

## *The Story About Propositions*

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### 0. Introduction

Talking even about rather ordinary circumstances appears to implicate directly certain metaphysically loaded identifications. For example, if Dr. Gustav Lauben is a doctor then it seems to follow that he has the *property* of being a doctor; just as if he is injured, he has the property (or the characteristic) of being injured. Moreover, if Frege should come to believe that the good doctor is injured then there is something that he believes—to wit, something apparently denoted by the expression ‘that the good doctor is injured’, something philosophers standardly call a *proposition*. And, of course, if the good doctor is injured and Frege believes that he is, then what Frege believes—the proposition that the good doctor is injured—is *true*, in which case, it seems, the proposition has the property of *truth*. All of this is, as we said, routine, and it is the job of the metaphysician (especially the metaphysician of meaning) to explain all of this (or to explain it away).

While we take the issues just canvassed all to belong to the same family, our focus in this paper will be on propositions. The notion of a proposition plays a central role in philosophical theorizing about language and the mind. This is no wonder, since it appears to provide considerable theoretical advantage in the form of a single kind of entity playing a wide range of roles. Propositions are held to be the sharable objects of belief and other intentional attitudes, the contents of these thought-states and of assertions and other speech acts, the common meanings of utterances from different languages, and the fundamental bearers of truth, necessity, apriority, and other

alethic, modal and epistemic properties. With such a variety of functions associated with propositions, this notion simplifies, unifies, and systematizes theorizing about our thought and talk.

A compelling motivation for countenancing propositions is that doing so provides a tidy explanation for the validity of obviously valid inferences, such as those listed below. Call this motivation the *referential appearance* of ‘that’-clauses.

- (I) Corey believes/asserts that crabapples are edible.  
So, there is something Corey believes/asserts.
- (II) Corey asserted that crabapples are edible.  
Isabel believes that crabapples are edible.  
So, Isabel believes what Corey asserted.  
(So, there is something Corey asserted, and Isabel believes it.)
- (III) ‘Holzäpfel sind eßbar’ means that crabapples are edible.  
‘Crabapples are edible’ means that crabapples are edible.  
So, ‘Holzäpfel sind eßbar’ and ‘Crabapples are edible’ mean the same thing (and thus each mean something).
- (IV) It is necessary/true/*a priori* that one plus one equals two.  
Zev believes that one plus one equals two.  
So, Zev believes something necessary/true/*a priori*.
- (V) Dex believes everything Corey asserts.  
Corey asserted that crabapples are edible.  
Therefore, Dex believes that crabapples are edible.
- (VI) Corey believes that every even number greater than 2 is the sum of two primes.  
Surprisingly, every even number greater than 2 is the sum of two primes.  
(It is surprising that every even number greater than 2 is the sum of two primes.)  
So, Corey believes something that is surprising.

We have in mind here the practice of quantifying into the positions occupied by ‘that’-clauses, trading on the repetition of a ‘that’-clause as an identity, and using ‘that’-clauses in universal instantiation. The inferential practices displayed in arguments (I)–(VI) are easily regimented into first-order logic, if we take the claims involved to traffic in a domain of mind- and language-independent entities.

While we acknowledge such considerations to have some force, we should note that we think this sort of “reifying” reasoning is often taken too far. This is not to say that we are wrong to see the inferential behavior present in such arguments as supporting or suggesting some sort of commitment. But it is not obvious—at least it is not, without further argument—that such ensuing commitments are necessarily *ontological*, as opposed to *linguistic*. After all, one might insist that ‘ontological commitment’ regards what is, rather

than what seems to be spoken about, given expressive, or even inferential, considerations. (We shall return to this point, below.)

It is our contention that an ontological commitment to propositions faces a number of problems; so many, in fact, that an attitude of realism towards propositions—understood the usual “platonistic” way, as a kind of mind- and language-independent abstract entity—is ultimately untenable. The particular worries about propositions that we shall marshal here, in arguing against a sort of propositional realism, parallel problems that Paul Benacerraf has raised for mathematical platonists, viz., for those who believe that mathematical objects such as numbers exist as abstract, mind-independent, non-spatiotemporal, causally inert entities. Benacerraf (1965, 1973) challenges platonists to come up with adequate accounts of what numbers are and how we can have (epistemic) access to them. These challenges remain serious problems for platonism in the philosophy of mathematics.

At the same time, however, the utility of “number-talk”—indeed, the apparent *linguistic* commitment evident in such talk (in offering explanations and making predictions)—is also in need of explanation. Keeping this in mind, we *might* take the problems that Benacerraf raises to motivate the development of a *fictionalist* account of mathematics—an alternative to a realist account that retains number-talk and explains its utility, while resisting ontological commitment to numbers as entities. Although our goal in this paper is not to argue for a fictionalist account of mathematical discourse, it bears noting an important difference between the approach to proposition-talk we pursue here and at least the most familiar versions of fictionalism in the philosophy of mathematics:<sup>1</sup> The latter are *error-theories*, maintaining that mathematical claims implying the existence of numbers are all, strictly speaking, *false*. An immediate worry for this sort of error-theoretic fictionalism (ETF) is how to explain the point or usefulness of a discourse so understood. We avoid this and other problems particular to ETF by going fictionalist in a different way. We instead appeal to the notion of *semantic pretense* to develop an alternative, pretense-involving fictionalist account (or what we will henceforth call a *SPIF account*<sup>2</sup>) of proposition-talk.

The idea of semantic pretense stems from Kendall Walton’s development and application of the notion of *make-believe* in his work in aesthetics,<sup>3</sup> but it has been fruitfully applied in other areas of philosophy as well.<sup>4</sup> A central feature of a SPIF account of any “way of talking”<sup>5</sup> is that the discourse in question is an indirect and non-literal one rather than a direct and literal one. A pretense-involving way of talking thus provides a means for making claims (and asking questions, etc.) about real aspects of the real world, by making *as if* to talk about other (pretend) things and situations. The upshot is that while a SPIF account takes a claim to operate through semantic pretense, and thus to belong to a fictional discourse, the claim can still turn out to make a genuinely true, serious assertion—just not the one it appears to make at face value. This is an important difference from an ETF account

of some discourse, and we take it be a significant merit of the SPIF account of proposition-talk we develop below.

Our plan is as follows. §1 provides more details about Benacerraf's challenges to mathematical platonism, and §2 considers the challenges for propositional realism: (i) sets out the extension of Benacerraf's challenges, directed at propositional realism; (ii) considers a response that has been offered to one of these challenges; and (iii) raises a worry about the response, on grounds that it makes the situation for propositions worse with respect to the other of Benacerraf's problems. §3 introduces the Walton-style SPIF account of propositions that we offer; §4 presents some of the fine details of how the pretense operates and connects with the real world; and §5 concludes, summarizing the advantages of analyzing proposition-talk in terms of semantic pretense (which are not just those of theft over honest toil). In the concluding section we also suggest some further parallels between this talk and mathematical discourse, with respect to the sorts of real aspects of the world they might be used to talk about indirectly, given that we reject a face-value realist interpretation of them. We show how these parallels relate to the way a pretense account of proposition-talk is able to deal with the challenges generated from the extension of Benacerraf's arguments to the matter of realism about propositions.

### 1. The Benacerraf Problems

In his afore noted papers, Benacerraf presents two pressing problems (or again, challenges) for the mathematical realist: *the non-uniqueness problem* and (what we will call) *the access problem* (sometimes called *the epistemological problem*). The former takes off from a consideration of how we can reduce number theory—in Benacerraf's case, elementary (or *simple*) number theory—to set theory. As Benacerraf notes, there are an infinite number of equivalent and equally effective ways that we can do this. Since, there do not seem to be acceptable, non-arbitrary, ways of identifying numbers with sets, he concludes that numbers cannot be sets. The latter, the access problem, asks platonists to provide an account of how we can have knowledge of mathematical entities that jibes with—viz., that is consistent with—a plausible semantics for mathematical discourse, and a reasonable account of knowledge acquisition, as it appears in other domains.

On its own, the non-uniqueness problem does not tell us anything about the ontological commitments involved in our number-talk; if anything, it tells us what (ontological) commitments we cannot have.<sup>6</sup> But, recently, Mark Balaguer (1998) has argued, echoing Hartry Field (1980) (and convincingly, by our lights), that Benacerraf's argument can be tweaked in such a way that it constitutes a general argument against platonism. Balaguer argues from the platonist's assumption that a mathematical theory (e.g., number theory) is about particular, unique collections of objects, to the conclusion

that there is not any particular unique sequence of abstracta that *are* the natural numbers. Thus, if, as he argues, the platonist is committed to there being a unique collection of number objects, then platonism must be (and, thus, is) false.

As for the challenge posed by the access problem, Benacerraf conjectures that it cannot be met.<sup>7</sup> The difficulty is that we are faced with one of two choices, neither enticing: Either

- (i) Accept an attractive semantics, in which case we must deny that we have knowledge of what putative mathematical claims express (or, at least, leave open the question of how we are to explain our knowledge of mathematical facts); or
- (ii) Leave open the possibility of a means for acquiring mathematical knowledge, at the cost of purchasing a very unattractive semantic theory for our mathematical language.

This aspect of Benacerraf's challenge is then to provide a view of mathematics that

- (iii) Yields an attractive semantics for our mathematical language, together with an adequate account of how we can come to know mathematical facts.

Although a number of philosophers have tried, it is fair to say that this challenge has yet to be met by a platonist view of mathematics.<sup>8</sup>

After introducing the access problem, Benacerraf draws some conclusions from it:

... combining [the causal] view of knowledge with the "standard" view of mathematical truth makes it difficult to see how mathematical knowledge is possible. If, for example, numbers are the kinds of entities they are normally taken to be, then the connection between the truth conditions for the statements of number theory and any relevant event connected with the people who are supposed to have mathematical knowledge cannot be made out. It will be impossible to account for how anyone knows any properly number-theoretic propositions.<sup>9</sup>

As the above quote indicates, he believes that the likelihood of success looks grim.

## 2. Problems for Propositions

Let "Benacerraf's Challenge" encompass both the non-uniqueness problem and the access problem. The problems that Benacerraf's Challenge poses for mathematical platonists can be redirected at realism about propositions. The non-uniqueness problem is basically one of over-determination in the area

of theoretical claims—there are too many possible reductions underwriting different theoretical identifications, with no obvious way of fixing a unique one (or so, anyway, the problem goes). This is a serious problem, and it carries over directly to propositions, but it is one that has been addressed in some detail by Joseph Moore.<sup>10</sup> While we are skeptical about Moore’s favored solution to the non-uniqueness problem, there is much in his arguments against alternative realist solutions that we endorse. We consider his reasoning in some detail below because doing so reveals an important interplay between the non-uniqueness problem and the access problem. As we will show, Moore’s proposed solution to the former only leaves him more vulnerable to the latter. In this sense, even if his solution to the non-uniqueness problem passes muster, he will not have answered Benacerraf’s Challenge. With this in mind, we turn to the non-uniqueness problem, which we cast in the key of propositions.

### 2.1 *The Non-Uniqueness Problem for Propositions*

Benacerraf argues against the platonist view that number theory concerns the properties and relations of abstract, numerical objects in two stages. In stage one, he argues that numbers cannot be sets, since there is no way of determining which sets they are. In stage two, he argues that numbers cannot be identified with any objects that are not already known to be numbers, since there is no way of uniquely identifying numbers with any such objects. Benacerraf took the upshot of the non-uniqueness problem to be that numbers, *qua* number theory, cannot be numerical objects—that is, abstract entities. According to Benacerraf

... there is no unique set of objects that are the numbers. Number theory is the elaboration of the properties of *all* structures of the order type of numbers. The number words do not have single referents.<sup>11</sup>

In order for the non-uniqueness problem to arise for propositions, we would have to be able to show that, given an attempted reduction (or: identification) of propositions to some “other” sorts of entities, the *prima facie* sanctioned reductions, like their set-theoretic kin in the case of number theory, suffer from an “embarrassment of riches”.<sup>12</sup> Moore (1999b) has provided a useful general form of the argument for non-uniqueness, what he calls “the argument from arbitrary identification” (AAI). After setting out its argument schema, we apply it to propositions.

Let ‘a’ represent an entity—a proposition, a number, etc.—and let ‘b’ and ‘c’ represent “reducing candidates”. Following Benacerraf, we assume that, for some b and some c,  $b \neq c$ . Moreover (and, again, following Benacerraf), we assume that the putative theoretical identity claims are symmetric in that any reasons for accepting one are equally reasons for accepting the other. This leaves us with a biconditional connecting the two candidate reductive identity

claims: ‘ $a = b$  if, and only if,  $a = c$ ’. With these assumptions functioning as premises, we get (a proof sketch of) AAI.

AAI

(P <sub>1</sub> ) $a = b$ iff $a = c$	Premise
(P <sub>2</sub> ) $b \neq c$	Premise
(P <sub>3</sub> ) $a = b$ only if $b = c$	(P <sub>1</sub> ), symmetry and transitivity of identity
∴ (P <sub>4</sub> ) $a \neq b$	(P <sub>2</sub> ), (P <sub>3</sub> ), MT <sup>13</sup>

(Notice that the same argument would likewise allow us to conclude (P<sub>5</sub>)  $a \neq c$ .)

We can see Benacerraf’s problem as an instantiation of AAI, where ‘2’, ‘ $\{\{\emptyset\}\}$ ’ and ‘ $\{\emptyset, \{\emptyset\}\}$ ’ stand in for ‘a’, ‘b’ and ‘c’, respectively. With this argument schema in place, let us consider two general accounts of propositions, in order to fill in for schematic letters in (P<sub>1</sub>) and (P<sub>2</sub>). We do not pretend to be covering every possible account of propositions in detail; we just want to give a sense for how the argument goes, if directed at propositions, rather than numbers.

Here is the argument. Propositions, if there are any, are either structured or not. To see how the problem arises in the first case, consider a Russellian view, according to which propositions are ordered  $n + 1$ -tuples, consisting of an  $n$ -adic property and  $n$  individuals. Following an argument by Joseph Melia,<sup>14</sup> we see that there are still several different theoretical identifications we can make of any proposition. We can treat ‘Zev believes that  $b$  bears  $F$  to  $c$ ’ as describing a relation between Zev and the ordered triple,  $\langle F, b, c \rangle$ . But we can also treat it as describing a relation between Zev and the ordered triple,  $\langle b, F, c \rangle$ ; or, alternatively, we can treat it as describing a relation between Zev and a different permutation of  $b$ ,  $c$ , and  $F$ . These treatments are equivalent, and there is no interesting debate about which one is the intended, or correct, *reducing candidate*. Even so, the resultant reducing candidates are non-identical, from which follows (P<sub>4</sub>) and its relative, (P<sub>5</sub>), respectively. Since any view treating propositions as structured entities will see them as consisting of constituents under an arrangement, this argument generalizes.

To see how the problem arises in the unstructured case, consider a possible-worlds account. On this view, Zev’s belief that  $b$  bears  $F$  to  $c$  might end up as a relation between Zev and the set of worlds at which  $b$  bears  $F$  to  $c$ , or it might end up as the relation between Zev and the set’s characteristic function—the one (function) that maps worlds where  $b$  bears  $F$  to  $c$  onto the value True and worlds where  $b$  does not bear  $F$  to  $c$  onto the value False. Again, these treatments are equivalent; and it does not seem, at least *prima facie*, that there is any reason for thinking that Zev, when he believes that  $b$  bears  $F$  to  $c$ , is related to the set of worlds at which  $b$  bears  $F$  to  $c$ , as opposed to that set’s characteristic function. Thus, it seems open, (and, thus, indeterminate), which

treatment one might prefer, which, again, yields instances of (P<sub>4</sub>) and (P<sub>5</sub>). Since any view of propositions as unstructured entities involves a mapping onto the truth-values, this argument also generalizes. The non-uniqueness problem thus appears to render the propositional realist with impending indeterminacy, whether she holds that propositions are structured or takes them to be unstructured.

Return to Moore. As he (1999a, 1999b) conceives it—rightly, by our lights—the challenge that Benacerraf makes to the platonist asks her to show that the argument is unsound, either because it is invalid or because one or the other of the premises are not true. In support of his preferred “way out” of the problem, Moore considers, and rejects, what he sees as the other possible responses to the argument. This is a dangerous strategy, for it leaves open the possibility that he has not exhausted the relevant positions. As we will show (§3), there is at least one that he has not considered. In order to support our position, after canvassing both the responses that Moore considers, together with his reason for rejecting them, we raise a problem for his proffered account.

First, consider a response inspired by Crispin Wright, which renders the argument unsound because (at least one instance of) the first premise is without a truth-value, as what stands in for ‘a’ may pick out a vague object. Call this *the semantico-metaphysical solution* to the non-uniqueness problem. Moore (1999b, pp. 240–8) surveys a couple of ways of making this approach stick, but ultimately rejects the response, on grounds that we cannot take propositions to be vague objects.

The second response Moore (Ibid.) considers calls for a general revision to proposition-talk. The idea is this. Although, in AAI, ‘a’ *appears* to serve as a referring expression, we might see ‘a’ functioning predicatively, so that, in ‘a = b’, in (P<sub>1</sub>), ‘a’ is interpreted so as to function as an indefinite singular term of the sort that is used in sortal predicates of the form ‘... is A’. Moore sees this *semantico-logical solution* as treating ‘a = b’ as saying (something like) *that b is of the kind or sort A*. On this second response, AAI is invalid; (P<sub>1</sub>) and (P<sub>2</sub>) can be true with (P<sub>4</sub>) untrue.

Moore raises two main objections to this response, both of which amount to reasons for rejecting any appeal made by an advocate of this semantico-logical approach (if any exist) to conceptual and semantic regimentation. He first objects that the response will not help the advocate just mentioned if, as seems reasonable, she is a reductionist. The reason is simple: On this approach, propositions no longer end up as abstract particulars, in which case there will not be a reduction of propositions to their possible reducing bases. Whether this objection is fatal is not something that we will consider here.

Moore’s second objection, which he (Ibid., p. 251) describes as “more important” than his first, is that “there are costs in the complexity of predicative reinterpretations.” He continues:



[the semantico-logical proposal] is a revisionary semantic one—a revision that distorts the surface grammar of our representational talk, and a view that demands that we rethink our simple picture of propositional attitudes . . . [t]he revisionary nature of the view must, after all, be considered a strike against it.<sup>15</sup>

Why is this a strike against it? Unfortunately, the only serious objection that Moore musters is that the proposal, if implemented, would call for a revision to the standard picture of propositional attitudes, together with the ensuing “oddness”.

It is hard to see how either the oddness or the ensuing loss in what Moore calls “active ontology” constitutes a strike against the second response to the non-uniqueness problem for propositions. One reason for this is that Moore seems to be assuming that the proposed revision is (in a sense) descriptive. But why not think that an advocate of a semantico-logical solution is offering up a regimentation—a sort of engineering job that is meant to explain how certain expressions of the language might plausibly function? Clearly, what Moore needs is an argument to the effect that we *cannot* abide a reinterpretation and revision “that demands that we rethink our simple picture of propositional attitudes”—that proposition-talk would not survive it. For reasons that will become evident in §3, we are not confident that he will be able to produce such an argument.

Having accepted the soundness of AAI, Moore concludes that propositions are *sui generis* entities, from which it follows that no identity statements linking names of propositions with names of “candidate-propositions” can be true.<sup>16</sup> Indeed, he takes the most compelling reason for believing in the existence of *sui generis* propositions to be that propositions need to be in place *before* we represent the various candidates, which then unsuccessfully threaten to replace propositions.<sup>17</sup> As we will show (§2.3), this positive thesis is far from compelling. But leave that aside, for the moment. It bears noting at this point that, while Moore has considered a number of possible responses to AAI, he has not considered all of them and, for better or worse—better, for us; worse, for Moore—there is an account of propositions (or, more precisely, of *proposition-talk*), which he has not considered, one that undermines AAI, while also providing an alternative to the idea of *sui generis* propositions—or, really, of any propositions at all. We present this account in §§3–4. Before that, however, we turn to the other facet of Benacerraf’s Challenge, the access problem.

## 2.2 The Access Problem for Propositions

Like the non-uniqueness problem, the access problem is not just a problem for a mathematical platonist, for if indeed it is a problem, it is also a problem for the propositional realist, provided, of course, that propositions, like mathematical objects, are construed as abstract objects of some sort. Recall that the access problem raises an epistemological challenge for the mathematical

platonist: provide a reasonable semantics for mathematics that is compatible with a reasonable epistemological story about how mathematical knowledge is possible, viz., about how we come to know mathematical propositions. This aspect of Benacerraf's Challenge is *very* pressing for a mathematical *platonist*, but it is not clear that the argument, or the ensuing challenge, should be seen as specifically directed at *mathematical* platonism. Rather, the access problem can be seen as a challenge for any *ontological* platonist, which is to say: for anyone who accepts (and so is committed, ontologically speaking, to) abstract objects, e.g. propositions.<sup>18</sup>

We can see the access problem for propositional platonism as arising from its assumption,

- $A_p$ : Propositions are abstract objects that are non-spatiotemporal, mind-independent, and not part of the causal nexus.

Given  $A_p$ , which we will not defend here, it is easy to formulate the access problem for propositional platonism: Explain how we can bear the knowledge relation to propositions, given that they are as  $A_p$  characterizes them. Again, but without relying on a causal theory of knowledge, it seems that we can generate an analogue to Benacerraf's access problem. Since the purpose of this paper is to propose and motivate an unorthodox treatment of propositions and proposition-talk, we shall run the access problem argument, with this subject firmly in mind.

#### APA

- A. Humans exist entirely (and exclusively) within spacetime.
  - B. If propositions, as abstract objects, exist then they exist out of spacetime.
  - C. If propositions, as abstract objects, exist, then human beings could not possess a relation to them, e.g. knowledge.
  - D. If propositional platonism is correct then human beings could not acquire propositional knowledge.
  - E. At least some human beings (e.g., the reader of this paper) have propositional knowledge.
- ∴ F. Propositional platonism is false.

Let us look quickly at the premises. We will accept A and E without comment. Premise B is quite easy to support, so we shall not comment on it here either. The most pressing question regards the status of C (we assume that the validity of the argument is not in question). The reason for this is clear: C entails F, since C entails D, and D, along with E (which is, as we said, not in question), entails F.

As Balaguer notes, insofar as (a variant of) C is not entailed by A and B, it requires further support.<sup>19</sup> But there is a difference between *further* support,

conclusive support, and *no* support at all. While A and B do not entail C, if the antecedent of B is true, it is, to say the least (and *pace* rationalism), *very* difficult to see how C could be false. Nevertheless, insofar as A and B do not entail C, the argument cannot be seen as a conclusive argument against propositional realism. That said, as others have pointed out (with respect to Benacerraf's access argument pertaining to mathematics), APA poses a challenge for a propositional realist (and for platonists, generally): explain what propositions, or the epistemic situations we find ourselves in, are like, given that we are the sorts of beings who can have epistemic access to propositions.

We have thus far assumed that the premise-to-be-jettisoned is C. Of course, platonists have not always gone this route. For example, Gödel's response to a version of the access argument (what we will call the *mathematical version*) would not be to deny (a general version of) C; it would be to deny A, given his acceptance of a sort of dualism. Other platonists, e.g., one time-slice of Maddy,<sup>20</sup> have opted for a denial of B, given the mathematical version of APA, which would, if plausible, undermine the support for C. Perhaps the most familiar response to the mathematical version of APA is to accept premises A and B and to argue that C is—that C *must be*—false. Prominent advocates of this, third, response, include W.v.O. Quine, structuralists,<sup>21</sup> and Jerry Katz (who advocates what he calls “realistic rationalism”).<sup>22</sup>

A final response to the mathematical version of APA takes off from an assumption regarding the semantics for the mathematical fragment of a language—that mathematical statements (all of the interesting ones, at any rate) are *strictly speaking* false, viz., that the *face-value* semantics for our language are correct, but the mathematical-involving sentences are not true.<sup>23</sup> This is, again, the thesis of ETF accounts.<sup>24</sup> In order to evaluate the ETF response to the mathematical version of APA properly, we would have to tease out all the various strands of contemporary fictionalism. This is an important job, but beyond distinguishing SPIF from ETF, it is not one that we shall take on in this paper.<sup>25</sup> As we shall argue, APA ends up as either a sound argument or an unsound one, depending on one's reading of proposition-talk.

### 2.3 *Sui Generis Propositions and APA*

Before closing this section, we return, briefly, to a lingering loose end. In §2.1 we discussed Moore's response to the non-uniqueness problem. We noted briefly that there were reasons for worrying about his positive account and reasons for thinking that our approach to proposition-talk obviates those worries. The latter is, of course, a promissory note; in subsequent sections, we cash it in. For now, we would like to consider how Moore's countenancing of *sui generis* propositions, as a solution to the non-uniqueness problem, fares, in light of APA.

One of the points that Moore stresses—one that he takes to be absolutely central to his positive account—is that *sui generis* propositions exist; in fact, that they *must* exist before we represent “the various candidates” in *any reductionist* program. That is to say, Moore sanctions A, B, D, E, and the antecedent to C and, when propositional realism is updated so as to allow for propositions as *sui generis* entities, flatly rejects F. He must therefore explain how the consequent of C is false. This is to say that, in order for Moore’s solution to be plausible, he must meet the challenge that the access problem raises. But his main motivation for thinking that propositions must be *sui generis* makes it very difficult to see how he could successfully meet that challenge.

We are not arguing that Moore cannot adequately resolve the access problem, our pessimism notwithstanding. But it is worth noting that the problem he faces is precisely the one that appears to plague the mathematical realist (provided she is not a rationalist). Indeed, the access problem may be *worse* for Moore’s view on propositions than it is for certain mathematical realists (e.g., Resnik’s (1997) and Shapiro’s (1997) brands of mathematical structuralism). With that in mind, what we wish to point out now is that if *another* response to the access problem could be made, which adequately addresses both facets of Benacerraf’s Challenge, without falling victim to any of the problems that other extant proposals face, it would be preferable to such other accounts and to Moore’s postulation of *sui generis* propositions. In the following sections, we set out our positive account, after which we shall return to deal with Benacerraf’s Challenge.

### 3. Proposition-Talk and Pretense

We leave it to propositional realists to develop further responses to Benacerraf’s Challenge as applied to propositions. Our aim in the remaining sections of this paper is to introduce a SPIF account of proposition-talk that handles the application to propositions of both facets of Benacerraf’s Challenge and retains the advantages offered by a naïve realist interpretation of the talk, even if Benacerraf’s Challenge prevented us from taking propositions seriously. The explanation we give of proposition-talk’s functioning will show how this talk provides a language with certain expressive advantages. As we mentioned in the introduction, the central thesis of our view is that proposition-talk functions via the linguistic mechanism of semantic pretense. Propositions may not exist, but talking *as if* they do extends the expressive capacity of our language in useful and important ways.

At the same time, while our account rejects any serious ontological commitment to propositions, it does not recoil to the other extreme of taking proposition-talk to be literally about something other than propositions (e.g., sentences<sup>26</sup>) and thus avoids the problems those approaches generates.<sup>27</sup> Ultimately, our account vindicates proposition-talk and retains its advantages

by explaining it as an indirect, yet particularly effective (to the point of being expressively indispensable), means for making claims about certain complex use-features of mental and linguistic items, and for expressing certain generalized claims about these features that we could not otherwise express.

### 3.1 Pretense and Make-Believe

Our SPIF account of proposition-talk takes off from the sort of pretense that is familiar from children's games of make-believe (Cf. Walton (1990)). The interesting aspect of make-believe is that some of what is *to be pretended* by participants in the game—some of what the game makes *fictionally true* (or *fictional*)—depends on the state of the world outside of the game. Games of make-believe involve principles of generation, rules which determine how actual circumstances combine with a game's stipulated pretenses to determine what else is to be pretended—what further pretenses are prescribed.<sup>28</sup> Within the context of a game of make-believe, then, there are two kinds of prescribed pretenses: those that are the stipulative ground of the game—what is *expressly make-believe*—and those that are *generated from reality*.<sup>29</sup>

As an illustration of how this works, consider a children's game of mudpies. In this game of make-believe, certain pretenses are stipulated: patty-shaped globs of mud are pretended to be pies, the hollow stump is pretended to be an oven, etc. Following this, certain other pretenses are prescribed depending on what happens in the world outside of the game. If someone puts a patty-shaped glob of mud into the hollow stump, it is to be pretended that she has put a pie in the oven. By including pretenses generated from reality, a game of make-believe establishes a *systematic dependency* between some of what is to be pretended and real-world conditions obtaining outside of the game. As a result, a game of make-believe can provide a mechanism through which a speaker can, by making as if to say one thing, succeed in making quite a different, albeit still serious assertion about the world.

For example, if, in talking about two children playing the mud pie game, we say

- (1) Dex stole one of Corey's pies out of the oven,

our utterance employs pretenses from the make-believe. But there is still a sense in which we make a serious assertion; it is just not one about pies or an oven. Sincerely uttering (1) as part of the mud pies game offers the pretenses displayed in the utterance as prescribed or appropriate. According to the rules of the game, they are prescribed (or deemed appropriate) if, and only if, certain real-world conditions obtain, namely those specified in

- (1\*) Dex took a glob of mud that Corey had fashioned and put in the hollow stump (as part of a game) out of the stump against her wishes.

Uttering (1), therefore, expresses a commitment to the obtaining of these real-world conditions.

Understood as a pretense-employing claim, (1) still makes a genuinely true assertion whenever the pretenses displayed in the utterance are prescribed, because that is when the real-world conditions to which it expresses a commitment obtain. These are also exactly the conditions in which (1\*) makes a true assertion. Thus, a pretense-employing way of talking can serve as a means of making genuinely true, serious assertions *indirectly*, that is, as a way of engaging in “indirectly serious discourse”.<sup>30</sup> We call claims that employ pretense to make serious assertions indirectly, *partially pretend* claims.<sup>31</sup> Even though (1) involves pretense, our uttering it can serve a serious purpose, for instance, that of explaining why Corey is mad at Dex. An appeal to make-believe thus allows for, rather than undermines, the serious purposes served by a way of talking. And if some talk is problematic when taken at face value, an appeal to pretense might explain how it serves any serious purposes at all. Certain philosophical problems might thus be solved by recognizing make-believe at work in ways of talking where it has not been noticed before.

### 3.2 *Semantic Pretense*

Our pretense-based account of proposition-talk is partially modeled on a pretense analysis of “existence-talk”, viz., our talk ostensibly of what does and does not exist, which can be motivated by the puzzle of negative existential claims, given in (e.g.)

(2) Santa Claus does not exist.

A pretense account would hold that claims like (2) can be genuinely true and would explain how without requiring ontological commitments to non-existent entities. Moreover, even though (2) functions in virtue of a pretense, it can still be used to make a serious assertion about the world, due to the special kind of pretense involved.

We can resolve puzzles about negative existentials by understanding existence-talk in terms of a game of make-believe that stipulates pretending, first, that every putative referring expression has a bearer, and, second, that ‘exists’ operates as a predicate, attributing a discriminating property. The serious purposes of existence-talk are explained by principles of generation making it to be pretended that a (pretend) referent has the (pretend) property of existence if, and only if, the referring expression, as employed in the existential claim, really refers to something. Because of the dependency established, one can use an utterance like (2) to make a serious and genuinely true claim about how the world actually is (namely, that the kind of attempt to refer displayed in the utterance is always unsuccessful), even though it employs pretense to do so.<sup>32</sup>

Our SPIF account of proposition-talk is also partially modeled on Mark Crimmins's pretense-based account of attitude ascription.<sup>33</sup> The make-believe Crimmins postulates behind attitude ascription is similar to the one suggested for existence-talk in that both stipulate pretending that every referring expression has a bearer. What gets added in the context of attitude ascriptions is that each term or, more generally, each mode of presentation (linguistic or mental) picks out a distinct thing.<sup>34</sup> All of this is part of the account's deployment of *semantic* pretense—pretenses about the semantic functioning of various expressions used in the utterances. The semantic pretenses displayed in an attitude ascription—that a thinker has a thought about one of these distinct objects—are prescribed just in case the thinker actually has a thought employing (something like) the mode of presentation used in the attribution. So the serious assertion made indirectly with a claim like

(3) Hammurabi believed that Hesperus is visible in the evening

is that Hammurabi has an evening-visibility-attributing belief using the Hesperus-mode of presentation.<sup>35</sup>

To cover cases in which different modes of presentation actually present the same object, the semantic pretense involved also includes principles governing identity-talk, according to which it is to be pretended that the relation expressed by the identity-predicate is “promiscuous”—i.e., that it is a relation that can hold between “different” (pretend) objects. The real-world conditions prescriptive for pretending that this relation holds between two or more (pretend) objects are that the modes of presentation that “provide” the different (pretend) objects all co-refer outside of the game.<sup>36</sup>

As Crimmins notes, there is some independent motivation for this sort of view, as a way to account for the seemingly contradictory way we use identity-talk in claims like

(4) The situation with Hesperus and Phosphorus is that *they are identical*.

On Crimmins's view, the serious assertion the utterance of (4) makes indirectly is that one single object is presented by both the Hesperus-mode of presentation and the Phosphorus-mode of presentation. With this addition, his account can accommodate the fine-grained Fregean criteria for truth that certain contexts of attitude ascription demand, while maintaining an intuitive “semantic innocence” that treats all attitude reports as intrinsically *de re*, i.e., as having Russellian logical form relating people to objects, properties, and relations (not to modes of presentation).

Our account of proposition-talk in general moves beyond Crimmins's account of attitude reports, by modifying the application of the pretense approach to this portion of our talk. Crimmins characterizes attitude

ascriptions as (in the make-believe) relating thinkers to objects, properties, and relations, and not explicitly to propositions,<sup>37</sup> thereby glossing over the way we use ‘that’-clauses as singular terms in proposition-talk. By contrast, we can easily accommodate this practice, while, at the same time, maintaining the “semantic innocence” Crimmins is after. We do this by explicitly stipulating that in the pretense ‘that’-clauses denote Russellian propositions. Within the make-believe, then, attitude reports relate thinkers to (pretend) Russellian *complexes* of (pretend) objects, properties, and relations; ‘that’-clauses employing different terms (pretend-) denote distinct propositions.

Like other pretense-employing ways of talking, proposition-talk is a means of making indirectly, certain assertions that cannot (easily) be made directly. As we see it, the primary purpose of this pretense is to provide a practical means for speakers to talk about certain complex use-features of linguistic items and cognitive states.<sup>38</sup> The kinds of features we have in mind are those included in what are sometimes called *long-arm conceptual roles*. In addition to narrow computational or inferential role (that is, the position an utterance or thought-state occupies in an inferential network, determining what claims it follows from and what claims follow from it) these use-features include certain social factors and inferential and causal connections to actions, as well as the sorts of connections to the world that Field calls “indication relations” (certain causal relations, including perceptual connections to the world).<sup>39</sup> Direct specifications and attributions of these use-features would inevitably be extremely long, complicated, and technical. By instituting an indirect semantic path by means of the pretense it invokes, proposition-talk allows speakers to talk about these matters with just the lexical, linguistic and logical devices of ordinary thing-talk (“moonlighting”, as Crimmins calls it).<sup>40</sup>

Moreover, the pretenses involved in proposition-talk offer an important expressive advantage by producing something like a collapse of the distinction between use and mention. Proposition-talk involves a kind of deferred ostension, giving speakers a way to pick out the use-features they attribute by displaying them in the use of (embedded) sentences with the features in question.<sup>41</sup> In fact, proposition-talk (or something like it) is indispensable for speakers to have this sort of access to its serious subject matter. Beyond these practical advantages, proposition-talk also provides a means of formulating in a natural language, otherwise apparently inexpressible general claims about the sorts of use-features the talk attributes indirectly (more on this in §4). The pretense of proposition-talk thus puts familiar linguistic resources to useful, new purposes, extending the expressive capacity of the language in a logico-syntactically conservative way.

The type of utterance we have considered thus far (e.g., (3)) involves the use of ‘that’-clauses (or singular terms that could be replaced with a ‘that’-clause, e.g., ‘Isabel’s theory’ in ‘Zev believes Isabel’s theory’) with what amount to nominal or apparently referential roles in the utterance. Following Stephen



Yablo (2001), we will call sentences of this type *applied proposition-talk*, in contrast with *explicit proposition-talk*. The central difference between the instances of these two varieties of the talk is whether the notion of proposition functions as a *representational aid*, as a device allowing speakers to talk indirectly about something else, or instead just as a device for talking directly about a *thing represented*.<sup>42</sup> In cases of applied proposition-talk, our SPIF account maintains that a speaker's use of a 'that'-clause (or a substitutable expression) appears on the surface *as if* it served to refer to a kind of object, but, via the operation of the principles of generation from the make-believe behind proposition-talk, that use ends up giving the utterance serious content about the complex use-features of certain utterances or cognitive states (the long-arm conceptual roles displayed in the use of a 'that'-clause or indicated opaquely with a substitutable expression). That is how our account accommodates the intuition that many such claims are genuinely true, despite their involving pretense: they express serious content indirectly, via the operation of the pretense, and what they thereby put forward seriously as being so is so.

Cases of explicit-proposition-talk use the notion of proposition only in the role of putatively expressing a thing represented. Our SPIF account needs to be extended to cover this sort of utterance as well.<sup>43</sup> The paradigm sort of case here involves the explicit use of the expression 'proposition' (or various cognate expressions like 'hypothesis' or 'theory') in contexts of existential quantification. The most basic of these is just an utterance like

(5) There are propositions.

On our view, in the real world outside of the pretense underwriting proposition-talk, there are no propositions. So, taken seriously at face value, an utterance of (5) is false. A pretense theorist could stop there and bite the bullet with respect to claims of this sort, but this is not the only option, nor is it the one that we will adopt.

We take (5) to express a pretense prescribed expressly in the make-believe behind proposition-talk, as a stipulated *background* pretense; it is what we call a *pretense-framework claim*. As such, it does not display a pretense that invokes the make-believe's principles of generation, and so it does not function via a device for talking about something else (e.g., a representational aid). While this means that the principles of generation do not attach any serious content to an utterance of (5), it does not mean the utterance has no such content, at least when we understand it as a pretense-framework claim. It does have serious content, and that content is what allows an utterance of (5) also to make a genuinely true claim.

Here is how. An utterance of (5) ends up with serious content, by involving a *content-oriented* make-believe that is directed at the make-believe itself, at relating what pretenses it includes.<sup>44</sup> This is familiar from pretense analyses

of works of fiction (e.g., Walton (1990)), where an utterance is offered as representing part of the content of such a work, as in,

- (6) Harry Potter wears glasses.

We can take claims like (6) to be true, when we understand them as being about the fiction, in which case they will express something like

- (6\*) The ‘Harry Potter’-stories are such that they portray there being someone named ‘Harry Potter’ who wears glasses.

This is similar to understanding claims like (6) as involving what Gideon Rosen calls a “story-prefix” of the form ‘In the fiction F, . . .’, although, following Walton, we see this as arising out of the way that (6) figures in the make-believe that J.K. Rowling’s stories invoke, rather than just holding as a prior, brute fact about (6).<sup>45</sup>

Applying this thought to (5), the point is that pretense-framework claims of this sort involve content-oriented make-believe, through which they express serious content that is explicitly about the pretense behind the talk. Thus, an utterance of (5) expresses something like,

- (5\*) In the make-believe behind proposition-talk, it is to be pretended that there are propositions.

Since what (5\*) expresses is true, (5), understood as a pretense-framework claim, is genuinely true, even though it expresses something that is to be pretended.

This analysis of (5) extends to cover other cases that might be thought to pose a challenge to pretense accounts of proposition-talk. The worry is the possibility of contexts within which speakers get genuinely (seriously) committed to propositions; that is, the possibility of speakers being committed to uses of (5) taken seriously at face value, when they accept or assert what they do. The sorts of claims that most clearly entail something like (5) are extensions of it that add details, as appears, for example, in an utterance of

- (7) There are numerous propositions *about the distribution of physical properties that Corey believes*.

This utterance seems to make a substantive claim about the world outside of the pretense and seems to be true in virtue of how things are with Corey. We agree, but maintain that our SPIF account covers utterances like (7). We recognize that this extension of (5) goes beyond the stipulated pretense displayed in that utterance, as it invokes a generalized version of the principles of generation, which operate on instances of applied proposition-talk. While

(7) neither displays any specific use-features it attributes (in a ‘that’-clause), nor specifies any particular use-features opaquely (with an expression like ‘Isabel’s theory’), it nevertheless serves to attribute certain *unspecified* use-features to certain of Corey’s cognitive states. But, once again, the notion of proposition serves as a representational aid, making this an instance of (generalized) applied proposition-talk. It is this that explains how a claim like (7) can be genuinely true with substantive (serious) content about the world.

In addition to (7), there are also extensions of (5) that present an initial worry because, while intuitively true, their particular details seem to rule out any appeal to the principles of generation that we have offered, even in a generalized form of the sort that (7) invokes. So they seem to be cases of explicit proposition-talk like (5). Yet, again, their truth appears to depend on the world. One might think, therefore, that accommodating the intuition that such claims are true produces an indispensability argument for realism about propositions. This is the situation with an utterance of a sentence like

- (7') There are numerous propositions about the distribution of physical properties *that no one will, or could, ever assert or entertain.*<sup>46</sup>

Notice that the last part of (7') explicitly blocks any connection to any use-features of any actual, or even possible, linguistic items or cognitive states that any human might produce. So this claim cannot be taken as an indirect assertion about any such use-features, which is to say that the situation with use-features, at least with respect to some of them, cannot be what makes (7') true.

Although (7') appears to be more challenging than the cases we have considered so far, in fact, it is really like (5). This is so because the serious content of (7') is only about the content of the make-believe that is behind proposition-talk. The truth of (7') is thus really just a matter of what pretenses are stipulated as background for the make-believe. We might accommodate intuitions that (7') is true for more substantial reasons as follows. We recognize that human linguistic and cognitive capacities are limited. This means that there are, in a sense, possible long-arm conceptual roles that states of more complex cognitive systems could have but that no state of a human cognitive system could possess. While we do not want to say that (7') makes this point as its serious content (since this strikes us as too reductive), recognizing this fact about our capacities could be the motivation for including the pretense displayed in (7') as part of the background pretense for proposition-talk. Thus, while (7') would be true by stipulation, it is stipulated true *for a substantial reason*, and thus might, in some way, convey this point about the limits of human capacities. If this is on the right track, then even an instance of explicit proposition-talk such as (7') could be true according

to our SPIF account, without the need to posit any real propositions that would (serve to) make it true.

We maintain that no contexts of proposition-talk commit ordinary speakers to what would be expressed by a face-value reading of (5), viz., propositions, as entities.<sup>47</sup> To be clear, this is *not* to say that ordinary speakers will never utter—and will never utter correctly—(5) and its ilk. Rather, it is to say that they will never utter the likes of (5)—correctly or not—and, in so doing, manifest a commitment to the existence of propositions. Note well, this is not to say that if an ordinary speaker were to utter (5), her utterance would fail to evince that she possesses any sort of a commitment. It is, rather, to deny that the commitment that she would take on for so uttering would have to be *ontological* in nature. Instead, the commitment might be what we call a *linguistic commitment* to the use of a certain way of talking, where this is explained in terms of the expressive advantages that the talk provides—perhaps even its possession of a kind of *expressive* indispensability (recall the point made earlier about the collapse of the use/mention distinction regarding long-arm conceptual roles). The reading of this commitment as linguistic, as opposed to ontological, is supported by a feature of proposition-talk that can be taken to cast doubt on the existence of propositions. What we have in mind is how, at least *prima facie*, there is neither means nor need for presenting identity conditions for propositions: no means, because there appears to be no way of accommodating all of conflicting practices that constitute proposition-talk; no need, because, despite the conflicts, proposition-talk occurs unproblematically in the utterances of ordinary speakers.

Expanding on the “no means” point, notice that there are numerous ways in which the linguistic and inferential practices involved in proposition-talk seem to treat propositions in conflicting ways regarding their putative natures. Some practices proceed as if propositions were unstructured entities; others proceed as if propositions were structured. Some practices proceed as if propositions were opaquely differentiated in a fine-grained, neo-Fregean manner; others proceed as if propositions were transparently identified in a neo-Russellian manner.<sup>48</sup> No realist account appears able to accommodate all the relevant practices adequately, and arguments for dropping some of these practices in favor of others would seem misguided.

Notice that this last point ties in with the central reason for thinking there is no need to present realist identity conditions for propositions—that the practices seem fine just as they are. Speakers do not register any kind of tension in them, motivating eliminating some of them to remove conflict. So if there is an account that can accommodate all of the practices as they are, without requiring ontological commitment to propositions but instead explaining the *linguistic* commitment speakers have to proposition-talk, there seems to be reason to prefer it. But this situation tells against taking proposition-talk literally, since doing so presupposes (or: requires; or: is committed to the existence of) propositions. In this case, it seems, a

pretense account that explains proposition-talk without ontological commitment would fit the bill.

### 3.3 *Semantic vs. Pragmatic Pretense*

The foregoing indicates the advantages of a pretense view in vindicating proposition-talk and retaining the expressive gains it offers while avoiding problematic ontological commitments. However, in developing a pretense account of any talk, it is important to apply the notion of pretense in the right way. The view we sketched above is specifically a *semantic* pretense account (a SPIF view) because it postulates pretenses about the referential functioning and success of certain expressions, along with pretenses about the predicative functioning of certain expressions in the attribution of certain kinds of properties and relations. SPIF accounts have an important advantage over pretense accounts of another sort—*pragmatic* pretense accounts (e.g., the one recently offered by Fred Kroon<sup>49</sup>). The latter fall victim to what we call *the engagement complaint*, as captured by the following (familiar) objection to pretense accounts.<sup>50</sup>

Objection: You pretense theorists have aligned your position with Walton's, elucidating your pretense account by appeal to games of make-believe. But if the analogy is apt, your pretense account is doomed, for, in the case of a game of make-believe (think of the mud pie example), those involved in the pretense are actively, and intentionally, engaged in the game. But it is implausible in the extreme to suppose that ordinary speakers are actively or intentionally engaged in the pretense account you are attributing to them. Hence, either the affiliation with Walton's own account is questionable or you are stuck with the unfortunate situation of being committed to the claim that actual speakers actually, and actively (or intentionally) engage in the pretense that you are putting forward.

As we see it, this is a genuine problem for pragmatic pretense accounts; however, as we will explain, it is not a problem for our own semantic pretense account. The general problem for an advocate of a (Kroon-style) pragmatic pretense analysis is that an account that locates pretense in the pragmatics of a discourse will not be able to separate the operation of the pretense from speakers' attitudes and what they are doing with the talk. It might be possible for a view of this sort to maintain that speakers are not actively engaged in deeply imaginative play when they use the discourse. But some awareness of the pretense is still a part of the speakers' intentions, since, according to Kroon (2004), they rely on the "interpretive tension"—specifically, generating a contradiction or truism—to pragmatically affect the assertion of a non-trivial and potentially true serious content that differs from the claim's content inside the pretense.

For example, on Kroon's view, when a speaker utters sentences like (2) and (4),

[w]e take the speaker to pretend that the reference determiners underlying his use of distinct names like ‘Hesperus’ and ‘Phosphorus’ secure reference to distinct objects, or that the reference determiner underlying his use of a name like [‘Santa Claus’] secures reference to a particular object.<sup>51</sup>

Indeed, Kroon also includes explicit reference to the pretense in the *content* of a speaker’s serious assertion—in what is *asserted* or *conveyed*, as opposed to what is, strictly speaking, *uttered*.<sup>52</sup> And he further acknowledges speakers’ awareness of pretense, when he describes them as “opportunistically engaged in a pretense” and assimilates the relevant cases to ones where he acknowledges that a speaker “achieves his communicative purpose partly through knowing that his audience knows that he is doing as if the description is apt.”<sup>53</sup> As mentioned above, while this might be plausible, when speakers are intentionally speaking figuratively, it is problematic for any account of a discourse that speakers do not typically consider figurative, e.g. those of interest here.

By contrast, while we agree that the objection is serious, we deny that it creates a problem for our SPIF account because ours is not an account of speakers’ attitudes or activities. A speaker who has uttered (1) or (6) would most likely think of herself as somewhat engaged in (or at least intentionally alluding to) the make-believe in which the utterance counts as a move, and the same might be true of speakers using metaphors, or otherwise speaking figuratively. But it is not (and certainly need not be) true of people making existence claims, nor must speakers making attitude ascriptions or otherwise employing ‘that’-clauses think of themselves as pretending anything. Our pretense analysis does not assume that speakers or hearers are engaged in such a pretense. On our view, pretense comes in as part of the account of how the talk functions semantically; it does not enter as part of an account of what speakers intend to do or what hearers take them to be doing. A speaker’s use of a way of talking, so explained, is like the use of a figure of speech that is best understood in terms of a possible game of make-believe: The speaker need not engage in the game behind the talk in order to use that talk.<sup>54</sup> Moreover, she does not have to be aware about how or whether the talk’s functioning involves pretense.

Although speakers need not engage in the pretense operating in some way of talking, *theorists* (e.g., the present authors), offering an accurate account of that fragment of discourse, will mention pretense, in order to explain what serious claims about the world its instances make (and how they do this). But no one needs to engage in, or even be aware of, the games of make-believe that figure in the explanation of how pretense-involving ways of talking function in order to use the talk competently. As such, our SPIF account avoids the engagement complaint by keeping all reference to the pretense within the *theorist’s explanation* of the claim’s semantics—of how it ends up with the serious content it does. What a speaker seriously asserts makes no

mention of pretense at all, and no awareness of the pretense (let alone any engagement in it) needs to be any component of the speaker's attitudes or mentioned in any explanation of what the speaker is doing.

Even if that objection can be quelled, one might complain (as Stanley (2001) does) that pretense theorists like us are engaged in "bad old paraphrasing" and, thus, that we suffer the ills that that method endures. In drawing an analogy to paraphrase, this objection focuses too much on a single aspect of a SPIF account, namely that it does assign truth conditions to sentences other than the ones those sentences seem, *on the surface*, to have. But the important difference between the paraphraser and the pretense theorist is that, unlike the former, the latter provides an account of how sentences get connected with the truth conditions the theorist actually assigns. Since the paraphraser's inability to do that is what is really behind the objection, this challenge can be resisted by someone giving a SPIF account of some discourse.

We mentioned above that we take the engagement complaint to pose a serious challenge to any pretense theorist: Either explain why your view does not require speakers to be at least aware of pretense at work in their talk, or explain why, although requiring pretense awareness may be a problem for some views, it is not one for *yours*. One way of explaining why it is not actually a problem would be by showing that it is really the only way in which certain problematic discourse can be resolved. This is Kroon's tack. For the reasons given above, we take requiring pretense awareness to be unavoidable for any pragmatic pretense account because of where it locates the pretense—in the pragmatics of the discourse, i.e., in factors pertaining to its use (specifically, those involving what speakers are doing with the sentences that they are uttering). As such, any pragmatic pretense approach will have to bite the bullet with respect to the engagement complaint and therefore must follow Kroon's tack. Our *reposte* is the provision of a SPIF account that explains the talk in terms of pretense, without requiring even pretense awareness on the part of speakers employing the discourse.

#### 4. The Semantic Pretense Behind Proposition-Talk

We have the space here to explain how a SPIF account of proposition-talk works, but only for certain forms of first-level proposition-talk that are the focus of the philosophies of mind and language. The relevant cases of proposition-talk include utterances like the following.

- (8) Goldbach's Conjecture is that every even number greater than 2 is the sum of two primes.
- (9) (What) Dex believes (is) that crabapples are edible.
- (10) 'Holzäpfel sind eßbar' means (expresses the proposition) that crabapples are edible.

- (11) What Corey uttered means (expresses the proposition) that crabapples are edible.

The forms of these utterances are presented respectively in the following schemata.

- A)  $n = (\text{the proposition}) \text{ that } p$   
 B)  $\exists x(Fx \ \& \ x = (\text{the proposition}) \text{ that } p)^{55}$   
 C)  $n \text{ means (expresses the proposition) that } p$   
 D)  $\exists x(Fx \ \& \ x \text{ means (expresses the proposition) that } p)$

There are also forms of proposition-talk related to these basic forms (especially form B)) but which involve additional complexity. For instance, there are cases that include embedded attitude ascriptions, such as

- (12) Isabel said that Zev believes that crabapples are edible.

While one technically can symbolize (12) with form B), doing so misses the complexities present in the sentence. To capture these complexities, a more detailed symbolization is needed. One should symbolize (12) along the lines of

$$B') \exists x(Fx \ \& \ x = t[\exists y(Gy \ \& \ y = t[p])]),$$

where 'F' stands for '... is said by Isabel', 'G' stands for '... is believed by Zev', and 't[...]' is a nominalizing operator that turns a sentence into a 'that'-clause. The iteration of this operator indicates that (in the context of the pretense) one of the constituents of the proposition Isabel asserted is another proposition (the one that Zev supposedly believes). The new details B') includes make it trickier to deal with, but its treatment proceeds along the same lines as the more basic cases. We give an indication of how this works below, but for the most part we will ignore these more complex cases here for space considerations.

As previously noted, we take the prescriptive real-world conditions for the pretenses displayed in utterances of these forms to involve facts about the long-arm conceptual roles of certain linguistic items (spoken and their mental analogs). It is easier to specify the real-world conditions prescriptive for the pretenses displayed in utterances of forms C) and D) since the subjects of these utterances—what are putatively attributed propositional content in them—are already linguistic entities. But even in utterances of the first two forms it is possible to specify "metalinguistic" use-theoretic conditions of the desired sort to serve as prescriptive for the pretenses they invoke.



#### 4.1 Some Principles of Generation

We will now present, all at once, the principles of generation from the make-believe behind proposition-talk, which govern these different forms of utterance. We will then explain these rules individually. The relevant principles of generation are given schematically as follows:

- P-A)  $\Pi n \Pi p$  (The pretenses displayed in an utterance of ‘ $n =$  (the proposition) that  $p$ ’ are prescribed iff the speaker assigns ‘ $n$ ’ a (singular-term) long-arm conceptual role relevantly similar to that of ‘that  $p$ ’-as-the-speaker-actually-understands-it (in the utterance))
- P-B)  $\Pi p$  (The pretenses displayed in an utterance of the form ‘ $\exists x(Fx \ \& \ x =$  (the proposition) that  $p$ )’ are prescribed iff  $\exists y[F^*y \ \& \text{the speaker or some other speaker/thinker mentioned in ‘F’ assigns } y \text{ a long-arm conceptual role relevantly similar to that of ‘p’-as-the-speaker-actually-understands-it (in the utterance)}]$ )<sup>56</sup>
- P-C)  $\Pi n \Pi p$  (The pretenses displayed in an utterance of ‘ $n$  means (expresses the proposition) that  $p$ ’ are prescribed iff the speaker assigns  $n$  a long-arm conceptual role relevantly similar to that of ‘ $p$ ’-as-the-speaker-actually-understands-it (in the utterance))
- P-D)  $\Pi p$  (The pretenses displayed in an utterance of the form ‘ $\exists x(Fx \ \& \ x$  means (expresses the proposition) that  $p$ )’ are prescribed iff  $\exists y[F^*y \ \& \text{the speaker or some other speaker/thinker mentioned in ‘F’ assigns } y \text{ a long-arm conceptual role relevantly similar to that of ‘p’-as-the-speaker-actually-understands-it (in the utterance)}]$ )

Before moving on to the gloss, there is one point to note. The principles of generation are given by (that is, generated by) schematic principles. Indeed, what makes P-A) through P-D) schematic is their use of substitutional variables (‘ $n$ ’ and ‘ $p$ ’) and the universal substitutional quantifier ‘ $\Pi$ ’ (understood as a device for encoding potentially infinite conjunctions). They capture collections of individual principles of generation formed by filling in the schematic variables ‘ $n$ ’ and ‘ $p$ ’ with singular terms and declarative sentences (respectively) from the substitution class associated with the quantifiers (in these cases, the speaker’s idiolect). In what follows, however, we will talk about P-A) through P-D) as if they themselves were principles of generation. This will not affect any of the points that we want to make here. With that understood, we turn to the rules P-A) through P-D)

##### 4.1.1 Form A) and Rule P-A)

As stipulated in rule P-A), the prescriptive real-world conditions for the pretenses involved in utterances of the form

- A)  $n =$  (the proposition) that  $p$

have to do with similarities in use-features between the linguistic expressions actually used in the utterances themselves. The rule correlates the prescription of these pretenses with a coincidence between the nominal (i.e., singular-term) use-features of the expressions flanking the identity expression. Use-features are a core component of the notion of understanding employed in (P-A) through (P-D); the principles view it as a practical ability—a function of a speaker’s using an expression in a certain way. This makes understanding non-intensional and a matter of degree, something on the order of giving an expression a computational or inferential role in a one’s cognitive system. The degree to which a speaker’s inferential procedures treat two expressions as intersubstitutable (in at least all extensional contexts) is the degree to which we can consider them cognitively equivalent for the speaker.<sup>57</sup> According to rule (P-A), an utterance of form (A) seriously asserts indirectly that the name employed is cognitively equivalent in this sense (for the speaker) to the ‘that’-clause employed. So, the serious assertion a speaker makes indirectly with an utterance of

- (8) Goldbach’s Conjecture is that every even number greater than 2 is the sum of two primes,

is that the name ‘Goldbach’s Conjecture’ has the same (singular-term) long-arm conceptual role that the speaker of (8) attaches to ‘that every even number greater than 2 is the sum of two primes’.

One potential worry about this account of claims like (8) is that it may seem to generate over-easy prescription of the pretenses involved in proposition-talk of this form. Without some sort of constraint on when a speaker can treat two expressions as cognitively equivalent, it seems as if utterances of form (A) would all be matters of stipulation, and will therefore be infeasible. However, there is a kind of external check in place, since speakers can be wrong about how they use expressions. This is especially so if the long-arm conceptual role a speaker assigns to an expression through his use of it includes external and social factors like matching the way others use the expression.<sup>58</sup> This would be enough to prevent someone’s utterance of, for example,

- (13) Goldbach’s Conjecture is that mathematics is difficult,

from being infeasible. Of course, (13) could be correct, but then the speaker would not be using ‘Goldbach’s Conjecture’ as a name for Goldbach’s Conjecture (i.e., as English speakers use it).

#### 4.1.2 Form B) and Rule P-B)

Rule (P-B) serves to associate descriptions (including explicitly quantificational expressions) that are used in proposition-talk with particular *sentential*

use-features. This rule cannot make a coincidence in nominal use-features between the descriptions and ‘that’-clauses prescriptive for the pretenses displayed in claims like

(9) What Dex believes is that crabapples are edible,

because the descriptions (‘what Dex believes’, i.e., ‘the thing believed by Dex’) get analyzed away (à la Russell) in terms of quantification and predication. The underlying form of these sorts of claims is thus

B)  $\exists x(Fx \ \& \ x = (\text{the proposition}) \text{ that } p)$ .

According to P-B), the real-world conditions prescriptive for the pretenses that claims of form B) display are partly a matter of how the speaker understands the embedded sentence (what goes in for ‘p’) and partly a matter of something sentence-like satisfying certain conditions. The predicate ‘F\*’ employed in the specification of these conditions is related to the predicate ‘F’ from the instance of proposition-talk in a manner analogous to how Field (1978) explains the sentential notion of belief\* to be related to the ordinary notion of belief in his divided approach to mental representation. On Field’s analysis, the ordinary propositional understanding of belief gets replaced with a two-part analysis in terms of, first, a (“starred”) relation a thinker bears to a syntactic representational item encoded in and manipulated by her cognitive system (e.g., a sentence of “mentalese”), and second, an account of what that representational item means.<sup>59</sup> The “starred” predicate is thus something like a nominalistic counterpart to the predicate the instance of proposition-talk employs.

This counterpart predicate is supposed to apply to the sentential analogs of the putative propositions that are ostensibly described by the original predicate. So, for instance, the counterpart to ‘is asserted by Dex’ is something like ‘is uttered by Dex’, since presumably one asserts propositions by uttering sentences. According to P-B), then, an utterance like

(14) What Dex asserted (at time *t*) is that crabapples are edible

seriously claims indirectly that some sentence uttered by Dex (at time *t*) has use-features similar to those the speaker of (14) gives to the embedded sentence about crabapples. Similarly, a claim ostensibly about what Dex believes would make indirectly a serious assertion about something along the lines of a sentence of mentalese that Dex believes\*, namely that it has a particular long-arm conceptual role.

One problem confronting rule P-B) is that once we move away from claims about what people assert, believe, etc. there is considerably less reason for thinking there is a sentential analog for the putative proposition denoted

by the description, and, so, considerably less reason for thinking that the serious assertion made indirectly with an utterance of form B) is about anything sentence-like. Consider, for example,

- (15) The definitive generalization about the irrational numbers is that no irrational number is a ratio of two integers.

It seems that (15) would be true, even if the irrational numbers had never been discovered, and so no assertions or beliefs regarding them had ever been formulated. It might therefore seem misguided to hold that (15) makes a serious assertion about anything sentence-like. However, we can partly assuage this worry by recognizing that if (15) were uttered, then there would *automatically* be a sentence-token available to be the subject of a serious assertion, namely, the sentence embedded in the utterance itself. Since this sentence is also the one used to identify the use-features the serious assertion is concerned with, this would make the second conjunct on the right-hand side of the relevant instance of P-B)—“y has a long-arm conceptual role similar to that of ‘p’-as-the-speaker-actually-understands-it”—trivially true. The serious purpose that rule P-B) gives to utterances of form B) must therefore involve more than just the attribution of use-features to sentence-like entities.

The non-trivial first conjunct on the right-hand side of any instance of P-B) is what provides substantive serious purposes to the relevant utterances of form B). This purpose is to associate the possession of certain use-features with the satisfaction of certain conditions. The use-features in question are picked out via deferred ostension through the use of a sentence with those features, and the relevant conditions involve the satisfaction of a nominalistic counterpart to the “propositional” predicate employed in the utterance. For example, the serious assertion made by (15) is that the possession of the use-features the speaker attaches in that utterance to ‘no irrational number is the ratio of two integers’ is a necessary condition for the satisfaction of the “starred” counterpart of the predicate ‘is a generalization definitive of the irrational numbers’.

The foregoing explanation also applies to the less problematic utterances about what people assert, believe, etc., such as

- (14) What Dex asserted (at time *t*) is that crabapples are edible.

The more precise statement of what (14) seriously asserts indirectly is that the possession of a long-arm conceptual role relevantly similar to that of ‘crabapples are edible’-as-the-speaker-of-(14)-actually-understands-it is a necessary condition for the satisfaction of the predicate ‘is uttered by Dex (at time *t*)’.

The maneuver just considered, involving the requirement of a nominalistic counterpart to any “propositional” predicate employed in an utterance of form B), generates a further worry about rule P-B). Very few predicates that putative describe propositions have “starred” counterparts in natural language the way, perhaps, ‘is asserted by Dex’ does. And very few of them have Field-style counterparts, the way ‘is believed by Dex’ does (provided we are willing to assume a language of thought). So specifying the prescriptive real-world conditions for utterances of form B) directly is rarely as easy as it is for (14) above. In fact, in the sorts of cases just considered, where the description employed does not appear to implicate anything sentence-like, it is not clear how a nominalistic counterpart could be constructed; there may be no general, systematic way of doing so. But for rule P-B) to work as the principle of generation for the pretenses displayed in utterances of form B), it must at least be possible to generate them on a case-by-case basis. So goes the latest worry.

Now, while this last point might be difficult to establish, we see no in principle reason for why that it cannot be done. Consider the predicate from (15), ‘is a generalization definitive of the irrational numbers’. This predicate appears to describe propositions without implying the existence of anything sentence-like. But the predicate ‘definitively generalizes about the irrational numbers’ is a plausible candidate for a counterpart that we can apply to sentences and link with the possession of certain use-features by a claim like (15). The general possibility of generating a “starred” counterpart predicate for any “propositional” predicate is something that would need to be argued for in a more complete presentation of a SPIF account of proposition-talk.<sup>60</sup>

#### 4.1.3 Forms C) and D) and Rules P-C) and P-D)

The rules P-C) and P-D) are easier to explain because the forms of utterances they govern,

- C) n means (expresses the proposition) that p
- D)  $\exists x(Fx \ \& \ x \text{ means (expresses the proposition) that } p)$ ,

employ subject-expressions that already pick out sentence-like entities. Thus, these subject-expressions can also function in the specifications of the real-world conditions prescriptive for the pretenses the utterances involve. These instances of proposition-talk are important because the notion of meaning or content is naturally understood in terms of the expression of a proposition, meaning that utterances of forms C) and D) purport to attribute propositional content to the linguistic items they denote. Thus, by specifying the prescriptive, real-world conditions for these utterances (thereby determining the serious assertions they make indirectly), the rules governing

proposition-talk of these forms constitute a start on an account of meaning attribution, and, derivatively, on an account of meaning.

Utterances of form C) ostensibly attribute propositional content to named linguistic items, as in

- (10) ‘Holzapfel sind eßbar’ means (expresses the proposition) that crabapples are edible,

and rule P-C) specifies the real-world conditions prescribing the pretenses involved in (10) and its ilk. These conditions are fairly straightforward: The relevant speaker assigns the linguistic item (sentence), which is named by the term-expression that goes in for ‘n’, a place in an inferential network of sentences much like the place that the embedded sentence (viz., the one that goes in for ‘p’) has for the speaker as she actually uses it. So, in (10), the serious assertion made indirectly is that the sentence ‘Holzapfel sind eßbar’ has a long-arm conceptual role relevantly similar to the one that the speaker of (10) gives to the embedded sentence about crabapples. On our view, then, attributions of propositional content (i.e., meaning) accomplish the indirect attribution of a long-arm conceptual role that is itself picked out indirectly through the (nominalized) use of some other (already understood) sentence that has similar use-features.

The explanation of utterances of form D) is similar. These instances of proposition-talk purport to attribute propositional content to linguistic items picked out with descriptions (or, more generally, quantificational expressions). This is what is done, for instance, in utterances of sentences like

- (11) What Corey uttered means (expresses the proposition) that crabapples are edible.

Notice that, in terms of how a long-arm conceptual role is attributed to the linguistic item picked out in the utterance, rule P-D) is similar to rule P-C). The pretenses displayed in the utterance are prescribed exactly when the linguistic item denoted in it has a long-arm conceptual role similar to the one the speaker gives to the sentence embedded in the ‘that’-clause.

Rule P-D) is also similar to rule P-B) in that each uses a quantificational (description-) expression on its right-hand side, one related to the description-expression mentioned on its left-hand side. The difference is that in P-D) the relation between the two descriptions is identity; this rule does not involve the complication P-B) faces as a result of its need for some sort of “starred” counterpart to the predicates putatively applied to propositions in utterances of form B). Since the predicates employed in utterances of form D) already apply to linguistic items, no transformation to linguistic counterparts is necessary. The conclusions drawn about what meaning attributions

accomplish with respect to utterances governed by rule P-C) apply here as well.

#### 4.2 Further Expressive Gains

The explanations just given of these four forms of proposition-talk bring out a centrally important expressive gain that this way of talking adds to a language, in virtue of the role pretense plays in its functioning. As mentioned above, on our view the use of an utterance of form C), such as

- (10) ‘Holzäpfel sind eßbar’ means (expresses the proposition) that crabapples are edible,

allows a speaker to attribute use-features to a particular linguistic item (here the mentioned German sentence), by indirectly identifying them as ones relevantly similar to those possessed by some other expression (here the embedded sentence about crabapples, as the speaker understands it). The advantage of using proposition-talk to make this sort of attribution is that the use-features specified actually are *activated* in the attribution, as the speaker’s use of the embedded sentence picks them out via a kind of deferred ostension. As such, the attribution the speaker makes is not referentially opaque, like it would be, given a two-place metalinguistic claim, like

- (16) ‘Holzäpfel sind eßbar’ has the same long-arm conceptual role as ‘crabapples are edible’.

Although the serious attributions of use-features made with utterances of form C) are indirect, they are more transparent than those of claims like (16) because, in the course of specifying them, they, in effect, *display* the features attributed. This produces the aforementioned collapse of the use/mention distinction, allowing speakers pick out and attribute use-features by employing them. This collapse is important, as it provides a middle ground between a direct, explicit specification and attribution of the relevant use features’ and the opaque specifications of those use-features offered by two-place metalinguistic claims like (16). There the relevant expressions all get mentioned, and directly specifying the kind of features being attributed would, in all likelihood, involve highly technical and complex statements (if such specifications can be stated at all). Pretense thus allows us to assert what we would with the latter, direct sort of claim, but in a way that is both logico-syntactically simpler and more transparent, viz., by saying it indirectly through seeming to say something else.

Beyond the practical advantages proposition-talk offers (with respect to the attribution of the complicated sorts of use-features we have been emphasizing), this talk also genuinely extends the expressive capacity of a language,

by providing a way for speakers to make certain kinds of general claims they could not otherwise make. Talking *as if* there were special objects of the sort propositions are supposed to be implements a means of attributing generalized (in the sense of being schematic) use-features, as in an utterance of

- (17) Everything Dex asserts is something he believes.

This utterance attributes a “schematic” long-arm conceptual role to all of the sentences Dex utters assertorically (as he uses them), a role similar to a “schematic” long-arm conceptual role possessed, for example, by some mentalese sentences he has in his belief-box.<sup>61</sup> The pretense of propositions therefore avoids the need to incorporate into our language new, complicated logical and linguistic devices (like schematic sentence variables and substitutional quantification) of the sorts that would be needed to make this kind of claim directly, as in

- (18)  $\Pi p(\text{Dex utters assertorically a sentence that has a long-arm conceptual role similar to that of 'p'-as-I-actually-understand-it} \rightarrow \text{Dex has a belief-state employing a sentence-like element with a long-arm conceptual role similar to that of 'p'-as-I-actually-understand-it}).$

The possibility of quantification, *in the context of a pretense*, over the sort of entities propositions are supposed to be, allows us to make schematic generalizations of the sort made by (18) with the linguistic and logical devices already available in ordinary thing-talk—most centrally, predication and objectual quantification.

## 5. Concluding Remarks

As we have been stressing, our SPIF account of proposition-talk reveals the practical and expressive advantages this way of talking incorporates into a language, even if it operates in virtue of a semantic pretense. Of particular importance is the way this talk extends the expressive capacity of our language, by providing a means of making schematic general claims without appeal to new, complicated logical and linguistic devices. An especially beneficial practical role proposition-talk plays is that of giving speakers a way to display certain use-features of linguistic expressions, as they attribute these features to other linguistic and mental items. This suggests further connections with mathematical discourse understood in light of Benacerraf’s arguments. Benacerraf originally took his arguments against mathematical platonism to support structuralism. Perhaps, then, number-talk (or maybe better, set-talk) might be understood as a pretense-based means for employing objectual quantification and predication to new expressive ends in making serious



claims indirectly about the structural features of progressions in general.<sup>62</sup> But this neatly parallels what we have said here about how proposition-talk functions in relation to conceptual- or inferential-role semantics.

Let us return, then, to Benacerraf's Challenge for propositions, the access problem and the non-uniqueness problem, to show how these challenges can be met by our pretense account of proposition-talk. To start, recall that APA presented a version of the access problem for ontological platonists. As pretense theorists about proposition-talk, we can accept APA as sound; hence, to the extent that APA gave rise to the access problem for propositions, that problem is (dis)solved. Indeed, unlike the situation with respect to a realist view of proposition-talk, retaining this semantics does not generate a problem regarding our epistemic access to propositions. If, as we contend, propositions do not really exist, there is no worry about how we can have epistemic access to them.

The problem of non-uniqueness is also mitigated, as the elements of the SPIF account that we have presented accommodates the myriad linguistic and inferential practices that seem to pull us in different directions regarding the nature of propositions. As mentioned above, when speakers talk and reason, sometimes it is as if they were committed to unstructured propositions, and sometimes it is as if they were committed to structured propositions. And, when they seem to indicate a linguistic commitment to structured propositions, some appear to implicate "neo-Fregean" propositions, with opaque identity-conditions, while others appear to implicate "neo-Russellian" propositions, with transparent identity-conditions.<sup>63</sup>

Our SPIF account covers a caudrie of different practices, by involving a pretense of *fine-grained* neo-Russellian propositions—distinct ones for every distinction in either the structures or modes of presentation involved in identifying them (to accommodate activities supporting a neo-Fregean view).<sup>64</sup> Some of these distinct propositions end up being "identical", this pretense being prescribed when the expressions that (pretend-)denote the putative structurally distinct propositions are truth-functionally equivalent (thereby accommodating activities supporting an unstructured view of propositions<sup>65</sup>). An account based on pretense can stipulate the different features needed for this kind of flexibility and scope, even if those features sound incompatible—after all, the putative entities required are just pretend. As is clear, a realist account of propositions could not have this kind of flexibility in dealing with Benacerraf's Challenge.

To conclude, we have presented a SPIF account of proposition-talk that vindicates this way of talking, even if arguments like those Benacerraf has put forward regarding numbers led us to deny the existence of propositions. By explaining the functioning of proposition-talk in terms of semantic pretense, our account accommodates our seemingly realist linguistic and

inferential (in particular, quantificational) practices—our *linguistic* commitments to proposition-talk—and maintains the sort of “plausible” semantics Benacerraf thought it important to keep, though with the semantics embedded in the context of a pretense.<sup>66</sup>

## Notes

<sup>1</sup> Field (1989); Balaguer (1998).

<sup>2</sup> In addition to distinguishing pretense-involving fictionalism (PIF) from error-theoretic fictionalism (ETF), it is also important to distinguish within PIF between *semantic* pretense accounts (SPIF) and *pragmatic* pretense accounts. The latter sort of approach is developed in Kroon (2004). We discuss this other sort of pretense account below.

<sup>3</sup> Walton (1990, 1993).

<sup>4</sup> Walton (1990, Ch. 11), Evans (1982, Ch. 10), Kroon (1996) present slightly different pretense accounts of existence-talk. See also Walton (1993) and Hills (1997) on metaphor, Yablo (1996) on possible-worlds-talk, Yablo (2001, 2005) on mathematics, Crimmins (1998) on attitude ascription and identity-talk, Kroon (2001, 2004) on identity-talk, Woodbridge (2005, 2006) on truth-talk and (a first pass on) proposition-talk.

<sup>5</sup> We take a way of talking to be a loosely bounded fragment of discourse (and thought) centered around some expression (concept) or family of expressions (concepts)—e.g., modality, numbers, propositions—or around some mode or figure of speech—e.g., metaphor, irony, hyperbole.

<sup>6</sup> Benacerraf’s actual conclusion is that numbers are not objects, given his initial attraction to structuralism. (See Benacerraf (1965), but also see his recant, in his (1983).) It should be noted that other *structuralists* (e.g., Shapiro (1991)) have argued, in accordance with Benacerraf’s original conclusion, that the non-uniqueness problem may not actually serve as a problem. Since this does not bear on the issues that are raised in this paper, we shall leave it aside.

<sup>7</sup> Benacerraf (1973). It should be noted that, although originally the problem presumed a causal theory of knowledge, he (1983, postscript) and Field (1989, pp. 25–6) have since shown that the access problem is not tethered to a commitment to a causal theory of knowledge.

That said, the problem is obvious, were one to insist on a naturalized epistemology. Given the demand that an account of knowledge acquisition be, in a sense, *unrestricted*—blind to the relevant domain under consideration—it may well be that an insistence on naturalized epistemology is ultimately dispensable. For an argument against the platonist’s commitment to the *a priori*, see Kitcher (1983).

<sup>8</sup> Jerry Katz (2004) disagrees. Given considerations of time (and space!), we shall have to leave aside his ‘realistic rationalism’.

<sup>9</sup> Benacerraf (1973, p. 673).

<sup>10</sup> Moore (1999b).

<sup>11</sup> Benacerraf (1965, p. 291). In this quote, Benacerraf alludes to his original penchant for structuralism, and the view that numbers are not objects but are, as Moore (1998, p. 231) says, “progressions in general”.

<sup>12</sup> Cf. Lowe (1993, p. 145), for an interesting discussion of Benacerraf’s non-uniqueness problem.

<sup>13</sup> Moore (1999b, p. 236).

<sup>14</sup> Melia (1992).

<sup>15</sup> Moore (1999b, p. 251).

<sup>16</sup> “Candidate” because they figure into putative reductions of propositions.

<sup>17</sup> Moore (1999b, p. 255).

<sup>18</sup> We are not the first people to discover that the argument can be generalized. For a useful discussion, see Balaguer (1998). Although, to our knowledge, Balaguer has not extended the

argument to subsume proposition-talk, it is clear that the way in which we set out the argument is compatible with his own, favored fictionalist treatment of mathematics.

<sup>19</sup> Balaguer (1998, Ch. 2).

<sup>20</sup> Maddy (1990). But see a later time-slice in Maddy (1997).

<sup>21</sup> E.g., Parsons (1994), Resnik (1997), and Shapiro (1997).

<sup>22</sup> Katz (1998, 2004).

<sup>23</sup> Of course, the negations of these false statements would be true.

<sup>24</sup> For ETF accounts, see Field (1980, 1989) and Balaguer (1998). Contrast the PIF account offered in Yablo (2005).

<sup>25</sup> But see Yablo (2001), Woodbridge & Armour-Garb (2009), and Armour-Garb & Woodbridge (2010).

<sup>26</sup> Quine (1960, Ch. 6).

<sup>27</sup> In this paper, we do not address the question of whether propositions can be construed sententially—as *sentential entities*. For a number of arguments against the sentential entity view, see Church (1950) and Schiffer (1987, 2003). Davidson (1968) presents a view in which the embedded sentence is used rather than (or perhaps as well as) mentioned, but Loar (1976, pp. 147–148) argues that this approach still requires an appeal to propositions in order to work adequately. See Rumfitt (1993) on this point as well.

<sup>28</sup> Walton (1990, pp. 37–38).

<sup>29</sup> Crimmins (1998, p. 5).

<sup>30</sup> *Ibid.*, p. 32.

<sup>31</sup> The contrast is with *purely pretend* claims that put forward no serious content. Pure pretense is the analog of ungroundedness in the pretense account of truth-talk developed in Woodbridge (2005). The most salient cases of purely pretend claims are those made by liar and truth-teller sentences like ‘This sentence is not true’ and ‘This sentence is true’.

<sup>32</sup> Walton (1990, Ch. 11).

<sup>33</sup> Crimmins (1998).

<sup>34</sup> *Ibid.*, pp. 9–10, 23. For simplicity, we follow Crimmins and discuss the view only as it pertains to term expressions, but presumably the same principles apply to different ways of attributing (even the same) features.

<sup>35</sup> Crimmins (1998, p. 28). This is a statement of the *truth-conditions* for (3)—the example Crimmins offers as (24). He goes on to distinguish the *modal content* this claim expresses as being that “...Hammurabi attributes evening visibility to *Venus* using the Hesperus-mode” (p. 30).

<sup>36</sup> Crimmins (1998, p. 35).

<sup>37</sup> *Ibid.*, p. 16. Crimmins describes the belief ascription ‘Hammurabi believes that Hesperus is brighter than Phosphorus’ as feeling like it simply talks about Hammurabi, believing, Hesperus, brightness, and Phosphorus. More explicitly, on p. 10 he describes a particular *de re* belief ascription as “designed for relating Hammurabi to *Hesperus* without entailing anything special about how he thinks of the *thing*” (italics added).

<sup>38</sup> This constitutes the most significant difference between our view of proposition-talk and Crimmins’s account of attitude ascription. Crimmins’s account still involves the assumption that intentional-attitude-talk attributes real relations (albeit, more complex ones than the simple two-place relations it initially appears to attribute) between thinkers and real Russellian propositions (see, for example, the version of the hidden-indexical approach developed in Crimmins (1992)). We maintain that all proposition-talk involves pretense, and the notion of a proposition has no application outside of the make-believe behind the talk.

<sup>39</sup> See Field (1994, pp. 253–256; 2001a, pp. 75–76; 2001c, pp. 158–159); Brandom (1994, pp. 119–120 and Ch. 4).

<sup>40</sup> Crimmins (2002), p. 95. Our account involves an extension of the idea of ordinary thing-talk that Crimmins has in mind, since he focuses on singular terms functioning to pick out things and predicates serving to describe them, while we focus on nominal uses of ‘that’-clauses.

Still, the quantificational, counting, and anaphoric practices that speakers apply to ‘that’-clauses are the same as those Crimmins considers central in ordinary thing-talk, so the extension is fairly natural.

<sup>41</sup> See Davidson (1968); Loar (1976, pp. 147–148); Rumfitt (1993); Brandom (1994, Ch. 8); Heal (2001).

<sup>42</sup> Yablo (2001), p. 81. The general distinction Yablo draws is between *applied X-talk* and *explicit X-talk*—between talk in which apparent mention of X’s functions only as a representational aid to talk about something else in the real world and talk in which apparent mention of X’s functions to pick out things represented.

<sup>43</sup> Thanks to an anonymous referee for pressing us on this point. What follows is our response.

<sup>44</sup> Cf. Walton (1993).

<sup>45</sup> Rosen (1990, p. 331) and Walton (1990, pp. 401–402).

<sup>46</sup> This case, and the need for explaining both its serious content and its role in the pretense, was suggested by an anonymous referee, for which we are grateful.

<sup>47</sup> The exception would be those theorists who advocate propositional realism and so would seriously assert (5), giving it a face-value reading. If our pretense account of proposition-talk is correct, they would be wrong to have so asserted.

<sup>48</sup> Cf. Moore (1999a).

<sup>49</sup> Kroon (2004). Kroon’s paper is becoming a standard in the field, as evidenced by its inclusion in Martinich (2008).

<sup>50</sup> A version of this objection is explicit in Stanley (2001). Stanley raises other objections, which would likewise raise problems for Kroon’s (or a Kroon-style) pragmatic pretense account. We shall briefly mention one other such objection.

Evidently, the psychological facility that enables speakers to engage in a pretense is not available to people with autism or Asperger’s Syndrome, as they have difficulty interpreting non-literal uses of expressions. If that is right, we would predict that they would be unable to parse, or understand, the parts of language use that are governed by, or that involve explicitly, the pretense, which is to say that, on Kroon’s account, they would be unable to understand negative existentials and identity statements. This would be so because, as Kroon (2001, 2004) makes clear, on his account of identity statements and negative existential, emphasis is placed on the way speakers exploit the literal semantic content of predicates—e.g., ‘identical’ and ‘exists’—in a pretense in order to assert what is not semantically expressed. But since people with autism and Asperger’s appear to have no problem understanding these notions of identity or existence (anymore than anyone else does, at any rate) then, given that, as Stanley points out, they have no problem understanding math (or, we conjecture, logic), it follows that Kroon’s pragmatic pretense account of negative existentials, identity statements, etc. is false. Although we would not put much weight on this objection, it does make the point that there seems to be a problem with a philosophical account that stands or falls based on particular features of only a subset of linguistically competent language users.

<sup>51</sup> Kroon (2004, p. 20).

<sup>52</sup> *Ibid.*, pp. 14, 16–17.

<sup>53</sup> *Ibid.*, p. 13.

<sup>54</sup> Crimmins (1998, pp. 10, 14–15). Crimmins talks of speakers being engaged in *shallow* pretense. While we agree with what he says about the level of a speaker’s engagement (specifically, her lack thereof) with the pretense a way of talking involves, characterizing speakers as pretending in any sense (even “shallowly”) runs the risk of setting up what can become an impassible stumbling block for certain theorists suspicious of the approach. We are therefore willing to give the naysayers the word ‘pretend’ in this context: speakers (other than a rather small minority) are *not* pretending when they use proposition-talk (or existence-talk or truth-talk). Still, we should understand these fragments of discourse to be “as if” ways of talking that involve a systematic dependency on how things actually are, and we should

explain (model?) this special kind of “as if” nature in terms of pretense, specifically, games of make-believe.

<sup>55</sup> Assume ‘F’ is a complex predicate that includes the uniqueness clause that is part of a definite description like ‘what Dex believes’ (i.e., ‘the thing that Dex believes’). The same applies to form D) below. We will leave this implicit when possible for simplicity.

<sup>56</sup> Here the predicate ‘F\*’ is the “nominalistic counterpart” to the propositional predicate ‘F’. (See below for more on what this means.) For more complex claims, e.g., those of form

$$B')\exists x(Fx \ \& \ x = t[\exists y(Gy \ \& \ y = t(p))]),$$

an application of P-B) yields something similar, though with added complications. To see this, return to

(12) Isabel said that Zev believes that crabapples are edible.

In this utterance, the serious content involves an attribution of a long-arm conceptual role to Isabel’s utterance. This long-arm conceptual role is similar to the one displayed in the speaker’s embedded utterance of ‘Zev believes that crabapples are edible’, which is built upon the long-arm conceptual role displayed in the speaker’s embedded utterance of ‘crabapples are edible’. The content of the make-believe of propositions contributes to determining the additional inferential or conceptual connections that factor into building the long-arm conceptual role of the former out of the long-arm conceptual role of the latter. This process can be iterated to cover cases involving still further embeddings. In any case of embedding, the long-arm conceptual role that the speaker attributes will involve a mixture of both real-world and pretense-generated elements. (It bears noting that the long-arm conceptual role attributed to Isabel’s utterance, in the serious content of (12), should not be confused with the one that would be attributed to Zev’s cognitive state in a free-standing utterance of ‘Zev believes that crabapples are edible’. Nor should it be confused with either the pretenses displayed in such an utterance or the real-world conditions prescribing them.) These additional complexities highlight the benefit of being able to pick out complicated use-features by displaying them, rather than having to specify them.

<sup>57</sup> Field (1994, p. 251, fn. 2).

<sup>58</sup> See Putnam (1975) and Kripke (1980).

<sup>59</sup> Field (1978, 2001).

<sup>60</sup> In addition, a full presentation of a pretense-based account of proposition-talk would have to cover another form of proposition-talk lurking on the periphery of the foregoing discussion, but which we have skipped here due to space considerations. This is proposition-talk of form ‘n is F’, where ‘n’ gets filled in with expressions that putatively denote propositions and ‘F’ by predicates ostensibly describing propositions. The most basic of these claims are those with the form ‘That p is F’. Although most such claims implicate neither sentences nor nominalistic counterparts to the predicates that go in for ‘F’, we still maintain that the serious assertions made indirectly with this form of proposition-talk are about use-features and sentence-like entities. The serious purpose of claims of form ‘That p is F’ is to link the possession of certain sentential use-features with the satisfaction of a different sort of condition, namely the “adverbial” sort specified by expressions of the form ‘F-ly’ in utterances of the form ‘F-ly, p’. One of the main benefits of recasting these claims, for example, ‘Surprisingly, every even number greater than 2 is the sum of two primes,’ via the pretenses involved in proposition-talk, is that it regiments these utterances into first-order logic. Proposition-talk turns expressions of the form ‘F-ly’ into predicates (this includes modal expressions like ‘necessarily’ and explains the connection between their fundamental logical role as sentential operators and their predicative inferential role, e.g., the role ‘is necessary’ plays in inference (VI) on p. 4 above) and then provides objects for these predicates to apply to by hypostatizing sentences. What results are claims like ‘It is surprising that every even number greater than 2 is the sum of two primes,’ or ‘that every even number greater than 2 is the sum of two primes is surprising.’ By recasting the original claim in this way we can account for the validity of inferences like the following.

Isabel believes that every even number greater than 2 is the sum of two primes.  
 Surprisingly, every even number greater than 2 is the sum of two primes.  
 So, Isabel believes something surprising.

Being able to account for inferences like this within first-order logic is one of the systematizing advantages provided by proposition-talk.

<sup>61</sup> Schiffer (1981). We use this terminology/picture simply as an example without intending to link our account to the correctness of this model. Others should work just as well.

<sup>62</sup> This might, in other words, provide an indirect means for arriving at a pretense account of number-talk of the sort developed in Yablo (2005).

<sup>63</sup> Moore (1999a).

<sup>64</sup> Cf. Crimmins (1998, pp. 17–18).

<sup>65</sup> Cf. Moore (1999a, p. 7) and Woodbridge (2006, p. 352).

<sup>66</sup> We would like to thank the participants at the *Mimesis, Make-Believe and Metaphysics* conference held in honor of Kendall Walton at the University of Leeds in June 2007, the audience at the 2007 Joint Sessions of The Aristotelian Society and The Mind Association in Bristol, and Fred Kroon, Joe Moore, Stephen Schiffer, and an anonymous referee from *Noûs* for helpful discussion and critique.

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