalization, *truth*. *Truth* can help form a relational NP that is of the very same form as a term referring to a particularized property or trope, such as *the wisdom of Socrates* or *the beauty of the landscape*.¹⁶ In such an NP, *truth* will take as its complement a referential NP to which *true* can also apply as a predicate and an adnominal modifier: such as *the proposition*, *the belief*, *the claim*, or *the sentence*^{17,18}

- (40) a. the truth of the proposition
 b. the truth of the belief/claim
 c. the truth of the sentence

Truth otherwise displays typical occurrences as an abstract mass noun, namely as a bare mass noun apparently referring to a quality in (41a) (which is parallel to (41a')) and as a mass quantifier ranging over quality instances (or tropes) in (41b) (which is parallel to (41b')):

- (41) a. The topic of the seminar was truth.¹⁹
 a'. The topic of the conversation was beauty.
 b. There was little truth in what he claimed.
 b'. There was little beauty in the photograph.

¹⁶ Terms of this sort are used as standard examples of trope-referring terms in the relevant philosophical literature. See Moltmann (2007, 2013) for a discussion of trope-referring terms in natural language.

¹⁷ It is obvious from the behavior of predicates that *the truth of the proposition that S* cannot refer to the same thing as *the proposition that S*:

- (i) a. The proposition that S might have been false.
 b. ??? The truth of the proposition that S might have been false.

Truth is essential to 'the truth of the proposition that S', but not generally to 'the proposition that S'.

¹⁸ Hinzen (2003) emphasizes the 'possessor' relation (the relation of inalienable possession) that is manifest in the application of the nominalization *truth*, as in (ia) and especially in (ib):

- (i) a. There is some truth in his claim that S.
 b. The claim that S has some truth in it.

This is the very same relation that may also apply to the referents of adjective nominalizations such as *wisdom*, where it is traditionally considered the relation of a trope to its bearer:

- (ii) a. There is some wisdom in his remark.
 b. His remark has some wisdom in it.

This relation is also involved in the interpretation of 'ordinary' trope-referring terms formed with *truth* or *wisdom*:

- (iii) a. the truth of his claim.
 b. the wisdom of his claim.

¹⁹ Coherence theorists would consider the quality-referring term *truth* as expressing the primary notion of truth, prior to that expressed the predicate *true* or the relational use of *truth*.

Given its semantic behavior, the nominalization *truth* thus treats truth as a particularized or general quantity. If this is considered an indication as to the concept of truth itself, this poses considerable difficulties for philosophical views of truth that focus entirely on the clausal construction, such as the redundancy theory, the anaphoric theory, and the theory of *true* as (part of) a connective or operator. Natural language not only treats *true* as a property-ascribing predicate. It also treats NPs formed with its nominalization as trope-referring or trope-quantifying terms or as terms standing for a quality.

This also poses a challenge to the deflationist view. The deflationist account of *true* explains the application of *true* in terms of the use of a denominalized sentence and thus could not account for modifiers of *true* such as *partly* or *to some extent*, which relate to the part-whole structure of the content of the truth bearer.

2.3 Type 2 Truth Predicates

Is the case is a type 2 truth predicate. The construction *is the case* is often considered synonymous with *is true*. More obviously than *is true*, *is the case* appears to act as a semantically redundant sentence operator, serving at best the purpose of hosting negation, as in (42a), or as permitting quantification, as in (42b), or anaphoric reference, as in (42c):

- (42) a. That it is raining is not the case.
 b. Several things he said are not the case.
 c. That is not the case.

The equivalence of the sentences below, with subject clauses and with extraposition, seems to show the synonymy of *is true* and *is the case*:

- (43) a. That S is not true.
 a'. That S is not the case.
 b. It is not true that S.
 b'. It is not the case that S.

However, the two constructions are in fact fundamentally different both syntactically and semantically.

A first difference consists in that (44a) is perfectly fine as it is, whereas (44b) is quite peculiar:

- (44) a. That it is raining is true.
 b.?? That it is raining is the case.

Is the case seems to require negation, as in (42a), or else an adverbial (*that it is raining is often the case*).

Another difference is that unlike *is true*, *is the case* does not accept full NPs in subject position:^{20, 21}

- (45) a.??? The proposition that S is the case.
 b.??? The belief that S is the case.
 c.??? The sentence 'S' is the case.

It has been held that the *is the case*-construction reflects the Identity Theory of truth. That is, *that S is the case* is true just in case that S picks out a worldly fact.²² If S fails to pick out a worldly fact, then *that S is true* is false.²³ On this view, *is the case* is in fact treated as an existence predicate. An existence predicate, unlike other predicates, does not presuppose the existence of the subject referent. This account, as we will see, cannot be right. The *that*-clause in *that S is the case* may be evaluated relative to different situations, rather than denoting a single entity.

The most important semantic difference between *is true* and *is the case* concerns their behavior with adverbial modifiers. First, *is true* and *is the case* differ in their acceptance of location modifiers. Location modifiers are perfectly fine with *is the case*, but they are hardly acceptable with *is true*:

- (46) a. In our firm, it is not the case that one gets fired without explanation.
 b.?? In our firm, it is not true that one gets fired without explanation.
 (47) a. In John's family, it is not the case that children respect their parents.
 b.?? In John's family, it is not true that children respect their parents.

²⁰ It has been held that that *is the case* does not apply to representational objects, such as propositions, beliefs, or sentences, but only to states or affairs or situations (Mulligan 2010). But in fact explicit descriptions of situations or states of affairs are equally impossible with *is the case*:

- (i) a.??? That state of affairs is the case.
 b.??? The situation he described is the case.

²¹ One might expect *is true* and *is the case* to differ in another respect. Whereas *true* as an adjective should have predicative status, this would not be expected for *the case* in *is the case*. Yet, *the case* in that context satisfies the same syntactic criteria for predicatehood as *true*. In particular, *true* and *the case* can be the predicate in 'small clauses', a standard linguistic criterion for predicatehood:

- (i) a. I consider it true that John is a genius.
 b. I consider it the case that John is a genius.

²² The Identity Theory of truth is that of early Russell and Moore; see Candlish and Damnjanovic (2011).

²³ Wittgenstein's dictum below in (ia) appears to be an expression of the Identity Theory, given the assumption that (ia) means just what (ib) means:

- (i) a. The world is everything that is the case.
 b. The world is the totality of facts.

On the intended meaning, *everything that is the case* would have to stand for the totality of worldly facts that 'are the case'. The question is whether (ia) is really acceptable (and its slightly provocative sound suggests that it is not). On the present view, *everything* in (ia) would best be considered a substitutional quantifier or something close to it. But then *everything that is the case* can hardly stand for the totality of facts. Thus, (ia) comes out as unacceptable.

Whereas (46a) and (47a) are perfectly natural as statements of facts, (46b) and (47b) if not unacceptable, at least convey a somewhat particular metasemantic notion of location-relative truth.

Furthermore, *is true* can hardly go together with adverbs of quantification, which are fine with *is the case*:

- (48) a. Given that she has developed Alzheimers, it will often be the case that Mary forgets something.
 b.?? It will often be true that Mary forgets something.
 (49) a. It was twice the case that someone was absent.
 b.??? It was twice true that someone was absent.

The use of adverbs of quantification with *is the case* shows that the subject clause may be evaluated with respect to the various situations that the adverb of quantification ranges over. The *that*-clause won't denote a single entity, which means that the identity-theoretical account of *is the case* cannot be right.

The use of propositional anaphora with *again* shows the same thing:

- (50) It was once the case that S. Today that is the case again.

By contrast, the *that*-clause with *is true* needs to be propositionally complete. *That S* in *that S is true* is understood as complete regarding context-dependent elements, such as quantifier restrictions, tense interpretation, spatial location etc., though of course the proposition expressed may involve 'unarticulated constituents'.

Is the case is not the only 'truth predicate' in English that rather than attributing truth, involves an evaluation of the *that*-clause with respect to situations. *Occur* can act that way as well, as (51), with a location modifier and an adverb of quantification illustrates:

- (51) That a student in this school failed an exam has never occurred.

Occur shares also other linguistic properties with *is the case*. It allows for extraposition and subject clauses and for a replacement of a subject clause by a quantifier or pronoun:

- (52) a. It is never occurred that a student in this school failed an exam.
 b. Nothing of what he predicted/That has occurred.

Occur differs from *is the case*, though, in that it imposes a restriction on the *that*-clause. It accepts only *that*-clauses with eventive verbs:

- (53)?? In John's family, it does not occur that children respect their parents.

Another construction belonging like *is the case* and *occur* to type 2 truth predicates appears in English only in a restricted form, namely *is so*. *Is so* does not accept *that*-clauses, but only sentential anaphora:²⁴

²⁴ The German version is not subject to the restriction:

- (i) Daß es im Winter kalt ist, war schon immer so.
 That it is cold in winter was always so.

- (54) a. It is perhaps so
b. Is that so?

Concerning the semantics of *is the case* (and other type 2 truth predicates), it is revealing to take a look at referential terms that can be formed with the noun *case*. Such terms are indicative as to what sorts of entities are involved in the semantics of type 2 truth predicates. They arguably are precisely the sorts of entities with respect to which the *that*-clause will be evaluated, or better that serve as truthmakers of the *that*-clause.²⁵

Case occurs as the head noun of referential terms like *the case in which S*, as below:

- (55) a. We discussed the case in which John might not return.
b. We cannot exclude the case in which John might be unable to do the job.

What is peculiar about such noun phrases is that they require a modal of possibility in the *that*-clause. The modal in this context serves as an indicator that the situation the NP refers to is a merely possible one. Without a modal, the *case*-NP would refer to an actual situation, and that, for some reason, is not permitted:

- (56) a.??? We were relieved about the case that John returned.
b.??? We discussed the case in which John is unable to do the job.

Case-NPs thus need to refer to merely possible situations or better possible 'cases'. Note that merely possible cases are not possibilities. 'The possibility that John might return' exists just in case it is possible that John returns. For a possible case to 'exist', it has to be actual. This can be seen from the way existence predicates for cases are understood, such as *occur* and *present itself*.²⁶

- (57) The case that John will not return could occur/ present itself.

'Cases' are situations in a certain sense and as referents of *case*-NPs they are merely possible situations. But once they are said to 'exist', they are worldly facts or actual situations.

Cases are not true propositions or non-wordly facts. Unlike the latter, they have to be fully specific. Thus, a case in which a student fails the exam involves a particular

Below we see that the construction also allows for extraposition:

- (ii) Es war schon immer so, daß es im Winter kalt ist.
'It was always so that it is cold in winter.'
- (iii) illustrates that the construction does not allow for referential NPs:
- (iii) * Dieser Satz/Diese Proposition/Dieser Sachverhalt was schon immer so.
'This sentence/This proposition/This state of affairs has always been so.'

That is, *is so* can mean neither 'true' nor 'obtain'.

²⁵ For the notion of a truthmaker see, for example, Mulligan et al. (1984), Armstrong (1997), Moltmann (2007), and Fine (2012).

²⁶ 'Cases' thus are also not states of affairs. States of affairs may or may not obtain. But 'cases' could not be said to 'obtain'. What exactly the ontological differences between states of affairs and cases amounts to remains to be clarified of course.

student failing the exam, and a case in which John or Mary fails the exam involves either John's failing the exam or Mary's failing exam, but not a disjunctive condition.

While *case*-NPs are subject to the constraint that they have to refer to merely possible 'cases', *is the case* obviously involves reference to an actual 'case'. This is not achieved by the noun phrase *the case* itself, though. *The case* in that context does not behave as a truly referential NP. It requires the simple definite determiner *the* (**it is that case that S*, **it is a case that S*), and does not permit any modifiers (**it is the unfortunate case that S*):

(58) * That it is raining is the case that I did not expect.

The case in *is the case*, moreover, cannot act as the antecedent of a *case*-NP:

(59) That no one came was recently the case.?? We did not like that case.

The case rather appears to be a mere referential residue. In fact, the construction *it is the case that S* generally involves quantification over cases. This is so with adverbs of quantification and also the negative sentence *it is not the case that S*, which states that there is no 'case' that supports S.

The relation between a 'case' and the *that*-clause that is involved in the semantics of the *is the case*-construction is a relation of truth-making, and it needs to be the relation of exact truth-making.²⁷ That is, it is the relation that holds between a case and a *that*-clause only if the case is wholly relevant to the truth of the *that*-clause. This is clear from the way quantifiers are understood:

(60) It was twice the case that John made a mistake.

Twice in (60) counts situations that are completely relevant for the truth of *John made a mistake*, that is, situations that include nothing more than John, a single mistake, and the 'making'-relation holding between the two. *Twice* does not count larger situations or sums of such situations.

The semantics of *is the case* with a location modifier or an adverb of quantification will thus be as follows, where $s \Vdash S$ is the exact truth-making relation:

(61) a. *In this firm it is the case that S* is true iff for the maximal actual 'case' s such that *in this firm*(s), $s \Vdash S$.

b. *It is sometimes the case that S* is true iff for some 'cases' s , $s \Vdash S$.

The truthmaking view as a general view about truth says that if a sentence/proposition is true, it is true in virtue of something in the world that makes it true. The fact that English has constructions expressing the truth-making relation between 'cases' and the content of *that*-clauses does not imply that English is committed to the truth maker view as a view about truth itself, though. That is, it does not imply the view that the truth of any sentence must be grounded in a truth-maker. Rather, it simply means that the semantics of English involves a concept of truthmaking that relates situations or rather 'cases' to the content of *that*-clauses.

²⁷ This is the truth-making relation that is used, for example, in Moltmann (2007) and Fine (2012).

It is the case that, it seems, involves as its interpretation the sort of semantics that Austin (1950) proposed for independent sentences in general. On Austin's view, with the utterance of a sentence, a speaker refers to an (actual) situation and claims that the situation referred to is of the type specified by the sentence uttered. That is, the situation referred to acts as the truthmaker of that sentence. On the present view, this is only part of the constructional meaning of *is the case*. With *is the case*, adverbs of quantification range over 'cases' and location adverbials act as predicates of cases. Austin's motivations for implicit situation reference were in fact quite different from the present ones. The situation referred to, for Austin, is responsible for contextual restrictions on quantification domains, the interpretation of tense etc. The present motivation for invoking truth-making is quite simply the semantics of the *is the case*-construction.

2.4 Conclusions

This paper has pointed out a range of linguistic facts about truth predicates in English (and German), which required a significant re-evaluation of the motivations of theories of truth that appeal to natural language. On the positive side, the paper has argued for an account of sentences of the form *that S is P* for a type 1 truth predicate P according to which *that S* specifies the content of a contextually given (or accommodated) attitudinal object such as a belief or claim and P acts as a predicate of that entity. Type 2 truth predicates such as *is the case*, by contrast, involve in their semantics the relation of truth-making, relating cases to the *that*-clause, and not predication of a truth property.

One obvious question the paper raises is the crosslinguistic generality of the observations made on the basis of English and German. Certainly, it is expected that the distinction between the two types of truth predicates is found across languages in general. Moreover, the observations made about type 1 truth predicates suggest that natural languages display a great variety of normative and representation-related concepts of truth. Of course, it would be highly desirable to be able to add data from other languages to this general picture and to establish further generalizations on the basis of them.

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2.5 Appendix: Two Further 'Truth Predicates'

In this appendix, I will briefly discuss two further apparent truth predicates in English, *is a fact* and *is the truth*, focusing on their rather special syntax and semantics.

4. *Is a fact*'

Is a fact appears to act as a truth predicate below:

- (1) That the sun is shining is a fact.

We will see, though, that the semantics of the *is a fact* -construction is fundamentally different from that of type 1 or type 2 predicates: it involves neither attribution of truth to a representational object nor the expression of the truth-making relation, but rather a specification of the 'content' of a fact.

Let us look at the linguistic properties of the *is a fact*-construction. Like *is true*-sentences, *is a fact*-sentences allow for extraposition:

- (2) a. That S is a fact.
b. It is a fact that S.

Moreover, like *is true*-sentences and unlike *is the case*-sentences, *is a fact*-sentences resist location modifiers and adverbs of quantification:

- (3) a.??? In our firm, it is never a fact that someone gets fired without explanation.
b.??? It was twice a fact that someone was absent.

This means that *that S* in *that S is a fact* must be propositionally complete.

There are differences, though, between *is true* and *is a fact*. Unlike *is true*, *is a fact* allows only for simple quantifiers and pronouns in subject position and not for referential NPs:²⁸

- (4) a. * John's belief is a fact.
b. * That sentence is a fact.
(5) a. Nothing is a fact.
b. It is raining. That is a fact.

Unlike *the case* in *is the case*, *a fact* in *is a fact* is an ordinary indefinite NP, allowing for adjectival modifiers, relative clauses, and anaphora support:

- (6) a. That S is an interesting fact.
b. That S is a fact that I had never noticed.
c. That S is a fact. That fact is hardly known.

All this suggests that the *is a fact*-construction reflects the Identity Theory of truth: *That S is a fact* is true just in case that S picks out a fact. This would also account for the possibility of negation:

- (7) That S is certainly not a fact.

²⁸ Note that *is a fact* does not allow for free relative clauses with attitude verbs, unlike *is the case* and *is true* (Austin 1961b):

- (i) a. What John said/believes is true.
b.?? What John said/believes is a fact.
c. What John said/believes is the case.

I do not have an explanation of that difference.

However, the identity-theoretic analysis is implausible. *That S* by itself cannot stand for a fact, not only because of the lack of referential independence of *that*-clauses discussed earlier. Let us look at the sentences below, which display the very same construction:

- (8) a. That S is a possibility.
 b. That S is a common belief.

If *that S* could by itself stand for a fact, then (8a) and (8b) could have a reading on which they are false just because S is true, since a fact is neither a possibility nor a belief. A fact is not a possibility since the possibility that S exists in circumstances in which S is not true. Moreover, a belief obviously is not a fact.

More plausibly, the *that*-clause in (1) occurs nonreferentially and serves to specify the 'content' of a fact. That is, (1) expresses a relation of specification that holds between the content of the *that*-clause in subject position and a fact (and not predication of the property of being a fact of the referent of the *that*-clause). This will be the very same semantic relation that obtains between *fact* and the *that*-clause in *the fact that the sun is shining*. The same holds of course for (8a) and (8b).²⁹

5. *Is the truth*

The truth predicate *is the truth* is a very puzzling one both from a semantic and a syntactic point of view:

- (9) That John is guilty is the truth.

Obviously, what the subject clause in (9) denotes cannot literally be 'the truth'. It could not make up the one and only 'truth'; there are lots of 'truths'.

In what follows, I will identify a range of semantic and syntactic properties of the construction and point at the kind of syntactic and semantic analysis that it most plausibly has.

It is tempting to take *the truth* in this context to stand for the unique contextually relevant 'truth' (that is, true proposition) or to act as a predicatively used contextually restricted definite description. But a contextual restriction driving the interpretation of *the truth* in (9) is implausible. For (9) to be acceptable, no particular context is required that would restrict the denotation of *the truth*. *The truth* does not behave like predicatively used contextually restricted NPs as in the examples below:

- (10) a. This chair is the yellow chair.
 b. This piece of furniture is the yellow chair.

Unlike (9), (10a) and (10b) do require a particular previous discourse context that was about a unique yellow chair.

In fact, *is the truth* belongs to a different construction than that of a subject-predicate sentence, as well as that of *that S is a fact*. *The truth* has neither the status of a predicatively used NP nor of a referential or quantificational NP (whatever the view of definite NPs may be).

²⁹ For such an analysis of *That is is a fact* and *the fact that S* see Moltmann (2013, Chaps. 2 and 6).

Three properties distinguish *is the truth* from ordinary predicates. First, *is the truth* allows subject-predicate inversion, as seen in (11), unlike ordinary predicates, such as type 1 and type 2 truth predicates, as in (12a) and (12b):

- (11) a. That John will not return is the truth.
 b. The truth is that John will not return.
 (12) a. * True/ Correct/ Right is that John will not return.
 b. * The case is that John will not return.

Second, unlike predicates taking clausal subjects, *is the truth* does not allow for extraposition:³⁰

- (13) * It is the truth that John will not return.

Third, *is the truth* requires a definite determiner in *the truth*, unlike ordinary predicates such as *is a chair*:

- (14) a. * A truth is that he will not return.
 b. * That John will not return is a truth.

Given these three properties, we can conclude that *is the truth* is not a syntactic predicate taking clausal subjects. Moreover, *the truth* in that construction does not act as an ordinary definite NP used predicatively. Otherwise the restriction to definiteness would be unexpected.

The construction more plausibly is a type of specificational sentence (Higgins 1979). Specificational sentences come in two sorts: with a free relative clause in subject position, as in (15a), and with a definite NP in subject position, as in (16a) (Higgins 1979):

- (15) a. What John did was kiss Mary.
 b. Kiss Mary is what John did.
 (16) a. The best player is John.
 b. John is the best player.

(15b) and (16b) illustrate, inversion is possible in both cases.

Semantically, specificational sentences have been analysed in one of two ways: [1] as expressing a question-answer relationship, with the subject acting as a concealed question and the postcopula expression partially specifying an answer (the Question-Answer Analysis) and [2] as expressing an identity among possibly higher-level semantic values (the Identity Analysis).³¹ It turns out that neither analysis can be right for specificational sentences with *that*-clauses in general. To see this, let us look at some more familiar kinds of specificational sentences involving *that*-clauses:

- (17) a. John's claim is that it is raining.
 b. That it is raining is John's claim.

³⁰ This poses difficulties for Hinzen's (2003) view, who takes *the truth* in *is the truth* to have the status of a predicate.

³¹ For the Question-Answer Analysis of specificational sentences, see, for example, Schlenker (2003) and references therein. For the Identity Analysis see, for example, Sharvit (1999) and references therein.

- (18) a. The idea is that there will be a party.
 b. That there will be a party is the idea.

It is not entirely obvious how the Question-Answer Analysis applies to specificational sentences with *that*-clauses. On that analysis, the subject of (18a) might stand for a question of the sort 'what idea is there?' or perhaps of the sort 'what is the idea?'. The postcopula NP presumably will partially specify an answer of the sort 'the idea that there will be a party'.

This kind of analysis is not generally applicable, however. In particular, it is not applicable to sentences with *the truth* as subject. On that analysis, the postcopula *that*-clause in (9) would partially specify an answer of the sort 'the truth that John is guilty'. But *the truth that John is guilty* is ungrammatical: *truth* does not accept *that*-clauses. The difficulty arises with other specificational sentences as well. Higgins (1979) already observed that in specificational sentences, the subject and a postcopula *that*-clause need not be able to form an NP. Thus, (19a) is a specificational sentence as well, but (19b) is ungrammatical:

- (19) a. The proof that John is guilty is that his fingerprints are on the knife.
 b. * the proof that John is guilty that his fingerprints are on the knife

The Identity Analysis does not straightforwardly apply to specificational sentences with *that*-clauses either. What a *that*-clause generally is taken to stand for is not a claim, an idea, or a proof. A *that*-clause specifies the content of such entities, but is not identical to them. The relation expressed by a specificational sentence with a *that*-clause could only be that of content specification, not that of identity.

A further question that the *is the truth*-construction raises is, why is the subject a definite NP when there need not be a unique entity it stands for? The Question-Answer Analysis would say that an NP of the sort *the fact that S* or *the claim that S* is obligatorily definite, since indefinites such as *a fact that S* or *a claim that S* are unacceptable. But we have seen that that analysis was not generally applicable to specificational sentences with *that*-clauses. There is a more plausible way of explaining the obligatory definiteness. It is a general requirement that specificational subjects always be definite, illustrated below (Heycock and Kroch 1999):³²

- (20) a. ??? A good player is John.
 b. ??? A problem is that it is raining.

Given that (9) is in fact the inverted structure, this means that the obligatory definiteness of *the truth* in *is the truth* would be an instance of a more general condition on the

³² *The truth* occurs in yet a different construction, as a concealed question below:

- (i) a. John told the truth.
 b. John knows/found out the truth.

The concealed-question use is not available with nominalizations of other type 1 truth predicates:

- (ii) a. * John told the falsehood.
 b. * John told the correctness.

subject of specificational sentences. Of course, the definiteness condition on specificational subjects needs to be explained itself (perhaps by associating the subject of a specificational sentence with a particular semantic role, for example by attributing it an anaphoric status relating to what is at least implicitly under discussion).

Let us then summarize this rather inconclusive discussion by stating that *is the truth* is a pseudo-truth predicate involving a complex syntactic structure whose semantics is far from well understood.

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