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Truthmaking, Satisfaction, and the Force-Content Distinction

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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 do different propositional attitudes (with different attitudinal modes) – or so the standard view. 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. 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, what we refer to as *claims, beliefs, thoughts, judgments, requests, 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 (intentions, decisions, hopes, beliefs 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. Though they depend on an agent, they enter similarity relations and form kinds on the basis of shared content (provided they share their force or mode) (Moltmann 2013, 2017). Attitudinal objects are bearers of truth conditions or more generally satisfaction conditions. I take them to be bearers of truthmakers or satisfiers: situations or actions that exactly satisfy the attitudinal object, in the sense of Fine’s (2017, 2018a, b) notion of exact truthmaking. Truthmaker semantics based on that notion allows for a fine-grained notion of content associated with both sentences and attitudinal objects.

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 (and the applicability of different predicates of satisfaction) can be cast in terms of conditions on the satisfaction of attitudinal objects.

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 is relevant when accounting

¹ See Moltmann (2003a, b, 2013).

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 X, a decision to do X produces an intention to do X).

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 what I call 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*, which I call ‘special quantifiers’ and ‘special pronouns’, and free relatives like *what Mary believes* appear to range just over the sorts of things *that*-clauses stand for: 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. Given the structured-propositions view, the proposition that Mary is happy is distinct from the proposition that Mary is happy and 2 is prime, but not so on the possible-worlds view. In any case, 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. Thus, *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. In addition, infinitival clauses may be indicative 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 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.
 b. John required that Bill be at work by 8.
 c. John required that Bill should be at work by 8.

Not just *wh*-clauses, but also *that*-clauses thus do not stand for force-free propositions, but may indicate force, and the verb itself may require such force indicators.

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 (which include *something*, *that* as well as the relative pronoun *what*) 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, 2017a). 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, 2017a). 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 below:

- (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 Twardowski’s 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.² In fact, some attitudinal objects have a modal component, a modal object that shares their satisfaction conditions. Requests 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.
 b. make(John, claim that S)

The semantic analysis of (8a) as (8b) is plausible given recent syntactic views on which the underlying syntactic structure of (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 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-

² Products in that sense may be understood in roughly the sense of abstract artifacts of Thomasson (1997), which for her in fact include laws - modal objects.

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 objects of the force of necessity and the force of possibility (Moltmann 2029). [3] Truthmaker semantics allows casting conditions of force as conditions on the satisfiers of attitudinal objects or on attitudinal objects themselves (Section 5).

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

Attitudinal objects come with satisfaction conditions. Attitudinal objects such as claims and assumptions have truth conditions, attitudinal objects such as requests and promises have fulfillment conditions. I take those conditions not to consist in conditions under which an attitudinal object is true (or satisfied) in a world, but rather to consist 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, 2018 a, 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 sentences not just a set of truthmakers (verifiers), but also a set of falsifiers. Some attitudinal objects also have falsifiers or violators, for example claims and assumptions have as falsifiers situations in virtue of which they are false (and that are completely relevant for the falsity of the claim). In a more obvious way, requests have violators, actions that violate or ignore the request.

In Fine's (2017b, 2018a, b) 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 play a role as truthmakers or satisfiers of attitudinal objects (Section 5).

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.³

In truthmaker semantics, (declarative and imperative) sentences are assigned a truthmaker-based content consisting of a set of verifiers/satisfiers and a set of falsifiers/violators (without being treated semantically the same – I will come to how to handle the distinction in truthmaker semantic terms shortly). Such a bipartite content carries over to attitudinal objects. Importantly, though, attitudinal objects with the modal force of possibility do not have falsifiers or violators: A proposal, invitation, offer or permission cannot be violated. The following truth-maker-based meaning is formulated so as to take that into account (Moltmann 2021):

(11) Truthmaker-based meaning of sentences

For an (imperative or declarative) sentence S,

$[(\text{that}) S] = \lambda d[\text{pos}(d) = \text{pos}(S) \ \& \ (\text{neg}(d) \neq \emptyset \ \rightarrow \ \text{neg}(d) = \text{neg}(S))]$.

Here $\text{pos}(d)$ is the set of satisfiers and $\text{neg}(d)$ the set of violators of an attitudinal object d .

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 truthmaker semantics.

The very same sentence meaning in (11) is applicable to modal objects such as obligations, permissions, offers, options, possibilities, and laws, giving rise to a new semantics of modal sentences based on an ontology of modal objects (Moltmann 2017a, 2020b). Attitudinal and modal objects of necessity have as their content a pair consisting of a non-empty set of satisfiers and a non-empty set of violators, whereas modal objects of possibility have as their content a pair consisting of a nonempty set of satisfiers and an empty set of violators.

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 are not ‘fulfilled’, but rather ‘taken up’ and an invitation

³ 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.

may be ‘accepted’. Moreover 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. A option, strategy, or possibility can be ‘taken’ or ‘pursued’, but cannot be ‘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 again is simply 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.⁴ 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, 2017, 2019, Davies 2020). By contrast, entities like claims, requests, and questions, the products of acts do, as do entities like rule, 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 (Searle 1983). 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

⁴ This accounts for one difficulty for the standard notion of a proposition as abstract objects, its graspability.

generally created by acts of predication (a rule can be established by habit rather than fiat; weak permissions and obligations need not result from an act of giving or imposing them).

Hank's 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 providing 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 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. Forces as conditions on the satisfaction of attitudinal objects

5.1. Force as conditions on types of satisfiers and violators

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 truthmakers or satisfiers of attitudinal objects as well as normative conditions on the attitudinal object itself. In what follows I will not attempt a full analysis of force in terms of truthmaker semantics, but rather only sketch the sorts of

conditions that are at play and that may lead to a full analysis.

What do conditions on force consist in, that is, what makes an attitudinal objects have the sort of satisfaction conditions that are reflected in the applicability of particular predicates of satisfaction? To an extent, conditions on force involve conditions on the sorts of things that can be truthmakers or satisfiers of the attitudinal objects, and to an extent, such conditions distinguish the content of the traditional three sentence types, declaratives, imperatives, interrogatives. On the present approach, all sentences, whether independent or embedded, are treated as predicates of attitudinal or modal objects. Declaratives thus apply to attitudinal objects that are assertions or at least truth-directed. An assertion that S, in Searle's (1969) characterization, has an illocutionary point that consists in the speaker's commitment to the truth of S. This means that the assertion has as verifiers situations that make S true and as falsifiers situations that make S false.⁵ Interrogatives (as independent sentences) apply to questions, which have answerhood conditions rather than truth conditions. This means their satisfiers are assertive attitudinal objects. Imperatives apply to directive attitudinal objects like requests and permissions, which generally means that their satisfiers are actions on the part of the addressee.⁶

5.2. Direction of fit as a normative condition: correctness of assertions, beliefs and actions

The distinction among forces does not just consist in different types of satisfiers. One important distinction among forces is that of different directions of fit (Searle 1969, 1983). 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 are attitudinal objects that come with a 'world-word/mind-direction of fit'. They require the world to fit the representation, rather than the representation to fit the world. They can be 'satisfied', 'fulfilled', 'complied with', 'kept', 'followed', or 'taken up',

⁵ This may also apply to expressive attitudinal objects if their satisfiers are taken to be situations involving a subjective property.

⁶ There is much less of a correlation between forces and embedded sentences. We have seen, for example, that *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 came*), knowledge (*Mary knows who came*) and assertions of a sort (*Mary announced who came*). 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.

but not ‘true’. A demand or promise, moreover, cannot be ‘false’; instead a demand can be ‘ignored’ or ‘contravened’ and a promise ‘broken’. Finally, mental states such as desires and hopes cannot be ‘true’, but they can be ‘fulfilled’.

The notion of direction of fit is a normative notion and associated with a connection between truth and normativity that attitudinal objects display. It can be linked to the notion of correctness, with correctness applying either to the attitudinal object or its satisfiers. The relevant observation is that *correct* can convey the very same thing as *true* with attitudinal objects with a word/mind-world direction of fit, but it could convey satisfaction only when applied to *satisfiers* of attitudinal objects with a word/mind-world direction of fit. Let us start with *correct* applying to beliefs, assumptions and claims:

- (12) a. John’s belief that S is correct.
 b. John’s assumption that S is correct.
 c. John’s claim that S is correct.

In natural language, *correct* when applied to a belief or an assertion conveys just truth, whether or not the belief or assertion is justified or warranted (Moltmann 2018b).⁷

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:

- (13) a. This sentence is correct.
 b. John’s punishment was correct

It is plausible that *correct* has a single normative meaning on which *correct* 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 the equivalence of *correct* with *true* when applied to beliefs, judgments, and assertions means that truth is treated as the 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

⁷ This holds despite the fact that some philosophers impose further epistemic conditions on the correctness of beliefs or assertion (e.g. Williamson 2000). Following just linguistic intuitions, it does not appear that an assertion can be true, while also being incorrect (because unjustified).

asserting or assuming 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. Assertions and assumptions, by contrast, are evaluated as correct according to the norm they are intrinsically associated with, the norm of truth.⁸ Truth as a norm is not action-guiding, 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 mental or illocutionary acts such as assertions and assumptions as well as state-like attitudinal objects like beliefs.^{9, 10}

An attitudinal object with a word/mind-world direction of fit is subject to a norm, the norm of truth and thus is correct just in case there is a part of the world that makes it true:

(14) Characterization of word/mind-world direction of fit

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 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 satisfiers¹¹. A request cannot be ‘correct’ (in the sense of being satisfied), but an action meant to satisfy the request can. 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

⁸ Note that propositions hardly allow for the application of *correct*, in marked contrast to beliefs and assertions (??? *The proposition that Mary left is correct*).

⁹ 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.

¹⁰ Not only *correct* conveys truth (and only truth) with beliefs, judgments, and assertions but also other normative predicates, for example *right* and, for falsehood, *wrong*, as do corresponding predicates in other European languages, which supports a generalization that predicates of correctness convey truth and just truth when applied to attitudinal objects like beliefs, judgments, and claims.

¹¹ Jarvis (2012) mistakenly takes correctness to also apply to intentions. However, intention could only be *correctly realized*, with *correctly* applying to the action that aims to realize the intention, not the intention itself.

correct because it is appropriate to have it. But directives (and their mental correlates) are not associated with a single intrinsic norm, unlike assertives (and their mental correlates).

By contrast, an action performed in recognition of an illocutionary object with a world-word direction is correct in case it satisfies the illocutionary object.¹² Illocutionary objects with a world-word/mind direction of fit thus come with an action-guiding norm or purpose:

(15) Characterization of world-word direction of fit of illocutionary objects

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*.

Desires, decisions, intentions, and hopes have fulfillment conditions rather than truth conditions and they come with a world-word/mind direction of fit. However, *correct* does not apply to their satisfiers. The reason arguably is that they do not impose a social norm on actions, Yet they may 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, implying a positive emotive response to their satisfaction (under normal circumstances), appear to impose a requirement on the world, rather than aiming to represent the world. The positive emotive response constitutes a kind of norm or purpose, to be satisfied by part of the world.

There are still other parameters at play that distinguish among types of attitudinal objects and the satisfaction predicates applicable to them. 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.

¹² ‘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.

To summarize, 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 potential satisfiers, as well as causal connections to satisfiers. Clearly, such conditions could hardly be formulated within a possible-worlds conception of content. Rather they support a truthmaker approach to the content of attitudinal and modal objects, with situations, actions and attitudinal objects being able to act as satisfiers or violators.

6. Conclusion

The paper has re-examined the force-content distinction from the point of view of a novel account of attitude reports in which an ontology of attitudinal objects takes center stage, which is an ontology of objects that do not display a distinction between content and force. Combining that ontology with a truthmaker theory allows for a fine-grained notion of content of attitudinal objects and permits formulating conditions of force in terms of conditions on truthmakers or satisfiers of attitudinal objects. These conditions are to an extent shared by modal objects, which allows for a unified semantics of attitude reports and modal sentences and connections among them.

The motivations for that approach to attitude reports are observations 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 (or embedded clauses more generally). *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.

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