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CHAPTER 6

CONTEMPORARY  
FOUNDATIONAL ACCOUNTS  
OF PROPOSITIONS

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1. INTRODUCTION

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THERE is a bundle of attributes that propositions are supposed to have. A proposition is the primary bearer of truth and falsity, the primary bearer of intentionality. A proposition is what a sentence expresses, its semantic content, or it is something like the meaning of a sentence or some piece of information. A proposition expressed by a sentence might have structure and components somehow associated with the structure and components of the sentence that expresses it. A proposition is the content of a belief and other propositional attitudes or an object of propositional attitude reports. As such, it might have a cognitive or behavioural role and feature in cognitive and perhaps behavioural explanation. A proposition can be necessarily true or contingently true. Propositions might serve as vehicles of reasoning and as the relata of logical or evidential relations.

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It might be, as David Lewis hints, that the attributes ascribed to propositions offer just a ‘jumble’ of conflicting desiderata (Lewis 1986: 54). It might turn out that what can bear some of the attributes could not be what can bear another.<sup>1</sup> Putting aside questions of whether there is just one unit thing that can bear all the attributes (Carrara and Sachi 2006), there is a more primary or fundamental issue: what are propositions and how does their nature allow all or some of the attributes? The question can be posed bluntly, or it can be explicitly posed for each one of the attributes: what is primarily a bearer of truth and falsity, what can be the content of a propositional attitude?

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One could bypass the foundational question if one takes a primitivist view about propositions or a deflationary view about propositions.

- C6P4** A primitivist about propositions will assert the existence of propositions, perhaps the necessary existence of propositions (Merricks 2015), but will deny that there can be any explanation why propositions have the attributes they have. Nothing explains why or how propositions are truth-value bearers or representations. Nothing explains why or how propositions are objects or contents of attitudes and judgements. That propositions have the attributes they do is a primitive and brute fact about them. The only thing that can be said of propositions is that they are abstract, mind- and language-independent entities.
- C6P5** There is a variation of primitivist views about propositions. On the face of the problem of the unity of proposition that accompanies structured propositions,<sup>2</sup> some scholars take propositions to be simple primitive things (Merricks 2015). Some others, on the pressure of finely discriminating among propositions, take the view that propositions are fine-grained *sui generis* entities (Keller 2022).
- C6P6** A deflationist about propositions will skip over the foundational question and will switch planes. Their project is to explain the attributes of propositions by the properties of their representative surrogates, that is sentences or utterances (García-Carpintero and Palmira 2022).
- C6P7** The present contribution to this volume is concerned with non-primitivist and non-deflationary accounts of propositions. It is concerned with very recent attempts to say something about the nature of propositions. The emphasis on the recent accounts is not meant to disdain the longstanding philosophical involvement with issues of truth-evaluable thought and talk, of the nature of belief and judgement, of representation and other affiliated notions. Needless to say, there is a tradition of philosophical discussion on the nature of propositions that goes back to Plato and Aristotle. Such discussion was often made with various terms that seemingly stand for what we have called ‘proposition’ (*logos*, *apofansi*, *lekton* or *axiom*, and others). In the tradition of the analytic philosophy, the philosophical discussion on what we call ‘proposition’ originates in Frege and Russell. Putting aside some details, there is a handful of accounts of propositions that have stood out. Propositions are abstract, language- and mind-independent, publicly accessible, structured entities.
- C6P8** Notwithstanding some differences, this is roughly Frege’s and, sometimes, Russell’s view on propositions. While for Frege, propositions are composed of senses that could be expressed by constituents of sentences, for Russell, propositions are composed of objects, properties, and relations. Later on, inspired by the advances of modal logic, philosophers placed propositions in possible-world semantics. A proposition is the intension of a sentence, and intensions are functions to extensions. Following this line, a proposition is a function from possible worlds to truth-values. The picture could be simplified by taking a proposition to be a set of possible worlds, the set of worlds in which such a function takes the value true (Stalnaker 2003). The Russellian view inspired the neo-Russellian accounts of propositions, according to which a proposition is a structured entity whose components are objects, properties, and relations and, following this line, propositions are construed as n-tuples of objects, properties, and relations (Salmon 1986).
- C6P9** These prominent accounts of propositions dominated the second half of the twentieth century, at least among philosophers who did not endorse a deflationary or a

primitivist stance on propositions. The disputes ran over the details. How could a possible-world account of propositions deal with content discrimination among logically or metaphysically equivalent sentences? Should propositions be construed as coarse grained or fine grained? But the general ideas advanced by those prominent accounts of propositions were not challenged.

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## 2. REACTIONS TO TRADITIONAL ACCOUNTS OF PROPOSITIONS

**C6P10** Recently, there has been a reaction to the general line of the traditional accounts. The reaction is that such accounts of propositions, the possible-world account and sorts of the n-tuple accounts, tell us nothing about what propositions are. While they may be well-elaborated programs to encompass many linguistic phenomena and perhaps cognitive phenomena, there didn't seem to be any serious engagement with whether a proposition could be a set of possible worlds or an n-tuple of individuals, properties, and relations. However, at the turn of the century, such questions made an appearance.

**C6P11** It has been pointed out that accounts of propositions, either as n-tuples, or as possible worlds, could not offer an account of what propositions are (Bealer 1998; Jubien 2001; King 2007; Soames 2010). If it is essential to a proposition that it is the primary truth-value bearer or a representation, then none of the above candidates for propositions could be so. N-tuples or sets of worlds are mathematical or formal entities that are what they are: they do not represent anything, and they could not be the primary bearers of truth and falsity. In addition to challenging the idea that abstract formal objects could be the primary source of intentionality, one can raise further issues with such a construal: how subjects, agents, and speakers have cognitive access to them, that is how those abstract objects are graspable, how they can figure as the objects or contents of propositional attitudes that have a distinctive role in psychology.

**C6P12** It is undeniable that the advances in semantics and pragmatics in the twentieth century offer valuable tools to theorize about propositions. The dissatisfaction with this tradition on propositions is that it does not throw light on the question of what a proposition is. Scott Soames claims,

**C6P13** the revolution in the study of language, mind, and meaning led by advances in philosophical logic from Frege through Tarski, Kripke, Montague, and Kaplan must be reconceptualized.

**C6P14** (Soames 2015: 7)

**C6P15** Michael Jubien puts it like this:

**C6P16** the entities that play the role of propositions really aren't propositions. Instead, they are set-theoretic or other mathematical constructions, sometimes involving

“possible worlds,” truth-values, may be properties and relations (but usually just “extensions”), often “logical operations,” and sometimes even linguistic entities ... don’t think the mathematical entities that play the proposition-role really are propositions in the first place. These theorists probably see themselves as offering a model for their theory—one in which the entities of the domain are proposition surrogates that mimic the structure of the real propositions, a structure they think their theory captures. In fact, it’s entirely consistent to offer such a theory while rejecting genuine Platonic propositions. So, one and the same mathematical theory could be propounded with or without ontological pretensions, and the central point here is that if the pretensions are present, then they’re thwarted.

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(Jubien 2001: 48–49)

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The reconceptualization that Soames thinks necessary is most likely the suggestion that some sort of abstract structures can be used to model or classify the primary sources of intentionality, that is the fundamental propositions. The idea is that the abstract structures often involved in the specification of propositions are issued as models of the basic domain of intentionality or as measurement-theoretic embeddings of propositions<sup>3</sup> and can be used as means for tracking the inhabitants of such a domain and the relationships between them. But the question is which is this basic domain of intentionality.

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The following sections critically present some recent attempts to say something about the nature of propositions. The discussion is in no way exhaustive of such attempts, but it aims to give some general idea of the concepts and tools that are put into play to dig into the fundamental question as well as the obstacles that such approaches face. There have been notable attempts to deal with the metaphysics of propositions that are left out of this presentation. Let me mention Caplan’s hylomorphic propositions, which are grounded on the essence of some *proposition-building* relation and Jespersen’s construal of propositions as certain kind of molecular procedures. For more on those accounts of propositions, the reader is referred to special volumes on propositions.<sup>4</sup> The present contribution discusses the following accounts of propositions: propositions as a certain sort of facts, propositions as a sort of properties, propositions as acts, and the view that propositions are act products.

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### 3. PROPOSITIONS AS FACTS

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Connecting propositions to facts is not foreign to philosophical literature. Frege called ‘fact’ a true proposition. But could a proposition be a fact? One way this could be is by allowing for facts to obtain or not obtain in a world. If a fact obtains in a world, it is true in that world. If it does not obtain in a world, it is false in that world. However, such a use of the notion of fact does not accord with common use of the term to which facts are existing.

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Jeffrey King, one of the pioneers of the reaction to the unsatisfying traditional accounts with respect to the foundational question about propositions, employs facts

for accounting for the metaphysics of propositions. But the facts that are propositions are of a specific kind that involve much cognitive, linguistic, and metalinguistic apparatus. He puts forward the view that propositions are a certain sort of language and mind-dependent facts. It is within the semantics of some language, actual or possible, its sentential structure, and with the cognitive or subcognitive enterprise of speakers that propositions are generated. Using an example, the proposition that Katharina sleeps involves the following: in some language  $L$  and in a context  $c$ , there is an assignment function  $f$  such that Katharina is the semantic value relative to  $c$  and  $f$  of a lexical item  $e$  of  $L$ , and the property of sleeping is the semantic value relative to  $c$  and  $f$  of a lexical item  $F$  of  $L$  such that  $e$  occurs at the left terminal node of a sentential relation  $R$  that in  $L$  encodes or is interpreted as ascription, and  $F$  occurs at  $R$ 's right terminal node. Applied to our example, there is an English sentence 'Katharina sleeps', and in a certain context, Katharina is the semantic value of 'Katharina'; the property of sleeping is the semantic value of 'sleeps'; and the sentential relation in which such lexical items stand, that is concatenation, encodes or is interpreted as ascribing the property of sleeping to Katharina.

**C6P22** So, propositions as facts are generated on several conditions. Propositional constituents are semantic values relative to a context of lexical items of some language. A sentential relation is interpreted as an ascription of semantic values that respect in characteristic ways the sentential relation (in simple and common cases, this is often concatenation, but the account does not demand a specific sentential relation). The interpretation of the sentential relation ascribes semantic values in distinctive ways. So, propositions depend and are generated by the semantic assignments in languages. They also depend and are generated by a specific cognitive or subcognitive activity of speakers, that of interpreting sentential relations among items of the language as ascription or, perhaps, as some other application on semantic value.

**C6P23** Let us note that the fact that is the proposition that Katharina sleeps is not the fact that Katharina sleeps. If such a fact obtains, the proposition that Katharina sleeps is true, and it is false otherwise. The proposition that Katharina sleeps is a fact that involves much more. As Jeffrey King puts it,

**C6P24** the sentential relation ... that binds together the words ... is a component, literally a part, of the relation that binds together ... in a proposition.

**C6P25** (King 2007: 32)

**C6P26** Propositional relations bind together the constituents of a proposition into a fact that is a proposition. Such facts involve semantic value assignment of some language, sentential relations in that language, ascription encoding of the sentential relations. In King et al. (2014: 52), King takes the 'encoding ascription' to be a relational property of the propositional relation:

**C6P27** Encoding ascription understood in this way, is a relational property of the propositional relation itself: the property of being interpreted as ascribing what is at its right

terminal node to what is at its left terminal node. So henceforth, let's understand the proposition ... to be the fact described above, taken together with the propositional relation having the relational property of encoding ascription (this means that the fact that is the proposition ... is a slightly 'larger' fact than we have taken it to be to this point, since it now includes the propositional relation possessing a certain relational property). In so doing, we can explain why the proposition/fact has truth conditions.

**C6P28** The specific ways in which the encoding ascription figures in propositional relations enables the differentiation between propositions with the same constituents. Thus, there is a different proposition expressed by the sentence 'Othello loves Desdemona' and the proposition expressed by 'Desdemona loves Othello', though presumably the constituents of both propositions are the same.

**C6P29** How does it come about that such general facts are truth bearers? King suggests that by binding together semantic values within propositional relations, which, as we saw, bear 'encoding ascription relation', speakers endow those facts with truth-conditions. The proposition that Katharina reads is true if and only if Katharina has the property of reading. It is false otherwise.

**C6P30** A proposition in which semantic values are bound together by the propositional relation, which bears the relational property of encoding ascription, is not a mere list of semantic values. And it is the cognitive (or something of that kind) activity of speakers on the metalinguistic level of interpreting sentential relations in a certain way that unites the constituents of a proposition into a unified structured fact. How do speakers, cognizers, and agents have access to propositions? King will answer that propositions are facts generated by the interpretation of sentential relations that explain the cognitive access of speakers to propositions. It is the foundation of a proposition that involves the cognitive engagement of speakers and thinkers. The account is a brilliant attempt to explain how representation by language works, while it is affiliated to speakers and capable for language-use thinkers.

**C6P31** However, the heavy burden of such a conception of propositions on linguistic activity, as far as the metaphysics of propositions is concerned, would turn it inadequate as an account that could capture the possibility of proposition involvement in the cognition of non-linguistic but cognitive creatures. One may suggest, as King seems to imply, that cognition of non-linguistic creatures involves some proto-intentional attitudes that are not attitudes toward propositions, or one might simply restrict the suggested account of content to an account of linguistic content.<sup>5</sup>

**C6P32** Since the foundation of a proposition requires the so-called 'propositional relation', one may wonder why one should construe the 'propositional relation' with a so demanding apparatus that requires from it to stand to a relation to encoding ascription or to depend so heavily on language.<sup>6</sup> Why not just take a proposition to be 'the instantiation' of some relation, or some 'activity' of thinkers and language users, or the 'product' of such an activity? Such worries lead us to the accounts of propositions that are presented in the following sections.

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## 4. PROPOSITIONS AS PROPERTIES OR RELATIONS

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Peter van Inwagen and Cody Gilmore have advanced the view that propositions are some sort of relations. Jeff Speaks develops a variation of this idea, according to which propositions are properties. Since the motives for such accounts and the obstacles they confront are similar, here we present both the property account and the relation account in parallel.

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What inspires such accounts is that there are monadic properties or one-place relations as there are dyadic relations, triadic relations, and that properties and relations can be instantiated or not be uninstantiated. The one-place relation *wooden*, the property *wooden*, is instantiated by the actual world since the desk in front of me is wooden in the actual world. Presumptively, it is instantiated by other worlds since, in other worlds, certain other things are wooden. Apparently, the property *round square* is not uninstantiated by any world. Jargon for instantiation of a property or relation includes ‘holds of’ and ‘is true of’. *Wooden* holds of the desk in the actual world, and it is true of my desk in the actual world. Advocates of the view that propositions are relations suggest that as there are one-place relations, two-place relations, so there are nought-place relations and that propositions are exactly nought-place relations. And there are advocates of the view that propositions are monadic properties. Advocates of the view of propositions as relations or properties would not account for instantiation in terms of truth but would suggest that truth and truth-bearing are cases of instantiation and instantiation bearing.

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Before presenting more details of these conceptions of propositions, let us note that there is similar motivation for both variations of the idea. Taking propositions to be properties or relations keeps ontology parsimonious. There is no need for an extra ontology of *sui generis* propositions, no need for adding more kinds of entities. Furthermore, if instantiation or non-instantiation of properties or relations is clear enough, then reducing truth bearing to instantiation bearing would turn truth bearing clear enough. After all, it is common to say that  $x$  instantiating a property  $G$  is like saying that it is true that  $x$  is  $G$ . So, the answer to the fundamental question of how propositions come about as truth bearers is that propositions as relations or as properties are instantiated or not instantiated.

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Cody Gilmore (2023) would go even further to argue that, at least for the case of Russellian atomic propositions, if the essences of relations suggest their instantiation conditions, then the propositions which are o-relations have essentially truth-conditions. And this answers the question of how, by their very nature, propositions have truth-conditions. Contrary to attempts to explain the intentionality of propositions by linguistic or mental intentionality, the suggestion is that a proposition as a nought-place relation is, by its nature, a truth-value bearer. A proposition’s truth-condition is



grounded on the essence of the relation that constitutes the proposition. The holding of that relation accounts for the truth of the proposition:

**C6P37** A fact about the truth conditions of such a proposition holds by the very nature of the given proposition but is metaphysically grounded in facts about that proposition's parts and their essences. If my account is correct, then the supposedly intractable problem of explaining why the given propositions have the truth conditions they do reduces to the problem of explaining why relations have the holding essences they do, which few seem to have found worrisome.

**C6P38** (Gilmore 2023: 304)

**C6P39** A more elaborate account of the idea that truth bearing is instantiation bearing is proposed by Jeff Speaks (2014, 2023). Speaks seems to doubt the intelligibility of nought-place relations. He puts forward the idea that propositions are properties. Propositions are expressed by sentences. What a sentence expresses is a property. Let us take the sentence 'Snow is white' and ask what it is that the sentence expresses. The spontaneous reply seems to be that the sentence expresses that the world is such that snow is white or, as the theorist would note, the sentence expresses the property of being such that snow is white. As a scheme the following holds:

Being such that S is the property sentence S expresses.

**C6P40** Speaks calls such properties 'Cambridge properties' (Speaks 2023: 292). Cambridge properties are properties like being such that S, where S is a sentence.

**C6P41** It is defensible that Cambridge properties can play roles assigned to propositions. As we just saw, they are expressed by sentences. As instantiation bearers, Cambridge properties are truth-value bearers. Instantiation of a Cambridge property by every world would amount to a necessary Cambridge property, a necessarily true proposition. The account requires uninstantiatable properties for the necessarily false propositions. To believe a proposition is believing a Cambridge property to be instantiated, while to desire a proposition is desiring a Cambridge property to be instantiated, and so on for other propositional attitudes.

**C6P42** Speaks thinks that it is an advantage of a conception of proposition as a Cambridge property, at least in comparison to alternative views, that it can easily handle transmission of content from perceptions to beliefs and judgements. It is natural, in his view, to take perception as directed to a property. Perception is the perception of a property being instantiated by the world. Since a belief is also an attitude that a property is instantiated by the world, common content or content of the same kind (property instantiation) between perceptions and other propositional attitudes can plainly hold.

**C6P43** Let us note that the instantiation conditions of a Cambridge property do not dictate any particular kind of thing that instantiates the property. If a Cambridge property is instantiated, everything instantiates it. That the world is such that snow is white and



Napoleon lost at Waterloo instantiate the Cambridge property that snow is white. For Speaks, a Cambridge property is instantiated by everything or nothing.

**C6P44** While it seems that Cambridge properties can play the roles assigned to propositions, there are some pressing issues that need to be dissolved for the viability of this approach to propositions. Similar issues arise for a conception of propositions as nought-place relations.

**C6P45** The implication that a proposition as a property is true by everything or nothing might be unwelcoming by most scholars. Instantiations get instantiated by certain things and not by others. Taking a proposition, when it is instantiated, to be instantiated by everything might be tolerated by some philosophers of language, but metaphysicians will find it untenable. More worries about the view that propositions are Cambridge properties or nought-place relations have to do with the possibility of certain compound propositions. One could object to an implication of the thesis that propositions are monadic properties or relations that, as far as there are disjunctive propositions, there are disjunctive properties or disjunctive relations. While there are disjunctive predicates, like ‘blue or green,’ it is questionable whether there is the disjunctive property blue or green. But, despite such worries, the account faces a more challenging issue, an issue acknowledged by Speaks himself. This story does not tell which properties are propositions and which are not, at least without depending on sentence expression. A similar worry to the view that propositions are nought-place relations would be the following: the story does not tell which nought-place relations are propositions and which are not, at least not without depending on sentence expression. The account demands further elaboration concerning the question of what properties or relations are the primary bearers of intentionality and how they are distinguished from other properties or relations.

**C6P46** Let us proceed with accounts that attempt to answer to the intentionality issue more directly.

**C6S5** **5. PROPOSITIONS AS ACTS**

**C6P47** Dissatisfaction with traditional accounts of propositions with respect to the foundational question is the motive for an account of propositions as acts classed into types.

**C6P48** Soames writes,

**C6P49** But there is nothing in the sets or sequences of ..., in the tree structures of ..., or in any other formal structure we might construct to organize the constituents of the ... proposition which, by its very nature, indicates that anything is predicated of anything. Hence, there is nothing inherent in such structures that makes them representational, and so capable of being true or false. Hence, structures of this sort can’t possibly be the primary bearers of intentionality.

**C6P50** (King et al. 2014: 30)

- C6P51** Primary representation and truth-aptness do not rest in any sort of objects, constructions of objects, or in any sort of processes outside the activities of subjects. The idea that propositions are acts classed into types rests on the plausibility of the thesis that representation and truth-aptness are features of what thinkers, speakers, and agents do. Speakers and thinkers represent things as being in a certain way; speakers and thinkers engage in representational or truth-aspiring acts. Such an account of propositions takes propositions to be acts performed or performable by thinkers and speakers. The idea is that it is subjects that represent the world as being in a certain way when they predicate properties to objects or when they perform other representational acts. Predicating a property to an object is not the introduction of a semantic value by a predicate symbol that a thinker views as an object of thought. It is a cognitive act that thinkers perform. Soames emphasizes the acting nature of propositions. He writes, 'Propositions are repeatable, purely representational, cognitive acts or operations; to entertain one is to perform it' (Soames 2013: 480).
- C6P52** Thus, an act-theoretic account of propositions is primarily a response to the challenge of finding the primary source of intentionality. Hanks writes,
- C6P53** Representation and truth conditions originate with our acts of thinking and speaking about the world. The representational features of these acts are not borrowed from pre-existing propositions. They are generated in the performance of the acts themselves.
- C6P54** (Hanks 2019: 1386)
- C6P55** Thus, for the act theorist, the primary source of intentionality are cognitive or linguistic acts of subjects, acts like predicting a property to an object. Propositions are types of such acts.
- C6P56** Propositions (for Soames) or some propositions (for Hanks) turn out to be representations or truth-value bearers because subjects are issuing truth-aspiring cognitive acts or issuing truth-aspiring utterances. Let us call here 'propositional acts' those cognitive and linguistic acts that are the primary source of intentionality. Predicating a property to an object is an instance of a propositional act.
- C6P57** An act-theoretic account of propositions also attempts to provide an adequate explanation of the issues involved in the notion of proposition. The worry about how propositions are graspable is easily shaken off under the act-theoretic account. Propositions originate from the cognitive and linguistic activities of thinkers and speakers and are immediately attached to them as they are certain kinds of their linguistic and cognitive activity. One could argue, though the point requires further elaboration, that speakers and thinkers somehow engage in reasoning by performing propositional acts.
- C6P58** Act theorists claim to have a response to the unity problem, that is the problem of explaining how a proposition that has some structure is more than a list of its components.
- C6P59** The question of what glues the components of a proposition into a unified whole could be overcome by the act theorist, as propositions are grounded on intentional acts, like truth-aspiring acts. Act theorists like Hanks construe the components of such

intentional acts as sub-acts of the propositional act. Sub-acts such as referring to an object and expressing a property are performed in the performance of a propositional act. Thus, the relation of a propositional act to its components is like the following: the subject performs the propositional act of ascribing a property to an object by predicating the property to the object. The ‘by doing this I do that’ scheme unites the sub-acts of a propositional act into a unified act.

**C6P60** Some issues have to be settled if one puts forward an act-theoretic conception of propositions. For instance, one has to clarify whether an act that will be taken to be a proposition token is analysed or identified in the line of other intentional acts; acts done for or out of reasons; or acts that are to be analysed in terms of beliefs, desires, and other propositional attitudes. As long as the act-theoretic conception of propositions aims to offer a foundational account of propositions, such a construal of propositional acts in terms of propositional attitudes doesn’t seem to be an option. Perhaps, and most likely, the act-theoretic conception of propositions construes propositional acts as some activations of cognitive or linguistic dispositions of subjects, agents, and speakers.<sup>7</sup>

**C6P61** There is a variation among the elaborated accounts of propositions as acts. Prominent versions the thesis are that (a) propositions are cognitive neutral-in-force, acts of predicating properties to things and (b) propositions are forceful acts of predicating properties to things. Scott Soames (2010, 2013, 2014, 2019) and Peter Hanks (2013, 2015, 2019) are advocates of the two versions, respectively.

**C6P62** We proceed with presenting more details and issues in each version of the idea.

**C6P63** Soames advances a cognitive account of propositions according to which propositions are repeatable acts of predication/application of functions to arguments that are classed into types. Since propositions themselves can be arguments of application of other functions, the account is a realist cognitive account of propositions.

**C6P64** A simple propositional act can be the predication of a property to an object. Such an act can be represented by the series  $\langle a, F \rangle$ . The performance of the cognitive act of necessitation on a proposition that represents  $a$  as  $F$  is the proposition that represents  $a$  as being necessarily  $F$ . This is the act of applying the necessity operator on the proposition  $\langle a, F \rangle$ . The application of the belief operator on the couple  $\langle S, \langle a, F \rangle \rangle$  is the representation that  $S$  believes that  $a$  is  $F$ , where the proposition  $\langle a, F \rangle$  is now one of the arguments of the two-place belief operator. Propositional acts may involve the performance of quantification, etc.

**C6P65** However, it has been disputed whether such a construal of fundamental propositional acts does respond to the problem of truth-aptness and representation. The critic would be opposed to the non-committal propositional acts, as there doesn’t seem to be truth-aptness in a non-assertive assignment of a property to an object. For example, if one throws red paint at a wall, one gets a painted wall, which does not represent anything, and it is not true or false. On the contrary, representing the wall as red is an entirely different activity. One has to claim that the wall is painted red or assertively assign redness to the wall so that something can be assessed as true or false.

**C6P66** Such considerations call for a variation of the act-theoretic account of propositions. Peter Hanks (2013, 2015, 2019) is a contemporary proponent of such an account. Hanks

dismisses cognitive propositions, as, according to his argumentation, a neutral-in-force predication of a property to an object could not be the fundamental representational act that is the primary bearer of intentionality and be a truth-value bearer. It is not the force-neutral predication of a property to an object or a force-neutral application of a function to an argument that can be the primary representational act that could found a proposition. It is the assertive predication of a property to an object that can be bound to be true or false. While he takes propositions to be acts, it is different sorts of act that are the fundamental reality of propositions.

**C6P67** A committal predication of a property to an object could be an assertive predication of a property to an object. Thus, it is when one asserts that a property is had by an object that it can be said that the subject represents something, or that she or he has issued in a truth-evaluable act. Acts of claiming, asserting, judging are assessed as true or false, not simple entertaining properties being assigned to objects. In a similar vein, it is imperative predication or directive-force predication of a property to an object that can be assessed as fulfilled or not. An imperative predication of a property to an object is an act that is satisfied if the object gets the property and not satisfied otherwise. Satisfaction conditions are assigned to imperative predication acts, as truth-conditions are assigned to assertive predication acts.

**C6P68** One could argue further for a forceful construal of propositional acts by considering not only the vertical relations of a propositional act to the object referred and the quality of the predication as assertive or imperative, etc. but also the horizontal relations between fundamental propositional acts. If the fundamental bearers of intentionality are acts, then they carry rational commitments and entitlements to other acts. For example, someone's saying or judging something commits him or her to saying or judging something else, as one's saying something entitles one to say something else. On the other hand, if the fundamental propositional acts were not committal, we could hardly make sense of relations of rational entitlement and rational commitment to proposition involving thought and discourse. Thus, the possibility of rational entitlements and rational commitments between propositional acts suggests a construal of propositional acts as forceful acts.

**C6P69** According to the forceful act-theoretic approach to propositions, they are types of acts of assertive predication, or types of acts of imperative predication, or types of acts of interrogative predication. Since the fundamental act-tokens, which are the source of intentionality, are forceful, the structural representation of fundamental propositional acts has to have a place for the force of the propositional act-token. The suggestion is that the propositional act one performs in uttering the sentence

**C6P70** 'John swims'

**C6P71** is represented by the sequence

**C6P72**  $\vdash \langle \text{JOHN, SWIM} \rangle,$

- C6P73** where ‘JOHN’ stands for the act of referring to John, ‘SWIM’ stands for the act of expressing the property of swimming, and the ‘!–’ stands for the assertive prediction of the property to the object referred to. Since the fundamental propositional acts are issued with a force, the propositional act performed by issuing the sentence
- C6P74** ‘John, swim!’
- C6P75** will be represented as
- C6P76** !<JOHN, SWIM>,
- C6P77** where ‘!’ stands for imperative predication.
- C6P78** However, such a construal of propositional acts as forceful faces an old issue, that issue for which Frege seems to have introduced the content–force distinction. This is the so-called ‘Frege–Geach point’, and it requires that the same proposition can occur asserted or unasserted as when it occurs in the antecedent of a conditional sentence, as a disjunct in a disjunctive sentence, or in cases of *modus ponens* or *modus tollens*. A similar requirement often holds for embedded propositions in many propositional attitudes like beliefs.
- C6P79** Hanks replies to this problem by suggesting that there are certain linguistic contexts that cancel force so that when an utterance of a sentence that would amount to a forceful predication occurs in between an ‘if ... then’, then the assertive force is cancelled, and similar cancellation contexts are created by disjunction signs and signs attributing beliefs or in indirect discourse. So, while the whole utterance, like ‘if you go to the movies, then no one will cook for us’ expresses an assertive predication, and so it counts as a propositional act, the assertive commitment within the antecedent is cancelled.
- C6P80** Scholars who are sympathetic to the view that representation, truth-aptness, and ultimately propositions are founded in commitments, as well as in other propositional acts thinkers and speakers perform, attempt, in various ways, to reply to the Frege–Geach point.
- C6P81** Recanati adds further to Hanks’s account of cancellation contexts by introducing a notion of simulation of force to account for force cancellation. Within the context of an ‘or’, the force of the embedded utterances are simulated, while within the context of an ‘if ... then’, the speaker simulates assertion in uttering the antecedent and, within that simulation, asserts the consequent (Hanks 2019: 18).
- C6P82** One may wonder whether, in contexts of force cancellation, propositional acts are performed. A negative answer to the question would turn the forceful act-theoretic account incoherent, as she or he would have to admit that there are no propositions in cancellation contexts. Hanks comments on cancellation:
- C6P83** Cancelled predication is not less than full-fledged predication; if anything, it is more than predication. But it is more than predication not in the sense that it involves

an additional action, alongside the act of predication. It is not that cancelled predication consists of two acts, an act of predication and an act of cancelling. Rather, cancelled predication is an act of predication that takes place in a special kind of context or setting. The additional element in cancelled predication is the context in which the act of predication takes place... Call this sort of context a cancellation context. Cancelled predication is an act of predication that takes place in a cancellation context.

C6P84

(Hanks 2019: 5)

C6P85

Let us note that common uses of ‘cancellation’ do not accord with Hanks’s specification. Common uses of cancellation suggest the non-performance or the not happening of the cancelled act or event. To cancel a meeting is for the meeting not to take place. To cancel a plan is for the plan not to happen. Cancelling is different from retracting, taking back, or withdrawing. One takes back a proposal that has been offered and withdraws an assertion that has been made. But one does not cancel an event that has taken place.

C6P86

There are further worries about the force-cancellation response to the Frege–Geach point. One may ask for the contexts that call for force cancellation or force simulation. One may ask what it is that makes such contexts force-simulation or force-cancellation contexts.

C6P87

The answer at hand is that ‘or’ and ‘if’ operate to the effect of cancelling force, while an ‘and’ does not. Hanks and Recanati suggest that asserting a conjunction is asserting both conjuncts (Hanks 2019: 1394; Recanati 2019: 1415).

C6P88

One may wonder whether the assertion of a conjunction is to be interpreted as a complex of propositional acts since, according to the suggested interpretation, it involves the two acts of asserting the conjuncts plus the assertion of the conjunction. Whatever the case, it seems that there is a discrepancy in the ways the linguistic context of conjunction, on the one hand, and of disjunction and conditionals, on the other, are interpreted. The first seems to involve complex acts; the others introduce cancellation contexts or simulations.

C6P89

Now, if we follow Hanks’s and Recanati’s suggestions, we will have to admit many more cancellation contexts.

C6P90

Let us consider the utterances

C6P91

‘It is slightly probable that the car is repaired.’

C6P92

‘Better visit your grandma than go to the movies!’

C6P93

‘It is more likely that John can walk than that he can run.’

C6P94

The utterances embedded in a probability prefix, in comparative probability, or in comparative preferability prefix do not involve assertive predication or imperative predication. Is it the case that probability prefix or probability comparatives create cancellation contexts or simulations? One might be dissatisfied by the lack of a uniform account of what is to be a force-cancellation or a force-simulation context.<sup>8</sup>

C6S6

## 6. PROPOSITIONS AS ACT PRODUCTS

C6P95

An account of propositions that bears some affiliation to the forceful act-theoretic approach, though it is considerably differentiated from it, has been elaborated by Frederike Moltmann (2003, 2013, 2017, 2023). Moltmann seems to support the idea that a force-neutral propositional/intentional act does not result in truth-aptness, and she accommodates into her approach intentional kinds affiliated to propositional/intentional acts that have force as an integral component. However, Moltmann objects to the idea that it is acts that are truth-apt. She adopts a distinction underlined by Twardowski between acts and their products. Although Moltmann does not use the term ‘proposition’,<sup>9</sup> she claims that most of the attributes assigned to propositions can be assigned to products of propositional acts. With this qualification and somehow loosely speaking, a proposition can be the product of some act. There is a considerable diversion from the act-theoretic approach, for propositions as products belong to a different ontological category from acts or types of acts. Acts, according to Moltmann, cannot be the bearers of the attributes assigned to propositions. An act or an act-type is not a bearer of truth and falsity; an act is not evaluated and not evaluable as true or false. It doesn’t make sense to say that a claiming or a judging is true. It is the product of a claiming and a judging, the claim and the judgement, that can be assessed as true. An act cannot be the object or the content of a belief and other propositional attitudes. Thus, though act products that would ground propositions are often generated by forceful intentional acts, they are ontologically distinct from them. She assimilates the relation of the intentional act that produces an intentional object to the relation between the act of painting and the painting (Moltmann 2013). While the act admits of traits by adverbial modification, act products may admit of completely different kind of traits.

C6P96

Act products of certain cognitive or linguistic acts, like claims, judgements, wills, classified into types, are the kind of thing that could be propositions. Moltmann calls such things ‘attitudinal objects’. Propositions as attitudinal objects are thoughts, claims, judgements, wishes, etc. A thought, a claim, a judgement, a belief is true or false. A wish is fulfilled or not. Though thoughts, wishes, and claims are the immediate product of intentional acts, they are non-enduring objects, as they exist only with their generating act. However, they can be reproduced when similar acts are performed. The similarity condition on the acts that produce the same attitudinal object relate only to content and not to the time of the act, the agent of the act, or the duration of the act. These features of acts do not transmit to attitudinal objects. On the other hand, distinct products, which depend on different agents or times, can have the same content and be similar. Attitudinal objects are structured by part-whole relations with elements from the content of attitudinal objects.

C6P97

It is straightforward that propositions as attitudinal objects are mind and language dependent. They originate from the very intentional acts of thinkers, speakers, and agents. They are ‘graspable’ by speakers and thinkers as speakers and thinkers produce them in engaging with cognitive and linguistic activity.



**C6P98** Moltmann invites us to acknowledge a new ontological category of attitudinal objects. She supplies plenty of linguistic evidence to the hypothesis that there are objects that are act produced and reproducible by speakers, thinkers, and agents, part-whole structured that play the roles of propositions. The account might satisfy the linguist, but the metaphysician might raise plenty of questions about the nature of attitudinal objects. How does the part-whole structure of attitudinal objects account for the relata of logical relations. How can objects stand in logical relations? If attitudinal objects are not abstract but concrete, are they spatio-temporal existences. But such questions belong to a different field of philosophy.

**C6S7**

## 7. CONCLUSION

**C6P99** Propositions have been associated with certain roles they play in language and thought. They are the primary bearers of intentionality, they are the primary truth-value bearers, they are bearers of modal truth, they are meanings of sentences, they are contents or objects of propositional attitudes, and they are relata of logical relations. There is a long tradition in the history of philosophy on theorizing about the nature of that which plays some or all of these roles. The twentieth-century philosophy of language took the direction of elaborating on highly sophisticated formal theorizing of language and thought. However, it seemed that such formal theorizing missed the target of throwing light on the very nature of the content of language and thought and the foundational domain of truth bearing. This contribution presents a selection of very recent attempts to throw light on the nature of propositions. It presents approaches to propositions that are motivated by a dissatisfaction from the inheritance of the twentieth-century philosophy of language concerning the question of what propositions are. Four such accounts were presented and critically discussed. Propositions could be certain sort of facts that involve some language with a semantic assignment, sentential relations, and a subcognitive metalinguistic activity that binds semantic values. Propositions as such a kind of fact can play the roles assigned to propositions. Nevertheless, such an approach would avail the possibility of engaging with propositions only as linguistic creatures. Propositions could be certain kinds of monadic properties or nought-place relations. The truth bearing of propositions would be accounted by instantiation bearing of properties or relations. Certain monadic properties or nought-place relations may play the roles assigned to propositions. However, it is not yet clear which are the monadic properties or the nought-place relations that are propositions and how to distinguish them from properties or relations that are not propositions. Propositions could be types of acts that thinkers and speakers of a language perform. After all, it is difficult to explain how any sort of thing can represent something or aspire to truth, independently of what thinkers and speakers do. Propositions could be acts of ascribing a property to an object. Such ascribing could be merely entertaining the ascription of a property to an object or could be a committal ascription of a property to an object. Both approaches

have their challenges. It is disputed that mere ascription of a property to an object is a genuine truth-apt act. On the other hand, a committal ascription of a property to an object would make force an integral component of a propositional act. Under such conception of propositions, it would be difficult, or it would require ad hoc restrictions to respond to the Frege–Geach point. Propositions could be certain sorts of objects internally related to such forceful representational acts. They could be something like the products of such acts that inherit content-related characteristics of the acts that produce them. The account is promising, but further elaboration at the metaphysics of intentional act products is required. How is it possible for such objects to enter into logical relations? And how can they be concrete while they are produced by abstractions of the content-related traits of acts that generate them?

## NOTES

1. As is well known, David Lewis distinguishes between propositions and the contents/objects of attitudes, with the latter being taken to be properties.
2. This is a problem that has puzzled philosophers since the time of Plato's *Sophist*:

For when he (a man) says that he makes a statement about that which is or is becoming or has become or is to be, he does not merely give names, but he concludes (*pertained ti*), by combining (*symplekoyn*) verbs with nouns. That is why we said that he discourses (*legein*) and does not merely give names (*onomazein*), and therefore we gave to this combination the name of discourse (*logos*).

(Plato: 262d2–6)

The problem was introduced by Russell as ‘the problem of the unity of the proposition’: ‘A proposition, in fact, is essentially a unity, and when analysis has destroyed the unity, no enumeration of constituents will restore the proposition’ (Russell 1903: §52). It is the problem of explaining how the meaning of a sentence is more than a list of the meanings of its meaningful parts. It is the question of what glues the components of a proposition into a unified whole that is not a mere list of semantic values but something distinct from a collection of its constituents. The proposition that John loves Mary is distinct from the collection of John, love, and Mary. In addition, the problem of the Unity of Proposition calls for an explanation of the fact that the unified whole that is a proposition is such that can be a truth-value-bearer, and it is such that can have specific truth-conditions or represent things in a certain way. Not any composition of semantic values is a proposition. A composition of the semantic values of ‘father’ and ‘John’, that is perhaps the father of John, is not a proposition. The proposition that John loves Mary represents John loving Mary, and it is true if and only if John loves Mary. It doesn’t represent Mary loving John, while it has the same constituents with the proposition that Mary loves John. In a nutshell, the discussion on the problem of the unity of proposition covers a family of problems that include the problem of how a proposition is distinct from a collection of its constituents, the problem of how a proposition becomes a truth-value bearer, the problem of how a proposition has certain truth-conditions or represents things in a certain way. It is worth noting that there is disagreement in the literature over whether all such questions pose a genuine problem and over whether they should be

- treated as independent or as related problems. For more on the issue see Soames (2012), King (2013), and Ostertag (2013).
3. Eleni Manolakaki elaborates on the idea of a measurement representation of propositions for an act-theoretic account of propositions (Manolakaki 2022).
  4. The most recent one is by Tillman and Murray (2023), *The Routledge Handbook of Propositions*.
  5. Such reply to an objection to King's account concerning proposition involvement by pre-linguistic creatures is given in King et al. (2014: 60).
  6. Such worries have been stated and elaborated by Soames (2014: 171) and Speaks (2014: 75).
  7. There are further issues with the act-theoretic construal of propositions. For instance, one may question whether a token of a propositional act requires prior conceptual resources. Or is it that the very concepts themselves are the offspring of fundamental propositional acts? If a propositional act requires prior conceptual resources, then the theory of propositions-as-acts is considerably weakened as a foundational account of meaning. John Collins, in Collins (2018), is critical of the adequacy of the propositions-as-acts theory on such and similar grounds. These are some issues that have to be clarified and developed further by the propositions-as-acts theorists. See Moltmann and Textor (2017) for a critical discussion of historical and contemporary conceptions of propositions as acts.
  8. Peter Hanks (2022) throws doubts on the possibility of a general theory of cancellation. Elaborated arguments against force cancellation and force simulation contexts as well as an alternative way for the act-theorist to reply to the Frege–Geach point can be found in Manolakaki (2022).
  9. Moltmann rejects the thesis that propositional attitude reports assign relations to subjects and propositions, and so she denies to attitudinal objects this role that propositions presumably play.

C6S8

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