

Benacerraf's revenge

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Abstract In a series of recent publications, Jeffrey King (The nature and structure of content, 2007; Proc Aristot Soc 109(3):257–277, 2009; Philos Stud, 2012) argues for a view on which propositions are facts. He also argues against views on which propositions are set-theoretical objects, in part because such views face Benacerraf problems. In this paper, we argue that, when it comes to Benacerraf problems, King's view doesn't fare any better than its set-theoretical rivals do. Finally, we argue that his view faces a further Benacerraf problem, one that threatens to undercut his explanation of why propositions have truth-conditions. If correct, our arguments undercut King's main motivation for accepting his view over its rivals.

Keyword Metaphysics of propositions · Semantics · Unity of propositions

1 Introduction

In a series of recent publications, Jeffrey King (2007, 2009, 2012) argues for a view on which propositions are facts. He also argues against views on which propositions are set-theoretical objects. King presents two motivations for his view.¹ The first motivation is that King's view is supposed to avoid a Benacerraf problem that its

¹ King (2007, pp. 7–8, 59; 2009, p. 258; 2012, pp. 1–3). King (2007, p. 4) mentions another motivation. He hopes that his view will win over foes of propositions by providing a metaphysically sober account of their nature. We're not concerned with this motivation here.

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rivals face.² The second motivation is that King's view is supposed to avoid a truth-conditional problem that its rivals face.³ That is, King maintains that his view explains why propositions have truth-conditions (as opposed to lacking them), and it explains why propositions have the truth-conditions they do (as opposed to some other truth-conditions).⁴ He also maintains that set-theoretical views cannot explain these truth-conditional facts about propositions.⁵ This paper aims to undercut both of these motivations for King's view. When it comes to Benacerraf problems, King's view doesn't fare any better than its set-theoretical rivals do. And a surprising consequence of this is that, when it comes to the truth-conditional problem, King's view also doesn't fare any better than its set-theoretical rivals do either.

The plan of the paper is as follows. In Sect. 2, we sketch some background. In Sect. 3, we present King's view in some detail. In Sect. 4, we argue that his view faces a Benacerraf problem. In Sect. 5, we consider some replies. And, in Sect. 6, we argue that his view faces a further Benacerraf problem, one that undercuts his explanation of why propositions have truth-conditions.

2 Background

With King (2007, pp. 1–2), we assume that there are propositions: things that sentences express, that agents assert and believe, and that have truth-values. For example,

- (1) Ole-Kristian Tollefsen can fight.

expresses something—the proposition that O.K. Tollefsen can fight—that some people believe and that is true.⁶ Let's call that proposition 'FIGHT'. Again with King, we also assume that propositions have truth-conditions and indeed that different propositions have different truth-conditions.⁷ For example, FIGHT is true if and only if O.K. Tollefsen can fight. In this regard, it is unlike both O.K. Tollefsen himself, who does not have truth-conditions, and the proposition that "Take on Me" is one of

² King (2007, pp. 7–8, 47–50, 127–135; 2012, p. 17).

³ King (2007, pp. 8, 129–131; 2012, pp. 18–20).

⁴ King (2007, pp. 59–64; 2009, pp. 265–273; 2012, pp. 8–16).

⁵ King (2007, pp. 8, 129–131; 2009, pp. 259–261; 2012, pp. 18–20).

⁶ O.K. Tollefsen is a professional hockey player from Norway, as is Patrick Thoresen, who is mentioned below.

⁷ Some friends of propositions might deny that propositions *have* truth-conditions because they might hold instead that propositions *are* truth-conditions. For instance, if you think that truth-conditions are functions from possible worlds to truth-values, and you accept Stalnaker's (1984) view that these are propositions, you must also accept that propositions are truth-conditions. So assuming that propositions have truth-conditions might in a way be stacking the deck against some views on which propositions are set-theoretical objects; but we nonetheless think that the assumption is dialectically appropriate, since our ultimate target is, not those views, but rather King's view, and it's an assumption that he makes. If you think that propositions don't have truth-conditions (because they are truth-conditions), you're unlikely to find our criticisms of King's view compelling. But then you're also unlikely to be sympathetic to King's view in the first place. Thanks to an anonymous referee for raising these issues.

the catchiest songs of the 1980s, which has truth-conditions—it's true if and only if "Take on Me" is one of the catchiest songs of the 1980s—but isn't such that it's true if and only if O.K. Tollefsen can fight.⁸

Consider a view that identifies FIGHT with the ordered pair ⟨O.K. Tollefsen, *being able to fight*⟩.⁹ Let's call this a *set-theoretical view*. One problem with this set-theoretical view is that there are multiple, equally good candidates for being FIGHT, so why does ⟨O.K. Tollefsen, *being able to fight*⟩ get to be that proposition? Why not, for example, ⟨*being able to fight*, O.K. Tollefsen⟩? In "Propositional Unity," King (2012, p. 3) puts the problem this way:

Perhaps the constituents of propositions are combined by being members of an *n*-tuple that is the proposition or in some other set theoretic way. Indeed, it might appear that there are *too many* possibilities as to how propositional constituents are combined and that this is itself cause for worry.¹⁰

Earlier, in discussing a case in *The Nature and Structure of Content* where the candidates are all ordered triples, he says "It is hard to see why any one of these should be the proposition in question, while the others are just non-proposition ordered three-tuples."¹¹ This is a *Benacerraf problem* or, as King (2007, p. 7) calls it, "a Benacerraf style worry."¹²

King raises a Benacerraf problem, not just for the view that propositions are ordered *n*-tuples, but also for another set-theoretical view, one on which propositions are sets of possible worlds or, equivalently, characteristic functions: functions from possible worlds to 0 and 1.¹³ He calls this view a *worlds account* and says

The first thing I want to ask about worlds account[s] is: which is it? Are propositions sets of worlds or characteristic functions of such sets? These are different things and something must be said about which are the propositions (or perhaps they both are?). So right off, worlds accounts are saddled with a Benacerraf problem.¹⁴

King is not alone here; the Benacerraf problem for set-theoretical views is commonly raised in the literature.¹⁵

⁸ See King (2007, pp. 25–26; 2009, pp. 258, 259, 260, 265; 2012, p. 2).

⁹ For a defense of this kind of view, see Hodgson ms.

¹⁰ Italics in original.

¹¹ King (2007, p. 7).

¹² The original Benacerraf problem is that there are multiple, equally good set-theoretical candidates for being the natural numbers. See Benacerraf (1965).

¹³ For a defense of this kind of view, see Stalnaker (1984). The equivalence holds only if logic is classical.

¹⁴ King (2012, p. 11).

¹⁵ See Melia (1992), Crane (1992, pp. 255–256), Bealer (1998, pp. 6–7), Moore (1999), Jubien (2001, pp. 49–53), Hanks (2001; 2009, pp. 473–475; 2011, p. 12), Soames (2010, pp. 70–71, 92–94). If you think that set-theoretical objects represent but are not identical to propositions, then you can sidestep this Benacerraf problem, since the same proposition might be equally well represented by different set-theoretical objects. But you do so at the cost of not saying what propositions *are* (other than that they're

In addition, set-theoretical views have no explanation of why FIGHT is true if and only if O.K. Tollefsen can fight or indeed of why it has truth-conditions at all. Why does \langle O.K. Tollefsen, *being able to fight* \rangle have truth-conditions? Other set-theoretical objects—for example, the set $\{$ O.K. Tollefsen, *being able to fight* $\}$ and the ordered pair \langle O.K. Tollefsen, Patrick Thoresen \rangle —don't have truth-conditions. And why is \langle O.K. Tollefsen, *being able to fight* \rangle true if and only if O.K. Tollefsen can fight rather than, say, if and only if “Take on Me” is one of the catchiest songs from the 1980s or if and only if *being able to fight* instantiates O.K. Tollefsen? This is *the truth-conditional problem*. King (2012, p. 2) puts the truth-conditional problem this way: “How do propositions manage to have truth-conditions ... ? And how do they have the *specific* truth conditions they have?”¹⁶

3 King

On King's view, FIGHT is a fact that contains O.K. Tollefsen, *being able to fight*, and a relation that he calls “the propositional relation” (for FIGHT).¹⁷ Let's call that relation 'PROP'. PROP is a bit complicated, and some of the details matter, so let's unpack it slowly. Consider (1). It has a certain syntactic structure, as a result of which the name 'O.K. Tollefsen' and the predicate 'can fight' stand in a relation that King (2012, p. 6) calls “the sentential relation” (for (1)).¹⁸ Let's call that relation 'SENT'. So here's a fact:

The plain sentential fact

'O.K. Tollefsen' and 'can fight' stand in SENT.

On King's (2009, p. 270; 2012, p. 8) view, the plain sentential fact just is (1).

The plain sentential fact can play different semantic roles in different languages. In English, it's true if and only if the semantic value of 'O.K. Tollefsen' instantiates the semantic value of 'can fight'. But, in another language, it might not have truth-conditions at all: it could be a list of a name that picks out the second Norwegian player to play for the Columbus Blue Jackets and a predicate that picks out a property that you think that Gottlob Frege has.¹⁹ Or maybe in some language it has

Footnote 15 continued

the sorts of things that can be represented by various set-theoretical objects). The set-theoretical views that we consider in the text are views about what propositions are. Thanks to Genoveva Martí here.

¹⁶ Italics in original. See also King (2007, p. 8; 2009, pp. 258–259), cf. Jubien (2001, pp. 53–54), Hanks (2009, pp. 474–475; 2011, p. 48), Soames (2010, pp. 29–32). The truth-conditional problem has two parts: one is to explain why propositions have truth-conditions at all (rather than not having truth-conditions); the other is to explain why propositions have the truth-conditions they do (rather than having other truth-conditions). There is no need in the text to treat these parts separately, so we don't.

¹⁷ King (2007, p. 32; 2009, p. 264; 2012, p. 5). Different propositions have different propositional relations; but in the text we focus for the most part on the propositional relation for FIGHT.

¹⁸ See also King (2007, p. 29; 2009, p. 261). Different sentences have different sentential relations; but in the text we focus for the most part on the sentential relation for (1).

¹⁹ This language is a variant of Englist. (In Englist, (1) is a list of O.K. Tollefsen, the instantiation relation, and *being able to fight*.) Englist was discovered by John Hawthorne. See King (2007, p. 36). The first Norwegian player to play for the Columbus Blue Jackets was, of course, Espen “Shampo” Knutsen.

truth-conditions, but it's not the case that it's true if and only if O.K. Tollefsen can fight: maybe it's true if and only if the semantic value of 'O.K. Tollefsen' does *not* instantiate the semantic value of 'can fight' or if and only if the semantic value of 'can fight' instantiates the semantic value of 'O.K. Tollefsen'.²⁰ (In a way, this is a reverse Benacerraf problem: instead of having multiple, equally good candidates for one role, we have one candidate that is equally good for multiple roles.)

So why is it that, in English, the plain sentential fact is true if and only if the semantic value of 'O.K. Tollefsen' instantiates the semantic value of 'can fight'? The crux of the explanation that King's (2012, p. 4) view offers is that we interpret the plain sentential fact that way: we "spontaneously and unreflectively take" it to be true if and only if O.K. Tollefsen can fight. By taking the plain sentential fact to have those truth-conditions, we thereby interpret SENT as ascribing the semantic value of 'can fight' to the semantic value of 'O.K. Tollefsen'. And, when we interpret SENT in that way, it acquires a relational property: it comes to encode instantiation (or ascription) in English.²¹ So here's a further fact:

The augmented sentential fact

'O.K. Tollefsen' and 'can fight' stand in SENT, and SENT encodes instantiation in English.

The plain sentential fact and the augmented sentential fact are distinct, just as

Fact (i) O.K. Tollefsen is taller than Patrick Thoresen.

and

Fact (ii) O.K. Tollefsen is taller than Patrick Thoresen, and *being taller than* is Sam's favorite relation.

are distinct. The facts have different parts or constituents: Fact (ii) is a conjunctive fact that contains as conjuncts both Fact (i) and a fact about a relational property—*being Sam's favorite relation*—that the relation in Fact (i) has acquired.²²

²⁰ The first language is Nenglish. See King (2007, p. 35; 2009, p. 261; 2012, pp. 3–4). The second language is Reverselish. It is based on an example due to Jeff Speaks. It is also known as 'Reverse English' or 'Hsilgne'.

²¹ See King (2007, pp. 34–38; 2009, pp. 261–263; 2012, pp. 3–4). SENT must encode a bit more than that: it must also encode facts about what instantiates what. Otherwise we couldn't distinguish English from Reverselish (see note 20), and we'd have trouble with asymmetric two-place predicates. Also, King talks about interpretation in King (2007) and ascription in King (2009, 2012); but nothing hangs on that difference. See King (2009, p. 265, n. 11).

²² We are individuating facts finely here: we think that facts are individuated by the objects, properties, relations, and facts that they contain. In this case, we think that the plain sentential fact and the augmented sentential fact—likewise for Fact (i) and Fact (ii)—are distinct because they contain different parts or constituents. (We also think that there can be distinct but necessarily equivalent facts, but that's not at issue here, because we think that the plain sentential fact and the augmented sentential fact are not necessarily equivalent: it is possible that some lexical items stand in SENT even if SENT does not encode instantiation in English.)

Here's another fact:

- (A) O.K. Tollefsen is the semantic value of 'O.K. Tollefsen' in English, and *being able to fight* is the semantic value of 'can fight' in English.

Putting (A) and the augmented sentential fact together, we get

- (B) O.K. Tollefsen is the semantic value of 'O.K. Tollefsen' in English, *being able to fight* is the semantic value of 'can fight' in English, 'O.K. Tollefsen' and 'can fight' stand in SENT, and SENT encodes instantiation in English.

Existentially generalizing over expressions and languages in (B), we get a further fact:

- (C) There are expressions x and y of a language L such that O.K. Tollefsen is the semantic value of x in L , *being able to fight* is the semantic value of y in L , x and y stand in SENT, and SENT encodes instantiation in L .

We can now say what PROP is: it's the relation that O.K. Tollefsen and *being able to fight* stand in when (C) obtains.²³ So (C) is really

The plain propositional fact

O.K. Tollefsen and *being able to fight* stand in PROP.

This is admittedly a bit complicated, but we're not done yet.

At least in principle, the plain propositional fact could play different semantic roles. As it happens, it's true if and only if O.K. Tollefsen instantiates *being able to fight*. But it might not have truth-conditions at all: it could be a list of the second Norwegian player to play for the Blue Jackets and a property that you think that Frege has. As King (2009, p. 264) puts it (speaking of a similar fact), "there is no reason to think that the just mentioned fact has truth conditions." For, he says, "in general, such facts aren't the sorts of things with truth conditions."²⁴ Or the plain propositional fact might have truth-conditions without its being the case that it's true if and only if O.K. Tollefsen instantiates *being able to fight*: it could be that it's true if and only if he does *not* instantiate that property or if and only if *being able to fight* instantiates him.²⁵

²³ More precisely, PROP is the relation expressed by the open sentence "There are expressions x and y of a language L such that ___ is the semantic value of x in L , ___ is the semantic value of y in L , x and y stand in SENT, and SENT encodes instantiation in L ".

Well, not exactly. First, since the same expression can have different semantic values in different contexts, we need to relativize semantic value to context. See King (2007, pp. 38–41; 2009, pp. 263–264; 2012, p. 5). Second, since SENT can be interpreted in different ways in different constructions (in the same language), we need to relativize encoding to construction. King (2009, pp. 262–263; 2012, p. 4) recognizes that SENT can be interpreted in different ways in different constructions (in the same language). But he does not build the required relativization into PROP. Neither of these complications matters for our purposes, so we ignore them in the text.

²⁴ King (2012, p. 7).

²⁵ Speaks (forthcoming) thinks that it would be absurd for speakers to interpret SENT so that it encodes instantiation without interpreting PROP so that it encodes instantiation, since in that case they could interpret SENT so that it encodes instantiation without FIGHT existing. (King (2012, p. 10) agrees that it

So why is it that the plain propositional fact is true if and only if O.K. Tollefsen can fight? The crux of the explanation that King's (2009, p. 268) view offers is that we interpret the plain propositional fact that way: we "implicitly and without thinking take" the plain propositional fact to be true if and only if O.K. Tollefsen can fight. By taking the plain propositional fact to have those truth-conditions, we thereby interpret PROP as ascribing *being able to fight* to O.K. Tollefsen. And, when we interpret PROP in that way, PROP acquires a relational property: it comes to encode instantiation (or ascription).²⁶ So here's a further fact:

The augmented propositional fact

O.K. Tollefsen and *being able to fight* stand in PROP, and PROP encodes instantiation.

The plain propositional fact and the augmented propositional fact are distinct, just as the plain sentential fact and the augmented sentential fact are. King (2012, p. 5) himself describes augmented propositional facts as "larger" than plain ones. The augmented propositional fact is "larger" than the plain one in the following sense: the augmented propositional fact is a conjunctive fact that contains as conjuncts both the plain propositional fact and a fact about a relational property—*encoding instantiation*—that PROP has acquired. So the plain propositional fact and the augmented propositional fact are distinct because they have different parts or constituents.²⁷

4 Benacerraf

At the beginning of the previous section, we said that, on King's view, FIGHT is a fact that contains O.K. Tollefsen, *being able to fight*, and PROP. But there are lots of facts that contain O.K. Tollefsen, *being able to fight*, and PROP, and we didn't say which one of them, on King's view, is FIGHT. The truth is that we don't know.

Footnote 25 continued

"just isn't coherent" for speakers to interpret PROP otherwise.) But, although that might be absurd, that doesn't mean that it's impossible. And, in any case, Speaks's argument relies on the claim that FIGHT would not exist if PROP did not encode instantiation. This is true if FIGHT is the augmented propositional fact, but it's not true if FIGHT is the plain propositional fact; if FIGHT is the plain propositional fact, then it would not have truth-conditions—and so in a sense would not deserve the name 'proposition'—if PROP did not encode instantiation. But it would still exist. On the augmented propositional fact, see below in the text. See also Speaks (forthcoming, p. 7, n. 7).

²⁶ See King (2007, pp. 59–62; 2009, pp. 265–273; 2012, pp. 6–7, 10). Again, PROP must encode a bit more than that: it must also encode facts about what instantiates what. See note 21.

²⁷ We think that the plain propositional fact and the augmented propositional fact—like the plain sentential fact and the augmented sentential fact (see note 22)—are not necessarily equivalent: it is possible that some entities stand in PROP even if PROP does not encode instantiation. King might disagree. (See note 25.) But, even if the facts are necessarily equivalent, we still think they're distinct because they contain different facts as parts or constituents. And we think King agrees with us here, since he describes augmented propositional facts as being "larger" than plain ones.

Sometimes King endorses a view on which FIGHT is the augmented propositional fact, the conjunctive fact that contains as a conjunct the fact that PROP encodes instantiation. For example, in *The Nature and Structure of Content* (2007), he says

We now claim that the fact that is the proposition that Rebecca swims includes the propositional relation possessing the property of encoding the instantiation function.²⁸

In “Questions of Unity” (2009), he says

we include as part of the fact/proposition that the propositional relation in it encodes ascription.²⁹

And, in “Propositional Unity” (2012), he says

henceforth, let’s understand the proposition that Michael swims to be the fact described above [one that doesn’t contain as a conjunct the fact that the propositional relation encodes instantiation or ascription], taken together with the propositional relation having the relational property of encoding ascription (this means that the fact that is the proposition that Michael swims is a slightly “larger” fact than we have taken it to be to this point, since it now includes the propositional relation possessing a certain relational property).³⁰

If the fact that is a proposition contains as a conjunct the fact that the propositional relation encodes instantiation, then FIGHT can’t be the plain propositional fact, but it can be the augmented propositional fact.

But sometimes King endorses a view on which FIGHT is the plain propositional fact, which does not contain as a conjunct the fact that PROP encodes instantiation. For example, in *The Nature and Structure of Content*, he discusses a fact that does not contain as a conjunct the fact that the propositional relation encodes instantiation and says that it

is the most eligible fact to be the proposition that Rebecca swims; hence it is so.³¹

In “Questions of Unity,” he says

Once languages come into existence facts like the fact I claim is the proposition that Dara swims came into existence. Now here let me tell a highly idealized and mythological story about speakers coming to interpret the propositional relation of the fact that is the proposition that Dara swims in the way they do.³²

Although the plain propositional fact existed before PROP encoded instantiation and so before speakers interpreted PROP, the augmented propositional fact did not. So, if the fact that is FIGHT existed before speakers interpreted PROP, then that fact can’t be

²⁸ King (2007, p. 60).

²⁹ King (2009, p. 265).

³⁰ King (2012, p. 5).

³¹ King (2007, p. 61).

³² King (2009, p. 266).

the augmented propositional fact, but it can be the plain propositional fact.³³ And, in “Propositional Unity,” he says

we are now trying to explain how certain facts *came to be* propositions (by having their propositional relations interpreted in certain ways, etc.).³⁴

If facts come to be propositions when their propositional relations are interpreted, that suggests that they existed before their propositional relations were interpreted. Although the plain propositional fact existed before PROP was interpreted, the augmented propositional fact did not. So, if FIGHT existed before PROP was interpreted, then FIGHT can't be the augmented propositional fact, but it can be the plain propositional fact.³⁵

King (2009, p. 268; 2012, p. 7) wants to explain how we have cognitive access to the things that we unthinkingly take to have truth-conditions. He thinks that these things are general facts and that we can have cognitive access to them by having cognitive access to particular facts that are instances of them.³⁶ On King's (2009, pp. 270–271; 2012, p. 9) view, we have cognitive access to (B), repeated here.

(B) O.K. Tollefsen is the semantic value of ‘O.K. Tollefsen’ in English, *being able to fight* is the semantic value of ‘can fight’ in English, ‘O.K. Tollefsen’ and ‘can fight’ stand in SENT, and SENT encodes instantiation in English.

And, on his view, this fact is an instance of the fact that is FIGHT.³⁷ But (B) does not contain as a conjunct the fact that PROP encodes instantiation. So, although it is an instance of the plain propositional fact, it is not an instance of the augmented propositional fact. So, if (B) is an instance of FIGHT, then FIGHT can't be the augmented propositional fact, but it can be the plain propositional fact.³⁸

Indeed, sometimes King seems to commit himself to both views in succession. In *The Nature and Structure of Content*, he says

Since we now claim that the propositional relation encoding the instantiation function is part of the fact that is the proposition that Rebecca swims, 4b” [a fact that does not contain as a conjunct the fact that the propositional relation encodes instantiation] is not yet that proposition.³⁹

The first clause says that the proposition contains as a conjunct the fact that the propositional relation encodes instantiation. This fits with FIGHT being the

³³ Temporal priority here is a stand-in for explanatory priority. See King (2009, pp. 267–268).

³⁴ King (2012, p. 8, n. 13); italics in original.

³⁵ See also King (2009, p. 267).

³⁶ See King (2009, p. 272; 2012, p. 10).

³⁷ See King (2009, p. 271; 2012, pp. 9–10). In these passages, King describes the fact that (B) as an instance of as a proposition (rather than merely as a fact that we unthinkingly take to have truth-conditions).

³⁸ This point emerged in conversation with Tom Hodgson.

³⁹ King (2007, p. 60).

augmented propositional fact but not with FIGHT being the plain propositional fact. The second clause suggests that a plain fact, one that does not contain as a conjunct the fact that the propositional relation encodes instantiation, will become a proposition as a result of one of its parts or constituents undergoing a relational change. This fits with FIGHT being the plain propositional fact but not with FIGHT being the augmented propositional fact.⁴⁰

These are the makings of a Benacerraf problem. For it seems that the plain propositional fact and the augmented propositional fact are equally good candidates for being FIGHT. There's an ad hominem argument for this claim: the best explanation of why King vacillates about which of them would be FIGHT is that they're equally good candidates. The less ad hominem argument is that the plain propositional fact and the augmented propositional fact equally satisfy the four conditions that, on King's view, any facts that are eligible candidates for being FIGHT must satisfy:

- (i) O.K. Tollefsen and *being able to fight* are constituents of them;
- (ii) we have good independent reason for thinking that they exist;
- (iii) they can play various propositional roles, like being objects of the attitudes; and
- (iv) we have cognitive access to them (via sentences like (1)).⁴¹

To these, we can add that the plain propositional fact and the augmented propositional fact both have truth-conditions and indeed have the right truth-conditions, by King's lights: they're both true if and only if O.K. Tollefsen can fight.

The augmented propositional fact is, in a sense, less minimal than the plain propositional fact, and that might make it less eligible to be FIGHT.⁴² Considerations of simplicity might thus favor the plain propositional fact. But then the plain propositional fact existed before it had truth-conditions, and that might make it less eligible to be FIGHT. Indeed, the plain propositional fact doesn't have truth-conditions intrinsically, because it has duplicates—in possible worlds in which the augmented propositional fact doesn't obtain—that lack truth-conditions.⁴³

⁴⁰ Perhaps King thinks that the plain propositional fact becomes the augmented propositional fact and that, more generally, facts can gain parts, so that the fact that P can become the fact that $P \& Q$? We're not sure that facts can gain parts in this way. But, in any case, it seems implausible in general that, whenever an object a acquires a property G , the fact that a has a property F becomes the conjunctive fact that a has F and a has G . If King were to write about PROP, would the plain propositional fact become the conjunctive fact that (i) O.K. Tollefsen and *being able to fight* stand in PROP and (ii) King writes about PROP? This doesn't seem like FIGHT! King would not become a part of the fact that is that proposition. Thanks to Einar Duenger Bøhn here.

⁴¹ See King (2009, pp. 268, 272–273). See also King (2007, pp. 62–64; 2012, p. 7). If we have cognitive access to what SENT encodes, then we should equally have cognitive access to what PROP encodes; so we should have cognitive access to the augmented propositional fact if we have cognitive access to the plain propositional fact.

⁴² On the preference for “smaller” facts, see King (2007, p. 64).

⁴³ On the claim that propositions have truth-conditions intrinsically, see King (2012, p. 11). King (2007, p. 61) also says that propositions have truth-conditions essentially, and the plain propositional fact doesn't.

There is a complication lurking here. With King, we are assuming that the augmented propositional fact has truth-conditions intrinsically and essentially. One might deny this: perhaps that the augmented

Considerations of intrinsicity might thus favor the augmented propositional fact. Considerations of simplicity and intrinsicity pull in opposite directions here, and it seems that there is no clear winner.⁴⁴

For FIGHT to have truth-conditions, PROP must encode instantiation, and so the fact that PROP encodes instantiation must obtain; but it doesn't follow that the fact that PROP encodes instantiation must be a part or constituent of FIGHT. In the end, what matters is that PROP encodes instantiation, not whether the fact that it does is a part or constituent of the fact that is FIGHT. To paraphrase King here, one might say the following: "Is FIGHT the plain propositional fact or the augmented propositional fact? These are different things and something must be said about which is FIGHT. It is hard to see why one of these facts should be FIGHT, while the other is just a non-proposition fact."

5 Some replies

5.1 The facts are identical

One might think there is no real problem for King's view here since the augmented propositional fact *just is* the plain propositional fact. Perhaps PROP is fixed by our psychology in some way and, as a result, what we called 'the augmented propositional fact' is really just a more complicated way of specifying the fact that we called 'the plain propositional fact'.⁴⁵ As we noted above, this is not King's own view, since he takes the augmented propositional fact to be "larger" than the plain propositional fact.⁴⁶ And we are inclined to agree with King here; we claimed above that the augmented propositional fact has parts or constituents that the plain propositional fact lacks. And we think this is so even if PROP is fixed by our psychology in some way. More generally, we think that the fact that some things stand in a relation *R* and that *R* has some relational property *F* is itself a "larger" fact than the fact that some things stand in *R*, even if *R* is fixed by our psychology in some way and *F* is some kind of psychological property. For example, we think that the fact that two people are thinking about the same thing and that the *thinking*

Footnote 43 continued

propositional fact obtains ensures that the plain propositional fact has truth-conditions without ensuring that the augmented propositional fact has truth-conditions itself. In that case, considerations of intrinsicity would lose their force, and considerations of simplicity would favor the plain propositional fact over the augmented propositional fact—and indeed would favor the diminished propositional fact, discussed in Sect. 6, over the plain propositional fact. This is not a possibility that King himself considers, and unfortunately it is not one that we can consider here, but it is intriguing. (Thanks to Olav Gjelsvik, Anders Nes, and Bryan Pickel for raising these issues.) Notice that pursuing this possibility would require, not only denying King's assumption that the augmented propositional fact has truth-conditions intrinsically and essentially, but also accepting a view on which propositions don't have truth-conditions intrinsically and essentially.

⁴⁴ Thanks to Bryan Pickel, Moritz Schulz, Giuliano Torrengo, and Elia Zardini for helping to bring this point out.

⁴⁵ Thanks here to an anonymous referee.

⁴⁶ King (2012, p. 5).

about the same thing relation is being thought about by a third person is a “larger” fact than the fact that two people are thinking about the same thing, even if the *thinking about the same thing* relation is fixed by our psychology in some way and *being thought about by a third person* is some kind of psychological property. Since we agree with King that one of them is “larger” than the other, we conclude that the augmented propositional fact and the plain propositional fact are distinct.

Alternatively, perhaps the augmented propositional fact is the plain propositional fact, not because PROP is fixed by our psychology, but rather because the part or constituent that the augmented propositional fact is said to contain and that the plain propositional fact is said to lack is about instantiation, and instantiation facts are “nothing over and above” or are “contained in” lower-level facts in some sense. For example, perhaps the fact that O.K. Tollefsen instantiates *being able to fight* is nothing over and above, or is contained in, the fact that O.K. Tollefsen can fight.⁴⁷

But, even if so, the part or constituent that we think distinguishes the plain propositional fact and the augmented propositional fact—namely, the fact that PROP encodes instantiation—isn’t like that. It isn’t the fact that an object *instantiates* a property or even that a property *instantiates* a higher-order property or relation.⁴⁸ Rather, it’s the fact that a property *encodes* instantiation. And, even if instantiation facts are in some sense nothing over and above lower-level facts, we don’t think that encoding facts are that way. The fact that PROP encodes instantiation obtains because we interpret certain facts that contain it in certain ways, and we interpret those facts in those ways because we unthinkingly take them to have certain truth-conditions. And the fact that we unthinkingly take certain facts to have certain truth-conditions *is*, we think, something over and above the fact that O.K. Tollefsen and *being able to fight* stand in PROP. This suggests that the fact that PROP encodes instantiation is also something over and above that fact. If so, then the augmented propositional fact has a part or constituent that is something over and above the plain propositional fact and hence, as we have been claiming, the two facts are distinct.

5.2 The facts are distinct, but only one of them has truth-conditions

Perhaps the plain propositional fact and the augmented propositional fact don’t both have truth-conditions; perhaps only one of them does. If so, then the one with the truth-conditions would be the better candidate for being FIGHT and hence there would be no Benacerraf problem.⁴⁹

But which one would be the one to have truth-conditions? On the one hand, if the augmented propositional fact is the one to have truth-conditions, then the plain propositional fact doesn’t have truth-conditions, even though on King’s view it is ultimately because speakers unthinkingly take it to have truth-conditions that the augmented propositional fact comes into existence. In that case, the existence of the augmented propositional fact and hence of FIGHT would ultimately be grounded in a

⁴⁷ Thanks to Dan López de Sa and Genoveva Martí for pressing us here.

⁴⁸ Unless it’s the fact that PROP instantiates *encoding instantiation*.

⁴⁹ This reply is due to Tom Hodgson.

mistake that speakers make. Such a view is coherent, but we don't know if King wants to endorse that kind of metaphysical error theory.

On the other hand, if the plain propositional fact is the one to have truth-conditions, then the augmented propositional fact doesn't have truth-conditions. Again, there is nothing incoherent about this view, but it is at odds with King's (2012, p. 11) claim that facts like the augmented propositional fact have their truth-conditions intrinsically and so must have truth-conditions.⁵⁰

More importantly, on either option, we would still need an explanation of why it is that one of the two facts, but not the other, has truth-conditions. Perhaps King could hold that one or the other of the facts is more intrinsically eligible to be the fact that is FIGHT. We will return to this below (in Sect. 5.4).⁵¹

5.3 The facts are distinct, and they both have truth-conditions, but theorists can pick whichever one they want

There are two sets of facts that we can appeal to. For some explanatory purposes, we might prefer facts that don't contain as a conjunct the fact that the propositional relation encodes instantiation; for others, we might prefer facts that do contain as a conjunct the fact that the propositional relation encodes instantiation. So what's the problem?⁵²

The objector might be some kind of constructivist about propositional facts. But, on King's view, propositions are not merely constructs wielded by theorists; rather, they are objects to which agents genuinely bear attitudes. As King (2012, p. 13, n. 18) puts it, "Propositions aren't a theorist's invention." Here, we think that King would agree with Soames's (2010, pp. 97–98) criticism of a theory on which propositions are merely theoretical constructs.

The theory's motivating idea is that propositions are constructions used by theorists to model the structure of agents' acts of predication. However, since the acts being modeled include those in which properties are predicated of

⁵⁰ Indeed, King describes the things that have truth-conditions intrinsically as propositions (and not just as facts like the augmented propositional fact). (See also note 43.) This suggests that on his view FIGHT is the augmented propositional fact. But of course there is countervailing evidence. See also note 59.

⁵¹ Perhaps which fact is FIGHT has changed over time: first the plain propositional fact was; but, now that the augmented propositional fact is around, it is. (Matters aren't really temporal here. See note 33. This might complicate the reply. We ignore this complication, since we think that there are further problems with the reply.) If so, then there is no Benacerraf problem.

But this reply assumes that the augmented propositional fact is a better candidate for being FIGHT than the plain propositional fact is. Otherwise, why did the plain propositional fact cease to be FIGHT? And, if the augmented propositional fact is a better candidate for being FIGHT, then there is a perfectly straightforward solution to the Benacerraf problem: FIGHT is the augmented propositional fact rather than the plain propositional fact because the augmented propositional fact is a better candidate for being FIGHT. But why is the augmented propositional fact a better candidate? That's what we wanted to know in the first place. It's true that the augmented propositional fact has truth-conditions intrinsically while the plain propositional fact does not, which might make the augmented propositional fact a better candidate; but the augmented propositional fact is also less minimal than the plain propositional fact, which might make the augmented propositional fact a worse candidate.

⁵² This reply is due to Georges Rey.

propositions, it would seem that propositions must be parts of the reality being modeled, rather than merely components of the model.⁵³

If propositions are merely in the model, then theorists can choose whether to use the plain propositional fact or the augmented propositional fact to model FIGHT. But propositions aren't just in the model; they're in "the reality being modeled." And theorists don't get to choose whether, in the reality being modeled, FIGHT is the plain propositional fact or the augmented propositional fact.

Alternatively, the objector might hold that there are two sets of facts that we can appeal to but might think a debate over which set of facts are *really* the proposition facts is "nonsubstantive" in Sider's (2011, p. 53) sense. Although propositions are not theorists' inventions, there are just different candidates for being FIGHT and neither is more eligible; neither "carves at the joints" better than the other.⁵⁴ But a proponent of the view that propositions are set-theoretical objects could similarly reply to the Benacerraf problem that her view faces. According to her, there are just different set-theoretical objects that are candidates for being FIGHT and none is most eligible.⁵⁵

5.4 The facts are distinct, and they both have truth-conditions, and theorists can't just pick whichever one they want, but one of them is more eligible

Above we mentioned that King (2009, p. 273) could "invoke eligibility" and say that the augmented propositional fact rather than the plain propositional fact (or vice versa) just is "the most intrinsically eligible" of the facts that satisfy the conditions that a fact must satisfy to be FIGHT.⁵⁶ While we are sympathetic to the idea that eligibility could break ties and thereby avoid Benacerraf problems, there are two points to make here: one exegetical, the other dialectical.

First, the exegetical point: we think that, when King invokes eligibility, he isn't using it to break the tie between facts like the plain propositional fact and the augmented propositional fact; rather, he's using it to break the tie between facts like the plain propositional fact and

The bizarre propositional fact

There are expressions x and y of a language L such that x has fewer than one million syllables and does not contain the letter 'z', y has fewer than one billion syllables and does not contain the letter 'ã', L is spoken by fewer than one trillion people at some point in the history of the universe, O.K. Tollefsen

⁵³ Italics in original. See Soames (2010, pp. 93–98).

⁵⁴ Really, Sider's notion of substantivity is metalinguistic. (See Sider 2011, p. 57.) But the simplification is harmless here.

⁵⁵ For Sider (2011, p. 335), set theory—along with physics and logic—is fundamental in a way in which a theory of facts is not. But this does not mean that a dispute about which set-theoretical candidate is FIGHT is deep in a way in which a dispute about which fact is FIGHT is not. For the set-theoretical candidates—sets of possible worlds, or ordered pairs whose elements are Norwegian hockey players and properties—are not among the sets that Sider would take to be fundamental.

⁵⁶ See also King (2012, p. 10). The notion of eligibility at play here comes from Lewis (1983, 1984). See also Merrill (1980).

is the semantic value of x in L , *being able to fight* is the semantic value of y in L , x and y stand in SENT, and SENT encodes instantiation in L .

King (2007, pp. 62–64) mentions alternative facts like the bizarre propositional fact in *The Nature and Structure of Content*. As far as we know, he does not mention other kinds of alternative facts there or elsewhere, and he cites *The Nature and Structure of Content* when he mentions eligibility in “Propositional Unity.”⁵⁷

Second, the dialectical point: if King were to invoke eligibility to break the tie between facts like the plain propositional fact and the augmented propositional fact, then he would be solving the Benacerraf problem that his view faces by brute metaphysical force, in which case he couldn't use Benacerraf problems against set-theoretical views. For those who endorse those views could also solve the Benacerraf problems that their views face by brute metaphysical force: perhaps $\langle \text{O.K. Tollefsen, being able to fight} \rangle$ is more eligible to be FIGHT than $\langle \text{being able to fight, O.K. Tollefsen} \rangle$ is (or vice versa); or perhaps the set of possible worlds in which O.K. Tollefsen can fight is more eligible to be FIGHT than is the characteristic function of that set (or vice versa).

In a somewhat surprising footnote at the end of the chapter of *The Nature and Structure of Content* in which he presents his view, King (2007, p. 64, n. 70) intimates that his view faces a Benacerraf problem of some kind and suggests that perhaps it could be solved:

I am often attracted to the idea that there are certain facts closely related to the facts I claim are propositions and that our talk about propositions is sometimes talk about these facts I claim are propositions and sometimes talk about these closely related facts. Or perhaps it is even vague which such facts are propositions. But I am unable to pursue this line of thinking here.

(He doesn't say what the candidates are. In the case of FIGHT, perhaps they're the plain propositional fact and the augmented propositional fact.) As far as we know, King doesn't pursue that line of thinking elsewhere. Perhaps he has a solution to the Benacerraf problem that his view faces. But, even if he does, the dialectical point remains: there is no reason to think that those who endorse set-theoretical views could not avail themselves of a similar solution.

For these reasons, we think that King doesn't intend to use eligibility to break the tie between the plain propositional fact and the augmented propositional fact; and we think that, were he to do so, that would undercut his use of Benacerraf problems against set-theoretical views. So we think that, when it comes to Benacerraf problems, in the end King's view doesn't have an advantage over its set-theoretical rivals.

6 Truth-conditions

King thinks that his view solves the truth-conditional problem. The truth-conditional problem is one of the “unity problems” that he addresses in “Propositional Unity,” and at the beginning of the paper he says

⁵⁷ See King (2012, p. 10, n. 15). He also cites King (2009, pp. 272–273). He invokes eligibility there but does not mention what kinds of alternative facts he has mind.

I shall argue that my account provides the best solutions to the unity problems. I take this to be powerful support for my account. Indeed, my main motivation in elaborating and defending my theory of propositions in King (2007) was that I thought it could solve unity problems and that other theories couldn't.⁵⁸

As we saw in Sect. 4, the crux of the solution to the truth-conditional problem that King's view offers is that, on that view, we unthinkingly take the plain propositional fact to be true if and only if O.K. Tollefsen can fight. This results in our interpreting PROP, in PROP encoding instantiation, and in the augmented propositional fact coming into existence.

King thinks that the first part of the solution to the truth-conditional problem that his view offers is an explanation of why it is that we unthinkingly take the plain propositional fact, rather than some other fact, to be true if and only if O.K. Tollefsen can fight. After presenting his explanation of why the proposition that Michael swims—which he calls 'FAST'—is true if and only if Michael swims, he says

To summarize, FAST has truth conditions because speakers interpret its propositional relation as ascribing the property of swimming to Michael. The account of what constitutes speakers doing this is in two steps. First, reason was given for thinking that it is *FAST's* propositional relation that gets interpreted as ascribing the property of swimming to Michael. Second, an account was given of what so interpreting FAST's propositional relation consists in.⁵⁹

Notice the italics: King is presumably contrasting FAST with other facts that contain propositional relations. As he puts it elsewhere, the first part of his solution to the truth-conditional problem is an explanation of "why it is FAST, rather than some other fact, whose propositional relation we interpret as ascribing the property of swimming to Michael so that it is true iff Michael swims."⁶⁰

In Sects. 4 and 5, we argued that King's view faces a Benacerraf problem, because on his view the plain propositional fact and the augmented propositional fact are equally good candidates for being FIGHT. This does not pose a problem for the explanation that his view offers of why it is the plain propositional fact, rather than some other fact, that we unthinkingly take to be true if and only if O.K. Tollefsen can fight. For, before we unthinkingly take the plain propositional fact to be true if and only if O.K. Tollefsen can fight, the augmented propositional fact does not exist, so it is not an available candidate. But we think that King's view faces a further Benacerraf problem, one that does pose a problem for that explanation.

The initial Benacerraf problem that King's view faces is that the following two facts are equally good candidates for being FIGHT.

⁵⁸ King (2012, p. 2). See also King (2007, p. 59; 2009, p. 258).

⁵⁹ King (2012, p. 10); italics in original. Notice that this passage makes more sense if FAST does not contain as a conjunct the fact that its propositional relation encodes instantiation. But let's not have that exegetical fight all over again.

⁶⁰ King (2012, p. 7).

The plain propositional fact

O.K. Tollefsen and *being able to fight* stand in PROP.

The augmented propositional fact

O.K. Tollefsen and *being able to fight* stand in PROP, and PROP encodes instantiation.

The difference between the plain propositional fact and the augmented propositional fact, of course, is that only the latter includes as a conjunct the fact that PROP encodes instantiation. But, as long as PROP does encode instantiation, the plain propositional fact will have the right truth-conditions and so won't be a worse candidate for being FIGHT.

Recall what the plain propositional fact really is.

The plain propositional fact

There are expressions x and y of a language L such that O.K. Tollefsen is the semantic value of x in L , *being able to fight* is the semantic value of y in L , x and y stand in SENT, and SENT encodes instantiation in L .

Here's a more austere fact.

The diminished propositional fact

There are expressions x and y of a language L such that O.K. Tollefsen is the semantic value of x in L , *being able to fight* is the semantic value of y in L , x and y stand in SENT.

The difference between the plain propositional fact and the diminished propositional fact is that only the former includes as a conjunct the fact that SENT encodes instantiation. But, as long as SENT does encode instantiation, the diminished propositional fact will have the right truth-conditions and so shouldn't be a worse candidate for being FIGHT.

We're not interested here in candidates for being FIGHT; rather, we're interested here in candidates for being something that we unthinkingly take to be true if and only if O.K. Tollefsen can fight. But, if the plain propositional fact and the diminished propositional fact are equally good candidates for being FIGHT, then they should also be equally good candidates for being something that we unthinkingly take to be true if and only if O.K. Tollefsen can fight. Unlike the augmented propositional fact, the diminished propositional fact does not depend for its existence on our taking the plain propositional fact to be true if and only if O.K. Tollefsen can fight. So, unlike the augmented propositional fact, the diminished propositional fact is—along with the plain propositional fact—an available candidate for being something that we unthinkingly take to be true if and only if O.K. Tollefsen can fight.

In effect, what we have here are two equally good candidates for being the propositional relation for FIGHT: on the one hand, we have the relation that we have been calling 'PROP', which obtains between O.K. Tollefsen and *being able to fight* when the plain propositional fact obtains; and, on the other, we now have a distinct relation, one that we can call 'PROP-MINUS', which obtains between O.K. Tollefsen

and *being able to fight* when the diminished propositional fact obtains.⁶¹ If the plain propositional fact and the diminished propositional fact are equally good candidates for being something that we unthinkingly take to be true if and only if O.K. Tollefsen can fight, then PROP and PROP-MINUS are equally good candidates for being propositional relations that we interpret.

And, if PROP and PROP-MINUS are equally good candidates for being propositional relations that we interpret, then King's view does not have an explanation of why it is PROP, rather than PROP-MINUS, that we interpret: that is, of why it is the plain propositional fact, rather than the diminished propositional fact, whose propositional relation we interpret. And, without that, he doesn't have the first part of his solution to the truth-conditional problem.

7 Conclusion

We have argued that King's view has a Benacerraf problem. On King's view, both the plain propositional fact and the augmented propositional fact exist. We argued that the two facts are distinct. (Recall that King (2012, p. 5) calls the augmented one "larger".) And we argued that, by King's lights, both are candidates for being FIGHT. So, when it comes to Benacerraf problems, King's view does not fare better than its set-theoretic rivals.

If our argument that King's view has a Benacerraf problem is sound, then King's view also has a truth-conditional problem. The first step in King's proposed solution to the truth-conditional problem for FIGHT is to identify a unique candidate for being something that we unthinkingly take to be true if and only if O.K. Tollefsen can fight. On King's view, both the plain propositional fact and the diminished propositional fact exist. And the two facts are distinct (the plain propositional fact is "larger"). But, by King's lights, both facts are candidates for being something that we unthinkingly take to be true if and only if O.K. Tollefsen fights. So there is no *unique* candidate for being such a fact, and King's proposed solution to the truth-conditional problem doesn't get off the ground. So, when it comes to the truth-conditional problem, King's view does not fare better than its set-theoretic rivals either. We conclude that, if King's view doesn't solve the Benacerraf problem, then it doesn't solve the truth-conditional problem either. And, without a solution to both, we lose what King considers to be the main motivation for accepting his view.

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⁶¹ More precisely, PROP-MINUS is the relation expressed by the open sentence 'There are expressions x and y of a language L such that $___$ is the semantic value of x in L , $___$ is the semantic value of y in L , x and y stand in SENT'. (See note 23.)

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