To appear in G. Mras / M. Schmitz (eds): *Force, Content, and the Unity of the Proposition*. Routledge

Truthmaking, Satisfaction, and the Force-Content Distinction

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February 1, 2021

Abstract

This paper presents a novel perspective on the force-content distinction against the background of truthmaker semantics and an ontology of attitudinal objects, entities that we refer to as 'claims', 'beliefs', 'requests', 'offers', 'desires', 'hopes', and 'decisions' and that are neither acts (or states) nor propositions. Attitudinal objects incorporate illocutionary force or attitudinal mode and come with various sorts of satisfaction conditions, reflected in the applicability of different satisfaction predicates. Various linguistic generalizations support the view that attitudinal objects, rather than propositions, play a central role in the semantics of attitude reports. Making use of Fine's (2017, 2018a, b) recent truthmaker semantics, the paper outlines an account of force/mode in terms of conditions on the satisfiers of attitudinal objects or on attitudinal objects themselves. Those conditions concern the type of entities that may act as satisfiers (situations, actions, states, (assertive) attitudinal objects), the presence or absence of violators, causal connections between attitudinal object and satisfiers, and, importantly, the direction of fit. The paper gives a novel account of the notion of direction of fit, motivated by the actual readings of the predicate *correct* when applied to attitudinal objects or their satisfiers: an attitudinal object with a word/mind-world direction of fit is associated with an intrinsic (non-action-guiding) norm (that of truth); attitudinal objects with a world-word/mind direction of fit impose an action-guiding norm or a purpose on potential satisfiers.

Introduction

Standard views in philosophy and formal semantics center around the notion of a proposition, an entity needed, or so it appears, to fulfill several functions at once: being the meaning of (declarative) sentences (and *that*-clauses in particular), being the (primary) bearer of truth, being the shareable object (or content) of propositional attitudes and of illocutionary acts. The availability of apparent propositional anaphora and quantifiers such as *that, something,* and *everything* as well as free relatives like *what Mary claims* in place of *that*-clauses seems to confirm the status of *that*-clauses as referential terms and thus the objectual status of propositions. Propositions are standardly seen as separate from force: different illocutionary act types (with different forces) can have the same propositional content, as can different

propositional attitudes (with different attitudinal modes). In order to avoid the too coarse-grained notion of content associated with the conception of propositions as sets of possible worlds, it has become common in philosophy of language, to adopt a structured conception of propositions. The structured-propositions view leads to the notorious problem of the unity of the proposition, however, that is, the problem, how a structure consisting of properties and objects can have the particular truth conditions it is meant to have. A solution to the problem that has been pursued recently consists in giving up the force-content distinction and take illocutionary acts to be acts of predication applying to the propositional constituents, thus providing the unity and the truth-evaluability of the propositions (Hanks 2015).

In this paper, I outline a very different view, which does away with the notion of a proposition as an entity and avoids the problem of the unity of the proposition while subscribing to a fine-grained notion of content. On that view, propositions do not play a role as entities fulfilling the various functions at once. *That*-clauses do not act as proposition-referring terms, and pronouns and quantifiers like *that* and *something* and free relatives like *what John believes* do not stand for propositions. The starting point instead are the kinds of objects that correspond to illocutionary acts and propositional attitudes, namely what we refer to as *claims, beliefs, judgments, requests, promises, intentions, desires, hopes,* and *decisions.* These are what I call 'attitudinal objects'.[1] Attitudinal objects divide into illocutionary objects (claims, requests, promises etc.) and mental objects (beliefs, judgments, intentions, decisions, hopes etc.). Closely related to attitudinal objects are modal objects, which include obligations, permissions, abilities, options, possibilities, strategies, and laws. Attitudinal objects are extremely well-reflected in natural language, but they are of course not dependent on language. Attitudinal objects are mind- and agent-dependent particulars. Yet, they enter similarity relations and form kinds on the basis of being the same in content (provided they share their force or mode) (Moltmann 2013 chap. 4, 2017, 2019). Kinds of attitudinal objects are thus suitable for the role of sharable contents. Attitudinal objects are bearers of truth conditions or more generally satisfaction conditions. I take them to be bearers of truthmakers or satisfiers, namely situations or actions that exactly satisfy the attitudinal object, in the sense of Fine's (2017, 2018a, b) notion of exact truthmaking. Truthmaker semantics, which based on that notion, allows for a fine-grained notion of content associated with both sentences and attitudinal objects.

[1] See Moltmann (2003a, b, 2013, chap. 4, 2014, 2017, 2019).

Attitudinal objects come with a mode or force, though they are not actions. Some of them can rather be viewed as (non-material) products of acts in the sense of Twardowski's (1912) action-product distinction. Thus assertions are products of acts of asserting, requests products of acts of requesting, and questions products of acts of asking. Satisfaction predicates do not apply to acts, but rather to attitudinal objects. Different satisfaction predicates apply to different types of attitudinal objects, reflecting, at least in part, their mode or force. *True* and *false* apply to beliefs, assumptions, and claims; *satisfy*, *comply with*, *violate*, and *contravene* to requests and commands; *fulfill* to desires and hopes, *accept* and *take up* to invitations and offers, *carry out* and *realize* to intentions and decisions, *take* and *follow* to options and strategies. Given the notion of an attitudinal object, force or mode can be cast in terms of conditions on the satisfaction of attitudinal objects, involving actions, situations, and attitudinal objects as satisfiers.

In what follows, I will first recall the standard view of propositions and the force-content distinction, then present challenges to that view from research in linguistics, and finally outline the new view based on attitudinal objects and their satisfaction conditions.

1. The standard view of propositions and the content–force distinction

The standard view, since Frege, is that propositions are entities that act as semantic values of *that*-clause complements of attitude verbs and provide arguments for the attitudinal relation expressed by such verbs. This gives rise to the relational analysis of attitude reports and illocutionary acts reports as in (1b) for (1a):

(1) a. John believes that S.
b. believe(John, the proposition that S)

That-clauses, on that view, are proposition-referring terms, with propositions being both meanings of sentences and the object or content of propositional attitudes and illocutionary acts.

Pronouns like *that* and quantifiers like *everything* and free relatives like *what Mary believes* , 'special' quantifiers or pronouns, as I call them, appear to stand for just the sorts of things *that*-clauses denote, propositions:

(2) a. Mary believes that.

b. John believes everything Mary believes.

c. John believes what Mary believes.

There are two standard views of what propositions are: sets of worlds and structured complexes consisting (in the simplest case) of a property and an object (structured propositions). The structured-propositions view has become a more widely adopted view among philosophers since it avoids problems with the possible-worlds view such as the identification of logically equivalent propositions. On either view, propositions are taken to be independent of force, providing the semantic values of embedded sentences in various contexts, including as antecedents of conditionals and as disjuncts of sentential disjunctions.

2. Linguistic challenges of the standard view

The standard view appears well-motivated by what the linguistic facts seem to bear on their sleeve; yet the view that embedded clauses stand for force-independent propositions has been challenged by recent and not so recent research in both syntax and semantics.

First, embedded clauses may indicate force and it has become a standard assumption in linguistics that semantic selectional requirements of verbs care about force and not just propositional content (Grimshaw 1979). Most obviously, the difference between *wh*-clauses and *that*-clauses is indicative of force. *Assert* selects assertions, which can be provided by *that*-sentences. *Ask* selects questions, which may take the form of a *wh*-clause or *if*-clause or else of definite NPs that are concealed questions.[2] In addition, infinitival clauses may be indicative of force and are generally selected by directive illocutionary verbs (*request, order*). Also mood and modals occurring in the embedded may be indicative of force. Depending on conditions of force, the verb may require a particular mood or the presence of a modal, and, vice versa, mood or modals may require particular embedding verbs. Thus, *require*, which selects directive force, requires a *that*-clause to be in the subjunctive mood or else to contain a modal like *should* ('modal concord', Portner 2007):

(4) a. ??? John required that Bill is at work by 8.

[2] In fact, the content-force distinction is hardly applicable to interrogatives in the first place. Interrogatives are generally taken to have a different denotations from declaratives and *that*-clauses (Hamblin 1958 , Karttunen 1977). Also imperatives have been taken to have a different denotations from declaratives, e.g. as properties as opposed to propositions (Portner 2007).

b. John required that Bill be at work by 8 / that Bill should be at work by 8.

Thus *that*-clauses may not stand for force-free propositions, but indicate the type of force selected by the verb.

There have also been various arguments to the effect that *that*-clauses do not syntactically behave like referential terms, but as predicates of content bearers, which may come with a force (Moulton 2015, Moltmann 2014, 2017). First, there are views according to which *that*-clauses are in fact relative clauses, given the syntactic behavior of complementizers such as *that* (Kayne 2010, Arsenijevic 2009). As such, *that*-clauses would modify a silent noun (such as silent *fact*) or a noun that has subsequently been incorporated into an underlying light verb such as *have* or *make* (with *believe* being derived from *have belief* and *claim* from *make claim*) (Arsenijevic 2009, Moltmann 2021). Second, the ability of *that*-clauses of modifying nouns (*the belief that* S) is indicative of a semantic status of clauses as predicates rather than arguments (Moulton 2015).

There is also strong evidence that special quantifiers and pronouns do not actually stand for propositions, but rather for concrete content bearers that incorporate a force or mode. First, quantifiers like *something* in place of *that*-clauses take restrictions that could not be predicated of propositions, such as *difficult to comply with* (*John requested something difficult to comply with*) (Moltmann 2003a, b, 2013 chap.4). Second, reports of content sharing involving different attitude verbs are subject to constraints that indicate that what is shared is (kinds of) content bearers that include a force (Moltmann 2003a, b, 2013, chap. 4). Thus, attitude verbs that involve different forces or modes generally cannot share their content:

(5) a. ??? John hoped what Mary claimed, that it would rain.

b. ??? John imagined what Mary claimed, that it was raining.

c.??? John decided what Mary predicted, that he would return.

(6) ??? John promised what Mary suspected, that he would return.

Only under special conditions are such sentences acceptable, namely when the described attitudes are coordinated or allow, under focusing, for a lexical decomposition in syntax, into attitudinal modifier and more general predicate (*John in fact promised what Mary only imagined, John knows what Mary only suspects*). The standard view has it that free relative clauses such as *what John hopes* stand for a force-free content; but the fact that reports of sharing such as (5-6) are unacceptable or require special linguistic contexts or efforts on the

part of the interlocutors means that that view is mistaken. The unacceptability of (5a, b) and (6) matches the unacceptability of corresponding sentences with nominalizations:

(7) a. ??? John's hope is Mary's claim.
b. ??? John's imagination is Bill's claim.
c. ??? John's decision is Mary's prediction.
(8) ??? John's promise is Bill's suspicion.

Standard views have it that nouns like *claim* and *decision* are polysemous standing either for a proposition or an act. The unacceptability of examples like (7-8) again shows that that view is mistaken since those examples should be fine on the proposition-reading.

Observations such as these indicate that propositions are not available as entities in the semantic structure of sentences. Instead what is available is just the sorts of entities we refer to as 'John's claim that S', an attitudinal object, or 'the claim that S', a kind of attitudinal object sharable by different agents. Attitudinal objects are mental or illocutionary objects that depend on a particular agent and generally come with satisfaction conditions. Some attitudinal objects are (non-material) products of acts, in the sense of Twardowksi's (1912) distinction between actions and products. Assertions are products of acts of assertion and thoughts products of acts of thinking. Attitudinal objects are closely related to modal objects, entities like obligations, permissions, possibilities, which likewise have satisfaction conditions. Unlike attitudinal objects, modal objects may generally endure past the act that may have produced them.[3] Some attitudinal objects come with a modal component, a modal object that shares their satisfaction conditions. A demand may involve an obligation, assertions a commitment to truth (Section 5).

Without this being a place for a detailed linguistic discussion, the linguistic generalizations above give support for a rather different semantics of attitude reports than the standard relational one. Such an analysis will start out with attitudinal objects and *that*-clauses acting semantically as their predicates, so that a simple attitude report such as (8a) will be interpreted as in (8b):

(8) a. John claims that S.

[3] Products in that sense may be understood in roughly the sense of abstract artifacts of Thomasson (1997), which for her include laws - modal objects.

b. make(John, claim that S)

The semantic analysis of (8a) as (8b) is plausible given recent syntactic views on which (8a) has an underlying structure as indicated in (9), involving the light verb *make* and movement of the noun *claim* from a position ('force projection') in the left periphery of the *that*-clause to the direct object position of the verb and subsequent incorporation into the verb (Arsenijevic 2009, Moltmann 2021):

(9) John claim_i-make e_i [that e_i S].

That-clauses act as predicates of attitudinal (and modal) objects by giving, at least, their satisfaction conditions. The satisfaction conditions of attitudinal objects are best cast in terms of truthmaker semantics as recently developed by Fine (2017, 2018a, b), rather than possible-worlds semantics. There are three reasons for that. [1] Sets of worlds as contents of attitudinal objects give a too coarse-grained notion of content. [2] Sets of worlds would not be able to distinguish attitudinal (and modal) objects with the modal force of necessity and the modal force of possibility (Moltmann 2020). [3] Truthmaker semantics allows casting certain conditions of force as conditions on actions and attitudinal objects as satisfiers of (other) attitudinal objects (Section 5). Truthmaker semantics has a range of motivations mainly from the sort of intensionality arising in non-attitudinal contexts such as conditionals and deontic modals. The possibility of casting force in terms of conditions on truthmakers/satisfiers and falsifiers/violators (Section 5) gives new motivations for it.

3. *That*-clauses as predicates: Attitudinal objects as bearers of truth and satisfaction conditions

Attitudinal objects come with satisfaction conditions, which divide into truth conditions and fulfilment conditions. Attitudinal objects such as claims and assumptions have truth conditions, attitudinal objects such as requests and promises have fulfillment conditions. I take satisfaction conditions not to consist in conditions under which an attitudinal object is true satisfied in a world, but in conditions under which possible or actual (or even impossible) situations or actions verify or satisfy the attitudinal object, in the sense of exact truthmaking or satisfaction of Fine's (2017b, 2018a, b) recent truthmaker semantics. That is, situations or actions verify or satisfy an attitudinal object such as a claim, assumption, request, promise,

intention, or decision just in case they are *wholly relevant* for the satisfaction of the claim, assumption, request, promise, intention, or decision.

Truthmaker semantics posits as the meaning of declarative and imperative sentences not just a set of truthmakers (satisfiers), but also a set of falsifiers (violators) (Fine 2017, 2018a, b). In Fine's truthmaker semantics, the notions of exact truthmaking or satisfaction and of falsemaking or violation play a central role, though applied to declarative and imperative sentences. The very same notion, however, carries over to attitudinal objects. A rudimentary truthmaker view of mental states and mental and illocutionary acts can in fact already be found in Searle (1983), who takes intentions, decisions and requests to be satisfied by actions and assertions and beliefs to be satisfied by states of affairs. One important feature of truthmaker semantics is that it is ontologically neutral: any entity can in principle play the truthmaker role. Situations, actions, as well as attitudinal objects (as answers) play a role as truthmakers or satisfiers of attitudinal objects and attitudinal object may require particular types of satisfiers or impose particular conditions on it (Section 5). This is a major difference of the present approach to possible-worlds semantics.

Truthmaker semantics is an alternative to the unstructured conception of propositions based on possible worlds. It gives a more fine-grained notion of content, providing a notion of partial content and a notion of subject matter.[4]

Truthmaker semantics when applied to attitudinal and modal objects differs in one important respect from sentence-based truthmaker semantics: not all attitudinal and modal objects have faslisfiers/violators. Claims and assumptions do have as falsifiers, namely situations in virtue of which they are false (situations completely relevant for the falsity of the claim). In a more obvious way, requests have violators, actions that violate or ignore the request. However, attitudinal objects with the modal force of possibility do not have falsifiers/ violators: A proposal, invitation, offer or permission cannot be violated.

Sentences as predicates of attitudinal or modal objects can be assigned a single meaning that takes that into account (Moltmann 2021):

(11) <u>Truthmaker-based meaning of sentences as predicates of attitudinal or modal objects</u>
For an (imperative or declarative) sentence or clause S,
[(that) S] = λd[pos(d) = pos(S) & (neg(d) $\neq$ Ø $\rightarrow$ neg(d) = neg(S))].

[4] Given truthmaker semantics, *John believes that Mary is happy* does not entail *John believes that Mary is happy and 2 is prime*. Truthmaker semantics as such does not deal with the mode of presentation problem, though. But see Moltmann (2021) for a proposal.

Here pos(d) is the set of satisfiers and neg(d) the set of violators of an attitudinal or modal object d. (11) does not yet take into account the semantic difference between declaratives and imperatives, which I will come to shortly.

The very same sentence meaning in (11) is applicable to modal objects of different flavors and forces, giving rise to a novel semantics of modal sentences based on an ontology of modal objects (Moltmann 2017a, 2020b). The difference between having and not having violators is also reflected in the applicability of satisfaction predicates. Attitudinal and modal objects can be 'fulfilled' or 'complied with' only if their modal force is that of necessity rather than possibility. Proposals, permissions, offers, and invitations cannot be 'fulfilled', but only 'taken up' and an invitation may be 'accepted'. In addition, predicates of violation are inapplicable to objects like invitations, permissions, offers, and requests. Obligations can be violated or contravened, and rules or laws can be broken. Offers and invitations can be declined or refused, but that does not amount to a violation, but a refusal of acceptance (satisfaction). The predicate *ignore* conveys violation with requests and obligations; but with invitations, offers, and permissions it conveys simply failure of satisfaction. What we refer to as 'options', 'strategies', and 'possibilities' are teleological modal objects of possibility. They can be 'taken' or 'pursued', but not 'violated'. A strategy may fail, of course, but here failure is a property of the attitudinal object, not its satisfier. An option may be rejected, but that means not taking it, rather than violating it.

Also actions of satisfying permissions, offers, and invitations are evaluated differently from the satisfiers of requests and obligations. Whereas actions can be called 'correct' when they satisfy a request or an obligation, actions of taking up a permission, offer, or invitation could only be considered 'legitimate', rather than 'correct' (see Section 5.2.).

4. The unity of the proposition problem

The attitudinal objects theory displays some similarities with recent act-based conceptions of propositions, in particular the view endorsed by Hanks (2015, 2018) on which propositions are conceived as types of acts of predication, predication in the assertive, directive, or interrogative way (Hanks 2015, 2018). The present approach shares with that approach, the use of types or kinds of cognitive particulars for the role of propositions as truthbearers and

shareable content bearers.[5] Moreover, it makes use of entities that come with a force, displaying truth conditions, fulfilment conditions or answerhood conditions. However, the motivations are otherwise quite different. First of all, attitudinal objects are not acts. Acts do not have truth or satisfaction conditions (Twardowski 1912, Ulrich 1976, Moltmann 2013 chap. 4, 2017, 2019, Davis 2020). By contrast, entities like claims, requests, and questions (the products of acts do), as do entities like rules, beliefs, intentions (which need not even be the products of acts: a belief may be an implicit belief, thus not the result of thinking, an intention precedes the corresponding intentional act, rather than being created by it, as Searle (1983) made clear). Second, it is not just attitudinal objects that have satisfaction conditions, but also modal objects. Modal objects include rules and weak permissions and obligations, which are not generally created by acts of predication (a rule may come about by habit rather than fiat; weak permissions and obligations need not result from an act of giving or imposing them).

Hanks' view rests on the assumption that propositions, in the sense of structured propositions, are what sentences stand for. If propositions are taken to be structured propositions (say sequences of an (n-1) place property and individuals), this raises the problem of the unity of the proposition: how can such a sequence be true or false and have the particular truth conditions it is meant to have? On Hank's proposal, assertoric, directive or interrogative force is construed as a property of predicative acts, acts that provide the unity of the propositions and its truth, fulfilment, or answerhood conditions.

The present approach is radically different: sentences come with a truthmaker-based content (i.e. (11)) which, when predicated of an attitudinal or modal object, gives its truth or satisfaction conditions, that is, the conditions under which a possible situation or action satisfies the attitudinal or modal object. The semantics does not have to deal with the issue of how attitudinal objects get their truth or satisfaction conditions: they are mind-dependent objects, and it is a matter of the philosophy of mind to account for the intentionality of the mental, not of semantics. The source of the problem of the unity of the propositions resides in the view that propositions are entities that are both the meanings of sentences and truth bearers, a view that is problematic both philosophically and linguistically.

The structured-propositions view has also been motivated by the need to have a more fine-grained notion of content than the possible-worlds-based one. On the present, truthmaker-based approach, content is fine-grained and a structured notion of content is not needed.

[5] This accounts for one difficulty for the standard notion of a proposition as abstract objects, its graspability.

5. Forces as conditions on the satisfaction of attitudinal objects

Attitudinal objects do not come with a force-content distinction: attitudinal objects comprise both those that come with truth conditions (beliefs, claims) as well as those that come with fulfilment conditions of various sorts (reflected in the applicability of different predicates of satisfaction). Since propositions do not play a semantic role as objects, attitudinal objects should not be taken to be composed of a proposition and a force. Force can instead be accounted for in terms of conditions on the satisfiers of attitudinal objects as well as on the attitudinal object itself. In what follows, I first propose conditions of force distinguishing traditional categories of speech acts: constatives (assertives), directives, questions, now considered illocutionary objects.[6]

To an extent, conditions on force involve conditions on the sorts of things that can be satisfiers of the attitudinal objects.[7] There are different views about the aim (and thus satisfaction) of an assertion consists in. On the Gricean view, it consists in the addressee having a belief (and constatives thus being directives). On Searle's (1969) view, the illocutionary point of an assertion is the speaker's commitment to the truth of S. The latter certainly matches the notion of an assertion as an attitudinal object better: assertions have truth conditions, with their truthmakers/falsifiers being situations. Questions have answerhood conditions rather than truth conditions. This means their satisfiers are attitudinal objects that are assertives. Directives are generally taken to have as their satisfiers actions on the part of the addressee.[8] However, this does not generally hold. Imperatives such as *Have a nice day* or *Get well soon* have satisfiers that are states or events involving the addressee. This is unproblematic on the present approach: there is no problem for an attitudinal object to have

[6] There is a debate, which needs to be set aside in the present context, as to what extent forces should be considered the content of sentence mood (McGinn 1977).

[7] This may also apply to expressive attitudinal objects if their satisfiers are taken to be situations involving a subjective property.

[8] There is much less of a correlation between forces and embedded sentences. As we have seen, *that*-clauses can give the content of both assertions and requests, depending on mood or the presence of a modal. Embedded interrogatives may give the content of questions (*Mary asked who came*), inquiries (*Mary wondered who won*), knowledge (*Mary knows who won*) and assertions of a sort (*Mary announced who won*). Infinitives often serve to characterize directive attitudinal objects whose satisfiers are actions, but not generally so (*John expects to be healthy*). This is a serious difficulty for Hanks (2015), who must assume a strict correlation of sentence types with force.

both actions and states or events as satisfiers.

The distinction among forces does not just consist in different types of satisfiers. One important parameter that plays a role for the distinction between having truth conditions as opposed to fulfilment or answerhood conditions is that of the directions of fit (Searle 1969, 1983), now to be considered a property of attitudinal and modal objects. An assertion, assumption, or belief has a word/mind-world direction of fit (and thus truth conditions): the representation ought to fit the world. Requests, demands, promises, pieces of advice, and permissions have a 'world-word/mind-direction of fit' (and thus fulfilment conditions): they require the world to fit the representation, rather than the representation to fit the world. Requests, offers, and invitations have fulfillment conditions, as do hopes and desires.

The notion of direction of fit is a normative notion, imposing requirements on the representation or the world. As such, it is reflected in the applicability of the predicate *correct* to attitudinal objects or their satisfiers, which reflects a striking connection between truth and normativity.[9] The relevant observation is that *correct* applies to attitudinal objects with a word/mind-world direction of fit, conveying truth and only truth. By contrast, it does not apply with a single reading to attitudinal objects with a world-word/mind direction of fit, though it can apply to their satisfiers, conveying satisfaction.

Let us start with *correct* applying to attitudinal objects with attitudinal objects with a word/mind-world direction of fit:

(12) a. John's belief that S is correct.
c. John's claim that S is correct.
b. Bill's guess / speculation / impression is correct.
d. Mary's answer / hypothesis / assumption is correct.

In natural language, *correct* when applied to a belief or assertion conveys just truth, whether or not the belief or assertion is justified or warranted (Moltmann 2018b).[10] *Correct* applies in the same way to guesses, speculations, and impressions, which by nature do not require justification or warrant. *Correct* furthermore applies to answers, hypotheses, and assumptions

[9] Here it is important to truly pay attention to linguistically reflected intuitions, setting aside philosophical preconceptions about what correctness amounts to.

[10] Some philosophers impose further epistemic conditions on the correctness of beliefs or assertion (e.g. Williamson 2000). I don't think that matches the intuitions that the applicability of *correct* displays. I don't think an assertion can be true while also being incorrect (because unjustified).

just in case they convey a truth, whether or not they are 'good' answers or assumptions. *Correct* thus does not concern itself with other norms than truth when applying to assertives; these are reserved for the application of evaluatives like *good*.[11]

Other types of objects that *correct* applies to are associated with other norms, e.g. grammaticality for sentences and laws or moral values for punishments. I will assume, as is plausible, that *correct* has a single normative meaning on it holds of an object *o* just in case *o* fulfills the norm (or standard of correctness) that is associated with *o* or that is relevant in the context. Then correctness being truth when applied to beliefs, assertions, guesses, hypotheses answers, and assumptions means that truth is treated as the one intrinsic norm associated with truth-directed attitudinal objects.

Correct sharply distinguishes between actions and attitudinal objects that may be their products. A punishment may be correct, but the act of punishing may have been performed incorrectly. Similarly, an assertion or assumption being correct does not entail the act of asserting or assuming being correct (or the making of an assertion or assumption being correct). The latter may be correct because they follow an instruction or order (the relevant contextually given norm), not because they capture or maintain a truth. Truth as a norm is not an action-guiding norm, but rather a teleological norm associated with the representational object in the sense of Jarvis (2012). As a teleological norm, truth is associated with the products of acts such as assertions and assumptions as well as beliefs which do not resulting from acts.[12, 13]

The word/mind-world direction of fit as a property of attitudinal objects can then be defined as follows, where < is the part-relation holding among situations:

(14) Word/mind-world (W/M-W) direction of fit

[11] Interestingly, *true* is hardly acceptable with guesses, speculations, impressions, and assumptions, which indicates that with 'assertives' it is *true* that implies warrant rather than *correct*. This does not hold, of course, for the notions that philosophers may have in mind when using the nouns *truth* and *correctness*.

[12] When normativity is linked just to actions, truth would then be taken to be constitutive of the norm associated with believing, by imposing the condition 'if one ought to believe p, then p' (Boghossian 2003, Gibbard 2003). Such conditions on adopting or maintaining a belief are problematic, however (Glüer and Wikforss 2009). Truth is not the aim of believing in the sense in which the fulfillment of moral values is what certain types of actions and decisions should aim for. The norms for actions of adopting or maintaining a belief may simply be a contextually given norm.

[13] Not only *correct* conveys truth (and only truth) with beliefs and assertions, but also other normative predicates, for example *right* and, for falsehood, *wrong*, as do corresponding predicates in other European languages. This supports the generalization that predicates of correctness convey truth and just truth when applied to attitudinal objects that have truth conditions.

An attitudinal object *o* has a *word-world direction of fit* just in case *o* satisfies its intrinsic norm (is correct) in a world *w* iff there is a situation *s*, *s* < *w*, that makes *o* true.

Let us then turn to the second observation, which is that *correct* does not convey satisfaction when applied to attitudinal objects with a world-word/mind direction of fit, but only when applied to their satisfiers[14]. A request cannot be 'correct' (in the sense of being satisfied), but an action meant to satisfy the request might be. Illocutionary objects with a world-word/mind direction of fit impose a norm on actions performed in recognition of them, but they are not themselves subject to an intrinsic norm. Attitudinal objects with a world-word/mind direction of fit might also be subject to a norm. For example a request may be considered correct because it complies with a standard of making a particular type of request; a desire may be correct because it is appropriate to have it. But directives (and their mental correlates) are not associated with a single intrinsic norm, unlike constatives (and their mental correlates). Illocutionary objects with a world-word/mind direction of fit thus come with an action-guiding norm or purpose:

(15) <u>World-word/mind (W-WM) direction of fir for illocutionary objects</u>

An illocutionary product *o* has a *world-word direction of fit* just in case any action *a* performed in recognition of *o* satisfies the norm imposed by *o* ('is correct') in a world *w* iff *a* is part of *w* and satisfies *o*.[15]

Desires, decisions, intentions, and hopes also come with a world-word/mind direction of fit. However, *correct* does not apply to their satisfiers. It seem *correct* when applied to satisfiers imposes a social norm, which would be inapplicable in the case of desires, decisions, intentions, and hopes. Still the latter set up a teleological modality, enabling inferences such as *I want you to leave. You should leave.* and *I decided to leave. I must leave*, on a particular reading of *must*.

(15) still needs to be modified so as to be applicable to hope or desire, which can be satisfied by situations, not just actions (*I hope / wish that I will win*). Hopes and desires,

[14] Jarvis (2012) takes correctness to also apply to intentions. However, intentions could only be *correctly realized*, with *correctly* applying to the action that aims to realize the intention, not the intention itself.

[15] 'In recognition of' is meant to capture Searle's (1983) point that only actions by way of satisfying a request or intention can satisfy the request or intention.

implying a positive emotive response to their satisfaction (under normal circumstances), apparently are treated as imposing a requirement on the world, rather than aiming to represent the world, with the positive emotive response constituting a kind of norm or purpose, to be satisfied by part of the world.

We can now give a rough characterization of standard notions of constatives (assertives), directives and questions viewed as illocutionary objects, as follows:

(16) a. An illocutionary object is a constative in case it has a WM-W direction of fit and its verifiers and falsifiers are situations.

b. An illocutionary object is a directive in case it has a W-WM direction of fit and its verifiers (falsifiers) are actions or states of the addressee.

c. An illocutionary object is a question in case it has a W-WM direction of fit and its verifiers are assertives.

This obviously does not capture the great variety of mental objects with their various modes and satisfaction predicates, for which yet other parameters may be at play. Thus, intentions and decisions, which are generally taken to involve a world-word/mind direction of fit, are not 'fulfilled' or 'complied with', but rather 'carried out' or 'realized' or, in the case of decisions, perhaps 'implemented' or 'executed'. What may play a role for the selection of such predicates of satisfaction is a much closer, direct causal connection between the attitudinal object and its satisfier than in the case of requests, hopes, and desires.

While attitudinal objects do not come with a content-force distinction, there is a sense in which attitudinal objects of different forces may share their content, namely if they share the same satisfiers. Such a notion of content will be relevant when accounting for when attitudinal objects of different forces bear logical relations to each other (e.g. an assertion that S is an answer to the question whether S, a decision to do X produces an intention to do X).

6. Conclusion

The paper has addressed the force-content distinction from the point of view of a novel semantics of attitude reports and independent sentences in which an ontology of attitudinal objects takes center stage. Various linguistic facts indicate that force-free propositions do not actually play the role in the semantics of attitude reports that they are standardly taken to play. Rather attitudinal objects play a central role, though not as semantic values of *that*-clauses.

That-clauses rather act as predicates of attitudinal objects, with conditions on force being imposed by the embedding verb as well as possibly mood and modals occurring in the clause. Likewise independent sentences act as predicates of attitudinal objects, more specifically locutionary objects, with sentence mood restricting the sorts of illocutionary objects of which they may hold.

Making use of truthmaker theory allows for a fine-grained notion of content for attitudinal objects and permits formulating conditions of force in terms of conditions on their satisfaction. Different conditions on force and the corresponding differences among satisfaction predicates reflect the presence or absence of violators, different ontological types of possible satisfiers, norms or purposes imposed on attitudinal objects or potential satisfiers, as well as causal connections to satisfiers. Such conditions could hardly be formulated within a possible-worlds conception of content. Rather they support a truthmaker approach, with situations, actions and attitudinal objects being able to act as satisfiers or violators of attitudinal and modal objects.

Acknowledgments

I would like to thank Benjamin Nelson, Indrek Reiland, Michael Schmitz, and two anonymous referees for very helpful comments on an earlier version of this paper.

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