



1 The problem of unarticulated truths

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5 Abstract

6 In recent years, a variety of philosophers have argued that the fundamental bearers
7 of representational properties like truth are concrete particulars produced by cogni-
8 tive agents—representational vehicles (“RVs”), as I will call them. This view appar-
9 ently conflicts with other judgments that are part of our common sense understand-
10 ing of truth. For instance, it is plausible that there are truths about the Milky Way
11 that have and never will never be articulated by anyone. Whatever these truths are, it
12 looks like they cannot be RVs, because an RV is articulated just in case it exists. In
13 this paper, I argue that it is consistent to hold that the fundamental truth-bearers are
14 representational vehicles, while also acknowledging the existence of unarticulated
15 truths. I argue that truth is a property that derivatively holds of kinds of RVs, that
16 these provide the basis for our judgments that there are unarticulated truths, and I
17 defend the view against putative counter-examples.

18 **Keywords** Truth · Truth bearer · Propositions

19 1 Introduction

20 There is a tension implicit in the common-sense platitudes that characterize truth.
21 On the one hand, we have ideas like the following:

- 22 (1) Truth is the correspondence of a thought with its object. (see Aquinas 1952,
23 Descartes 1991 AT II:597, Kant 1998 A58/B82)
24 (2) To say of what is that it is, is true. (Aristotle *Metaphysics* 2016 1011b25)

25 The picture suggested by these claims is that truth is fundamentally a property of
26 representational vehicles, e.g. thoughts or acts of saying. By “representational
27 vehicles” (“RVs,” for short) I mean concrete particulars with semantic properties,

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28 produced by some cognitive agent at a particular time.¹ I will leave the notion some-
29 what vague, hoping that examples—utterances, belief states—are a sufficient guide
30 for now. I will call the thesis that the fundamental truth-bearers are token representa-
31 tional vehicles the *RV-First view*.

32 On the other hand, it is quite natural to talk as if truth is utterly independent of
33 any representing vehicle. This is the perspective we take when we say something
34 like (3):

35 (3) There are truths about the Milky Way that have never and will never be articu-
36 lated by anyone.

37 (3) is *prima facie* incompatible with the view that truth is fundamentally a property
38 of representational vehicles. No representational vehicles could be the “truths” that
39 count as witnesses for the generalization in (3). On the most natural understanding
40 of “articulation” applicable to representational vehicles, a representational vehicle is
41 articulated just in case it is *produced* or brought into existence. But according to this
42 reading, (3) would incoherently suppose there are representational vehicles that are
43 unproduced. Rather (3) seems to be talking about a class of truths that are not rep-
44 resentational vehicles, and, moreover, what it says is intuitively plausible. Probably
45 there are objects in the Milky way that no one has or will ever think or talk about—
46 but how could there fail to be *truths* about what those objects are like²?

47 How should this tension be resolved³? One promising line of thought goes as fol-
48 lows: the fundamental truth-bearers are particular RVs, but other things can have
49 truth-values in a derivative sense; in particular, we can group RVs into kinds and
50 derivatively characterize those *kinds* as true or false. This line of thought meshes well
51 with the recent trend in the propositions literature to analyze propositions as *kinds* or
52 *abstract groupings* of more fundamental, concrete representational things. I take Soa-
53 mes (2014), Hanks (2011, 2013), and Grzankowski and Buchanan (2019) as repre-
54 sentatives of this approach.⁴ If we posit *kinds* of RVs and suppose that they are truth-
55 bearers in a derivative sense, then it is plausible that we can accept both (3) and the

1FL01 ¹ I mean concrete in the sense isolated by Hoffman and Rosenkrantz (2005). Even if mental states are
1FL02 modes of Cartesian souls, they will count as concrete on this understanding.

2FL01 ² One finds perhaps the purest expression of this perspective in Frege: “What I acknowledge as true, I
2FL02 judge to be true quite apart from my acknowledging it’s truth or even thinking about it. That someone
2FL03 thinks it has nothing to do with the truth of a thought” (1997 p. 342). One plausible reaction to (3),
2FL04 championed by Frege among others, is to see it as supporting the view that the fundamental truth-bearers
2FL05 are members of a *sui generis* ontological category—propositions or Gedanken—that are “abstract” Hoff-
2FL06 man and Rosenkrantz’s (2005) sense.

3FL01 ³ Historically, many philosophers have favored a theological solution: there is a divine mind that neces-
3FL02 sarily exists and supplies vehicles for the truths that would otherwise appear to lack them Augustine
3FL03 (2010 p. 395) and Leibniz (1714) even offer *arguments* for the existence of God on the basis that neces-
3FL04 sary truths must subsist in a necessarily existing substance.

4FL01 ⁴ Tyler Burge expresses a similar point of view, though not in the service of developing a detailed theory
4FL02 of propositional content (see 2010 p. 37–42 and 2019 p. 45). Jeff King’s account of propositions is also a
4FL03 core example of an attempt to ground the existence and truth-conditions of propositions in the activities
4FL04 of real cognitive agents. However, on King’s view propositions are not *types* that are instantiated in par-
4FL05 ticular representations; they are a special sort of existentially quantified fact.

56 RV-First View. For there is good reason to think that there are many true RV-kinds that
57 are never instantiated, and these can serve as witnesses for the generalization in (3).⁵

58 Of course, the merits of this line of thought really rest on the *account* it gives
59 of what it is for an RV-kind to be true. In this paper, I will be considering and the
60 exploring the consequences of one such account:

61 *D*: For an RV-kind x to be true is for x to be such that, were it instantiated, its
62 instances would be true.

63 I take this to be the most intuitive and simple way of characterizing what it is for an
64 RV-kind to be true.

65 In Sect. 1, I introduce *D* and explain the sense in which I take it to define truth
66 as a *derivative* property of RV-kinds. In Sect. 2, I introduce a crucial distinction for
67 RV-kinds between being true-at a possible world vs. being true-in a possible world.
68 In Sect. 3, I develop what I take to be the strongest putative counter-examples to *D*
69 and argue that they fail.

70 2 Truth and RV-kinds

71 It will be helpful as a preliminary to situate my project with respect to debates about
72 the nature of propositions. If we take a broadly “abstractionist” approach to propo-
73 sitions, according to which they are essentially kinds, types, or reified equivalence
74 classes of token RV’s, then it is natural to think that what I am calling RV-kinds just
75 are propositions. I do not object to this interpretation but neither do I insist on it—for
76 two reasons. First, the puzzle raised by (3) is a problem for *any* RV-First view, and I
77 aim to provide a defense of the RV-First perspective that is maximally general. So I
78 do not want to make assumptions about RV-kinds that would privilege one particular
79 account of propositions over another. Second, my own view is that there is no parti-
80 tion of token RV’s into equivalence classes that *uniquely* deserves to be called the
81 partition according to *sameness of content*. So, for any RV token, there may be multi-
82 ple kinds that are equally good candidates for *the proposition* expressed by that token.

83 That said—for the purposes of making things concrete, it will be helpful to adopt
84 Hanks’ view when discussing particular examples. For Hanks, the relevant RV-kinds
85 are complex action types, the instances of which are dated particular acts of predi-
86 cation. Particular assertions are paradigm cases of “predications” in Hank’s sense.
87 Since, for Hanks, declarative mood conventionally encodes predication, by uttering

5FL01 ⁵ I should mention that Soames makes some remarks that suggest an alternative strategy for dissolving
5FL02 this puzzle. In the context of considering whether there really are enough cognitive-act types to play the
5FL03 role of all the propositions we are prepared to accept as true, he claims that propositions do not need
5FL04 to exist in order to be true (2014 p. 103). For some properties, he suggests, an individual can have that
5FL05 property without existing—for instance, Socrates has the property of being admired, though he does not
5FL06 exist (see also Salmon 1987). Truth is a property like this. In the present context, we could adopt Soa-
5FL07 mes’ strategy and say that the truths about the Milky Way quantified over in (3) are particular RVs that
5FL08 are true but do not exist. Frankly, I find this to be a non-starter—on the understanding of “exist” at issue,
5FL09 I feel compelled to deny that *there is* anything that does not exist. There are more ontologically plausible
5FL10 interpretations of the examples Soames gives, in my view.

88 literally a declarative natural language sentence one thereby makes an assertion. So
89 my producing the following token sentence constitutes a token predication:

90 (4) Magnus Carlsen is clever.

91 By producing this token, I assert that Magnus Carlsen is clever. This is an instantia-
92 tion of an action type that Hanks represents in the following way:

93 (5) $\text{I} - \langle \text{Magnus Carlsen, clever} \rangle$

94 This is the sort of action that consists in (a) referring to Magnus Carlsen (via the
95 name “Magnus Carlsen”), (b) expressing the property of being clever, and (c) predi-
96 cating the property expressed of the object referred to. For the purposes of thinking
97 through my examples of RV-tokens and RV-kinds, it will be fine to understand them
98 on the model of (4) and (5). However, I will often (sloppily, from Hanks’ perspec-
99 tive) simply treat token natural language sentences themselves as RV-tokens, rather
100 than the token actions that consist in uttering them.

101 One key consequence of Hanks’ account is that RV-kinds essentially mark out
102 token representations that have the same truth-conditions: necessarily, any token
103 predication that instantiates (5) will be true if and only if Magnus Carlsen is clever,
104 because any such token is a predication of cleverness of Magnus Carlsen. This con-
105 sequence—that RV-kinds *rigidly* pick out tokens that form an equivalence class with
106 respect to their truth-conditions—is a necessary feature of anything that counts as an
107 RV-kind, as I am using the term.

108 In the arguments I will help myself to the following schematic principles, where
109 “*p*” is to be replaced by any declarative English sentence:

110 *Referring to RV-Kinds*

111 Expressions of the form “The claim that *p*” refer to RV-kinds.

112 *Rule of thumb condition for kind membership*

113 A token of a sentence *p* will generally be a member of the kind referred to by
114 tokens of the expression “the claim that *p*.”

115 The *Referring* principle expresses my view that, when we speak about “claims” or
116 “statements” in abstraction from any particular event of claiming or stating, we are
117 referring to RV-kinds. *The Rule of Thumb Condition* provides a bridge between talk-
118 ing about particular RVs and talking about the kinds they instantiate. There are obvi-
119 ously cases in which this Rule of Thumb fails. For instance, the claim that I am
120 hungry is not a claim that LeBron James might make by uttering the sentence “I am
121 hungry.”⁶ Since claims are meant to track (at minimum) sameness of truth-condi-
122 tions, to the extent that a sentence type has context dependent truth-conditions, not
123 all tokens of that sentence will be instances of the same claim. I will not offer a gen-
124 eral theory of the conditions under which two RV’s should be counted as instances

⁶ At any rate, the sense of “claim” according to which all tokens of “I am hungry” express the same claim does not out an RV-kind that has a truth-value.

125 of the same claim.⁷ However, all the cases in which I apply the Rule of Thumb—
126 jumping from an RV-token to the kind it instantiates—are in conformity with ordi-
127 nary-language usages of “the claim that p ” and should be uncontroversial.

128 As I announced in the introduction, I propose to define *truth* as a property of RV-
129 kinds, in the following way:

130 *D*: for an RV-kind x to be true is for x to be such that, were x instantiated, x 's
131 instances would be true.

132 I intend this as a real definition of truth as property of RV-kinds: a statement of
133 *what it is* for an RV-kind to be true. Hanks explicitly endorses *D* in his explanation
134 of the manner in which cognitive act-types inherit truth-conditions from cognitive
135 act tokens (2013 p. 568); a good case can be made that it follows from Soames'
136 commitments as well.⁸ The counterfactual conditional in *D* should be understood in
137 terms of the Lewis-Stalnaker semantics: in all of the worlds that are relevantly simi-
138 lar to our own, if x is instantiated at those worlds, then x 's instances are true in those
139 worlds. A world is “relevantly similar” to our own, roughly, if and only if it differs at
140 most in the existence of a token expression of the relevant RV-kind.⁹

141 I propose that the “truths” that serve as witnesses for the generalization in (3) are
142 RV-kinds. For, it is highly plausible that (3)' is true, and (3)' posits RV-kinds that,
143 given *D*, make the generalization in (3) true:

144 (3)' There are RV-kinds that (a) are about the Milky Way that (b) have never
145 and will never be articulated by anyone and (c) are such that were they
146 tokened, their tokens would be true.

7FL01 ⁷ Indeed, I am skeptical there is a single theory adequate to all purposes for which we use words like
7FL02 “claim” or “statement.”.

8FL01 ⁸ Strictly, Soames says that a true proposition (cognitive act-type) is true in virtue of the fact that it
8FL02 represents things as being certain way and things are that way (Soames 2014 p. 96). But a proposition p
8FL03 represents things as being a certain way virtue of the fact that “all conceivable instances” of p represent
8FL04 things as being that way (*ibid* p. 96). In lieu of positing an ontology of “merely conceivable instances,”
8FL05 this claim seems appropriately paraphrased as: a proposition p represents things as being a certain way
8FL06 in virtue of the fact that, were it to be instantiated, its instantiations would represent things as being that
8FL07 way. If this paraphrase is fair, then, since a token cognitive act is likewise true in virtue of representing
8FL08 things as they are, Soames' characterization of truth for propositions, plausibly, can be partially reduced
8FL09 to the following: a proposition (cognitive act-type) is true in virtue of the fact that, were it to be instanti-
8FL010 ated, its instantiations would be true.

9FL01 ⁹ One might doubt that this is coherent: surely two worlds cannot differ *solely* in the fact that in one
9FL02 world includes a token representation that the other does not. This is correct, but I do not think it raises
9FL03 any special problems for understanding *D*. We can say that a world v differs from the actual world at
9FL04 most in the existence of token t if all the facts that distinguish v from our world are: (a) constitutive of
9FL05 the existence of t or (b) entirely grounded by the fact that t exists combined with facts hold in the actual
9FL06 world. So, for example, if we consider a world z in which a token representation s exists that does not
9FL07 exist in the actual world, there are some differences between z and the actual world that are compat-
9FL08 ible with z differing from the actual world at *most* in the existence of s : for instance, z will contain all
9FL09 s 's parts, which the actual world may not contain; and z will be such that s exists and there are horses,
9FL010 whereas that conjunctive fact does not hold of the actual world. These latter facts are, respectively, (a)
9FL011 constitutive of the existence of s and (b) entirely grounded by the fact that s exists combined with a fact
9FL012 that holds in the actual world (there are horses).

147 For instance, I think the claim consisting of the claim that the Milky Way is a gal-
148 axy conjoined with itself twenty thousand times is (a) about the Milky Way, (b) has
149 never and will never be tokened, and (c) is such that, were it to be tokened, its tokens
150 would be true. I take it that (a) and (b) are *prima facie* plausible, but I will spell out
151 the reasoning for (c). Let's call the claim consisting of the claim that the Milky Way
152 is a galaxy conjoined with itself twenty thousand times *c*. Take an arbitrary world
153 *x* that differs from the actual world at most in that *c* is instantiated. In *x* the Milky
154 Way is a galaxy, for otherwise *x* would differ drastically from the actual world, con-
155 trary to hypothesis. Now suppose that *c* is tokened in *x*. Necessarily, if something
156 is a token of *c* it is true if and only if the Milky Way is a galaxy—because all such
157 tokens consist of a conjunction each of the elements of which is true if and only if
158 the Milky Way is a galaxy. Therefore, since *x* is a world in which the Milky Way is a
159 galaxy, *x* is a world in which *c*'s token is true. Since *x* was an arbitrary world, we can
160 conclude that *c* is such that, in all the worlds that differ at most from the actual world
161 in that *c* is instantiated, *c*'s tokens are true. This proves (c), on the intended Lewis-
162 Stalnaker understanding of the counterfactual.

163 (3)' is consistent with the RV-first view. Since (3)' in combination with *D* implies
164 (3), and *D* is a principle RV-first theorists should be happy to accept, this amounts to
165 showing that (3) is consistent with the RV-first view.

166 Does *D* characterize RV-kinds as true in a *derivative*, rather than fundamental,
167 sense? One might object to this along the following lines. Trenton Merricks character-
168 izes a "fundamental truth bearer" as an object that (a) has a truth-value and (b) is such
169 that its possessing that truth-value is not (even partially) analyzed in terms of its being
170 related to another object that has a truth value (2015 p. 22). This definition suggests
171 that some RV-kinds might be fundamental truth-bearers. Consider one of the RV-kinds
172 about the Milky Way that serves as a witness for (3)' above: call it *a*. By hypothesis, *a*
173 is true and has never been tokened. The analysis I would give of *a*'s being true is that
174 *a* is such that, if it were tokened, its tokens would be true. But this analysis does not
175 mention some distinct object, standing in a relation to *a*, that is actually true—it just
176 ascribes a modal property to *a*. So it seems that, according to Merrick's characteriza-
177 tion of what makes a truth-bearer fundamental, *a* should count as a fundamental truth
178 bearer. Since *a* is not an RV-token, this result is inconsistent with the RV-first view.

179 However, I think that my definition of truth for RV-kinds still marks them as
180 derivative truth-bearers in a recognizable sense, even if that sense is not Merricks'.
181 They are derivative truth-bearers in the sense that, in the statement of what it is for
182 an RV-kind to be true, truth is predicated of another sort of thing. Truth as property
183 of RV-tokens is "prior in definition" to truth as a property of RV-kinds.¹⁰ A strong
184 way of putting it is that, on my view, a truth-predicate for RV-kinds is *eliminable*—
185 we could just as well talk about RV-kinds that could have true tokens, rather than
186 true RV-kinds. The fact stated by (6) reduces to that stated by (7):

¹⁰ I have heard the following objection about *D*: *D* explains the truth of RV-kinds in terms of the truth of possible RV tokens. But surely this is problematic from the RV-first perspective: merely possible RV-tokens are not actual concrete RV's. If we need to posit merely possible RV-tokens to explain full story about truth, then it is just false that concrete RVs are the fundamental truth-bearers. This line of thought is misleading. Plausibly, the sense in which *D* quantifies over "possible tokens" is ontologically non-

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187 (6) The claim that Shakespeare wrote plays is true.

188 (7) If the claim that Shakespeare wrote plays were tokened, its tokens would be
189 true.

190 Does this mean that *strictly* speaking the property of truth does not apply to RV-
191 kinds? Grzankowski and Buchanan (2019) recommend this position. But if we accept
192 that no RV-kind is really true then my proposed analysis of (3) fails—and, anyway,
193 I do not find the view well motivated. There is an intelligible reason why we extend
194 our concept of truth to RV-kinds, even if what it is for a RV-token to be true is not
195 exactly what is for an RV-kind to be true. This is an instance of a pattern that is
196 utterly general regarding the ascription of properties to kinds. For an individual car
197 to be red is (very roughly) for the parts on its exterior to reflect certain wavelengths
198 of light. A *type* of car, e.g. the 1998 Dodge Viper Red, can also be red, but it cannot
199 be red in exactly the same way. (In order to reflect light an object has to be located
200 somewhere in space, but a part of a *type* of car, e.g. the hood of the 1998 Dodge
201 Viper Red, is not located anywhere). Ascribing truth to RV-kinds is no more illegiti-
202 mate than ascribing colors to kinds of material objects.¹¹

203 Perhaps from a metaphysically rigorous point of view, we should say that truth
204 as property of RV-kinds is distinct from truth as a property of RV-tokens, because
205 the real definition of the former cannot apply to the latter. But all the same, natural
206 language truth-predicates can be correctly applied (without straightforward ambigu-
207 ity) to *both* RV-tokens and RV-kinds. This is what matters, from my perspective,
208 because this is what allows me to say that (3) says something correct. In ordinary
209 usage, some RV-kinds really are true.

210 3 Truth-in a world vs. truth-at a world

211 Is *D* correct about what it is for an RV-kind to be true? If we limit our attention to
212 RV-kinds that actually are instantiated, *D* predicts that these RV-kinds are true if
213 and only if all of their tokens are true. This seems to track our intuitions about what
214 claims are true. For RV-kinds as well as RV-tokens, one of the primary functions of

Footnote 10 (continued)

committal. With many philosophers, I reject the Barcan Formula, and so reject the inference from, e.g., “There might have existed a cake I baked yesterday” to “There exists something that could have been a cake I baked yesterday.” For the same reasons, I would object to an interpretation of *D* according to which it is committed to the existence of things that could be RV-tokens. Or to the existence of non-actual “merely possible things,” which I regard as a confused idea (see Williamson 2013 p.22–23). (Of course, some philosophers have argued for the Barcan formula and the view that ontology is necessary (see Williamson 2010, 2013; Fritz and Goodman 2017). My sense is that this remains a minority position, and the issues it raises are mostly orthogonal to my present concerns.) *D* ascribes a modal property to an RV-kind; the property will be modeled in a possible-worlds semantics framework by means of individuals inhabiting alternative possible worlds, but I am agnostic about the ontological commitments involved in such modeling (see Stalnaker 2012 p.22–51 for an “actualist” take on these matters). So it is somewhat misleading to say, as I do, that, in *D*, “truth is predicated of another sort of thing”—there are no *things* (possible tokens) such that *D* ascribes truth to them. The important point is that truth as a property of RV-kinds is a complex modal property, the nature of which is made intelligible in terms of truth as property of RV-tokens. (Thanks to Bill Melanson for pressing me on these issues.).

11FL01 ¹¹ See Hanks 2016 for a similar argument.

215 the concept of truth is to license “disquotational” inferences. For instance, consider
 216 the following schemata where “ p ” is to be replaced by some English sentence.

- (8) The claim that p is true (8)' p
 (9) p (9)' The claim that p is true

217
 218 In many ordinary cases, the token instantiated in line (9) or (8)' will be an
 219 instance of the claim that that is referred to in line (8) or (9)'. When this holds, the
 220 inference is a good one.

- (10) The claim that there are no unicorns is true (10)' There are no unicorns
 (11) There are no unicorns (11)' The claim that there are no unicorns is true

221
 222 When we know that a given RV-kind is true, we can be confident in endorsing a
 223 particular instantiation of it. If these sorts of inferences were not in general valid,
 224 it is difficult to see what the purpose of extending the concept of truth to RV-kinds
 225 would be. But in order for these inferences to be valid, it must be the case that, for
 226 any instantiated RV-kind x , x is true if and only if all its instantiations are true. Oth-
 227 erwise the argument schemata above might take one from a truth to a falsehood. So,
 228 if there are counterexamples to D , they will not be found among actually instantiated
 229 RV-kinds: there are no true claims that are instantiated in untrue acts of claiming,
 230 or true acts of claiming untrue claims.¹² The potentially controversial cases concern
 231 untokened RV-kinds.

232 Before we turn to that however, it will be instructive to consider an objection to
 233 the effect that the definition does not hold of necessity, even if it is extensionally
 234 correct. Consider the RV-kind instantiated by (12):

- (12) No RV-tokens exist.

235
 236 (12) suggests the following argument. Consider a possible world w in which no RV-
 237 tokens exist. In w , the RV-kind instantiated by (12)—the claim that no RV-tokens
 238 exist—is true. But, in w , it is not the case that if the RV-kind instantiated by (12)

12FL01 ¹² One might think that there are examples of claims for which this does not hold. In my view this
 12FL02 reflects the fact that, in ordinary language, we are promiscuous about what sorts of equivalence classes
 12FL03 we want to pick out with the word “claim.” There is an intuitive sense in which two people who say “I’m
 12FL04 hungry” have made the same claim, though their particular acts of claiming might have different truth
 12FL05 values. One the other hand, it would be strange to talk of *the* single claim that both of these people made
 12FL06 as having *one* truth-value—which tends to confirm D . Some cases are a bit trickier, for instance, cases
 12FL07 where “claim” seems to pick out a temporal proposition: e.g. “the claim that China’s growth is slowing is
 12FL08 true now, but it was false when economists put it forward in 1990.” This example suggests that the claim
 12FL09 that China’s growth is slowing is true but it was tokened falsely in 1990. This is not inconsistent with D
 12FL10 on its own, but inconsistency will arise if we add some natural assumptions, i.e. that the tokens expres-
 12FL11 sions from 1990 have not changed their truth-value. There are a variety of ways a defender of D could
 12FL12 deal with this issue, but, since the details are not entirely pertinent to my present concerns, I will leave
 12FL13 them for another time. (It seems promising to me to suggest that, since timeless truth is more fundamen-
 12FL14 tal than time relative truth, the sort of RV-kinds that count as the paradigm case for the application of the
 12FL15 truth-predicate to RV-kinds will be timelessly true.)

239 were tokened, those tokens would be true. In all the closest possible worlds to w in
240 which an RV-token x instantiates the claim that no RV-tokens exist, x is false—it
241 falsifies itself. Therefore w is a world in which the RV-kind instantiated by (12) is
242 true, but it is not the case that, were that kind tokened, its tokens would be true. This
243 implies that the proposed definition does not hold of necessity.

244 To my mind, this argument goes wrong in its first step: inferring from the fact
245 that, in w , no RV-tokens exist, that, in w , the claim that no RV-tokens exist is true.
246 We need to introduce a distinction, for RV-kinds, between being *true-at* a world ver-
247 sus being *true-in* a world.

248 The *truth-at/truth-in* a world distinction distinguishes between what can truly be
249 said, in our actual circumstances, of various counterfactual circumstances, versus
250 what could be truly said in those counterfactual circumstances, if they obtained.¹³ If
251 we predicate truth of contingent objects like RV-tokens, there is no avoiding such a
252 distinction, and (12) illustrates this nicely. Assuming that RV-tokens are contingent
253 beings, there are possible worlds in which no RV-tokens exist. Call the class of such
254 worlds G . (12) correctly describes the worlds in G —it is “true-at” those worlds. But
255 none of the worlds in G is such that, were they actual (12) would have the property
256 of being true. For (12) can only be true if it exists (and is an RV-token), but all of the
257 worlds in G are such that, were they actual, no RV-tokens would exist at all. This is
258 the sense in which (12) fails to be *true-in* the members of G .

259 If we extend the truth-at/truth-in distinction to RV-kinds we will be able to block
260 the argument above right at the beginning. For the argument proceeded in the fol-
261 lowing way:

- 262 (a) w is a world in which there are no RV-tokens.
263 (b) w is a world in which the claim that there are no RV-tokens is true.

264 But this in effect assumes there is no substantive truth-at/truth-in distinction for
265 RV-kinds. If there is such a distinction, there is no guarantee that a world that can
266 be characterized by means of an RV-kind p will be a world in which p is true. This
267 distinction can be used to explain the invalidity of the analogous inference for the
268 case of sentence tokens:

- 269 (a)' w is a world in which there are no RV-tokens.
270 (b)' w is a world in which tokens of the English sentence “There are no RV-tokens”
271 are true.

272 Is there a substantive truth-at/truth-in distinction applicable to *claims*, in addi-
273 tion to sentences types or concrete tokens? Here is an argument that there is not: in
274 general, it seems that an object is *true-in* a world if and only if it is *true-of* that world
275 and it exists there (with its actual semantic properties). So, for truth-bearers that

¹³ This follows Williamson’s formulation in (2013 p. 297), though he speaks of “truth of” not “truth-at”.
13FL.01 One can find similar presentations of the distinction in Mates (1970), Fine (1985), Davies and Humber-
13FL.02 stone (1980) and Stalnaker (2011). The distinction is sometimes credited to the fourteenth Century phi-
13FL.03 losopher Jean Buridan, who gives a lucid presentation of it in his *Sophismata* (1966).
13FL.04

276 exist contingently, it makes sense to mark the truth-at/truth-in distinction, because
277 they may not exist in every world where their descriptive conditions are met. But if
278 we assume (for the moment) that RV-kinds exist necessarily, the distinction would
279 be idle because RV-kinds would be true-in all and only the worlds they are true-at.

280 I am not sure if RV-kinds really are necessary existents, but, even assuming they
281 are, I think this argument should be resisted. We do not arrive at the *truth-in* relation
282 via deriving it from the *truth-at* relation plus existence. Rather, *truth-in* is the result
283 of translating talk of “what would be true” into a framework where we explicitly
284 refer to and quantify over possible situations. To say that x is true-in a possible situ-
285 ation y is just to say that, were y realized, x would have the property *truth*. So the
286 question at hand is: if w were realized, would the claim that there are no RV-kinds
287 be true? I say no, on the grounds that, even if w were realized, that claim would not
288 be such that, were it to be tokened, its tokens would be true. This is a somewhat the-
289 ory-driven response, but in the present context I do not think it begs the question.¹⁴

290 I propose then, that there is a substantive truth-at/truth-in distinction for RV-kinds
291 that we can characterize as follows:

292 An RV-kind x is true-at a world w iff x is such that, were it tokened, its tokens
293 would be true-at w .

294 An RV-kind x is true-in a world w iff, were w realized, then x would be true.

295 With this distinction in hand we can unravel the problem for D raised by (12).
296 When we consider the world w in which there are no RV-tokens, we are considering
297 a world *at which* the claim that there are no RV-tokens is true. But if we take seri-
298 ously the truth-at/truth-in distinction, this does not necessarily imply that, *in* w , the
299 claim that there are no RV-tokens is true. If this inference is blocked, then w cannot
300 be put forward as an example in which D fails to hold.

301 4 Counterexamples?

302 The strongest arguments that might be marshaled to show that D has extensional
303 counterexamples also fail, I think, for similar reasons. The arguments I have in mind
304 try to show that there is an RV-kind that accurately describes our world but would
305 not have true tokens if tokened (or misdescribes our world but would have true
306 tokens if tokened). For instance, take some true RV-kind p that is never tokened, and
307 consider the following schematically described RV-kinds:

308 **Never- p** The RV-kind consisting of the conjunction of p and the claim that p
309 is not tokened.

¹⁴ I do not think there is much hope of giving a non-theory-driven account of the inference from (a) to
14FL.01 (b)—commonsense thinking about truth does not seem to provide us with a neutral verdict that is stable.
14FL.02 The transition between (a) and (b) is natural enough, but I expect many would be uneasy endorsing struc-
14FL.03 turally similar inferences, i.e. there are no claims, therefore, the claim that there are no claims is true.
14FL.04

310 **Sometime- p** The RV-kind consisting of the conjunction of p and the claim that p
311 is tokened sometime.

312 Here is an argument that Never- p is true. By hypothesis p is true and untokened.
313 (Since I believe there are infinitely many untokened true RV-kinds, I have no reason
314 to object here.) Never- p is a conjunction of two claims. The first is p , which is true
315 by hypothesis; the second is the claim that p is not tokened, which is also true by
316 hypothesis. So Never- p is a conjunction of two true claims, and is, therefore, true.
317 But Never- p is not such that, were it tokened, its tokens would be true. Any token
318 of Never- p has a token of p as a part, so any world in which Never- p is tokened
319 is a world in which p is tokened. And therefore, in any world in which Never- p is
320 tokened, its tokens are false, because their second conjunct is false. So Never- p is a
321 counterexample to D . The argument is parallel with Sometime- p , though the conclu-
322 sion is perhaps more disturbing: Sometime- p is false, but D counts it as true.

323 Never- p actually raises two different (though related) problems for D . First, these
324 cases show that D is inconsistent with supposing that that RV-kinds form a Boolean
325 algebra. It can be that two claims x and y are individually such that, were they
326 tokened, their tokens would be true, but the conjunction [x and y] is not such that,
327 were it tokened, its tokens would be true. So if D is correct, not every conjunction of
328 true claims is itself true. Second, Never- p shows us an example of an RV-kind that
329 says of itself, in effect, that it is not instantiated, and that D therefore must count as
330 not true even if what it says is, apparently, the case.

331 The second problem is, in my view, the deeper one. The first problem can be ade-
332 quately addressed by replacing D with a recursive definition of truth for RV-kinds
333 based on their composition.¹⁵ For example:

334 An atomic RV-kind x is true iff x is such that, were it instantiated, its tokens
335 would be true.

336 An RV-kind of the form $\sim x$ is true iff x is not true.¹⁶

337 An RV-kind of the form $x \wedge y$ is true iff x is true and y is true.

338 ...

339 I do not pursue this sort of response in detail for a couple of reasons. First, to
340 develop such an account I would need to endorse a particular theory of RV-kind
341 *structure*. This would violate my aim to give a defense of the RV-First view that is
342 maximally general and depends on no special assumptions about RV-kinds—including
343 that they are structured. I am not sure there is a unique notion of “structure” that
344 applies uniformly to all schemes of classification that count as marking RV-kinds.
345 More importantly, although this solution would disarm Never- p and Sometime- p , it
346 would leave the general issue they raise—the second problem—untouched. There
347 are other plausible cases of claims that characterize themselves as uninstantiated. In
348 fact, if we develop a theory of RV-kind structure that recapitulates the structure of
349 First-Order Logic, we will likely be able to *prove* the existence of such RV-kinds via
350 diagonalization.

¹⁵FL01 ¹⁵ Thanks to Ryan Simonelli for suggesting this approach to me.

¹⁶FL01 ¹⁶ Of course, this will need to be adjusted if we want to include RV-kinds that are neither true nor false.

351 So let us take the second problem head on. I think that are grounds from within
352 common sense for taking Never- p to be false (or at the very least not true). For
353 the following seems to me to be a platitude: a true claim is something that can be
354 truly claimed. And, on this score, Never- p fails—it is a claim that, in principle, can
355 only ever be claimed *falsely*. As a representation, it is self-undermining. Looking
356 at Never- p from this perspective, it does not seem to stretch ordinary intuitions to
357 count it as false, and I propose we accept this verdict. The case of Never- p is a bit
358 odd, but I do not think that common sense provides us with dispositive reasons for
359 thinking that it is true.

360 The really significant reason in favor of judging Never- p to be true derives not
361 from common sense but from logical theory. One might plausibly object: to sup-
362 pose that a conjunction of two truths can be false involves a radical revision of clas-
363 sical semantics and would seem to imperil the validity of rules like Conjunction-
364 Introduction. On reflection, though, I think accepting that RV-kinds do not form a
365 Boolean algebra with respect to their truth-values raises no deep logical problems.
366 This would be problematic if we wanted a *logic* of RV-kinds, i.e. if we thought that
367 RV-kinds were the sort of thing that fundamentally stand in relations like logical
368 implication. (If we are thinking of RV-kinds as propositions, and take propositions
369 to have a central role in logic, this point of view is understandable.) However, from
370 the RV-first perspective it is not obvious that a logic of RV-kinds is something we
371 need.

372 It is natural to think that the properties of interest to the logician—roughly, prop-
373 erties that underlie truth-preservation due to logical form—are instantiated by the
374 *fundamental* truth-bearers. For the RV-First Proponent, then, it is natural to think
375 that logic is about token RVs (studied at a level of abstraction), since these are
376 what fundamentally have truth-values. So the fact that RV-kinds do not form a
377 Boolean algebra, does not imply that the RV-first theorist denies, e.g., Conjun-
378 ction-Introduction. From the RV-First perspective, it is not obvious that rules like
379 Conjunction-Introduction are properly applied to RV-kinds, because these are not
380 fundamentally the constituents of arguments—RV-tokens are.¹⁷ And it is consist-
381 ent with D to suppose that, necessarily, the set of RV-tokens is a Boolean algebra:
382 necessarily, every token conjunction is true iff each of its conjuncts is true, and so
383 on. This is the natural way to understand clauses for conjunction, disjunction, and
384 negation in truth-conditional semantic theories if we understand them as issuing
385 lawful universal generalizations *about token RVs* based on their structure. So the
386 fundamental truth-bearers can still conform to Boolean operations on the RV-first
387 view I am sketching.

388 Moreover, even though RV-kinds do not form a Boolean algebra with respect to
389 their truth-values, there is a property in the vicinity with respect to which they *do*
390 form a Boolean algebra: whether or not they are true-at the actual world. Although
391 a conjunctive claim composed of two true conjuncts may not always be true, a

¹⁷ There are substantial questions about what a logic for token expressions would actually look like. For some suggestions see Klima (2004), Radulescu (2018).

392 conjunctive claim composed of two claims that are both true at w will always be true
393 at w .¹⁸ Indeed, what is particularly strange about Never- p is that, although it is false,
394 it is true-at the actual world. It stands in relation to the actual world that (12) stands
395 to w in the example above. Its descriptive conditions are satisfied by the actual
396 world, but that does not—I am suggesting—make it true. With this in mind, we can
397 see that the argument above goes wrong by ignoring the truth-at/truth-in distinc-
398 tion. The actual world satisfies the descriptive condition encoded by Never- p (i.e.
399 it is true-at the actual world), but, given the truth-at/truth-in distinction, that does
400 not imply that it is true. When we compute a truth-value for Never- p on the basis of
401 Boolean conjunction, we are applying a rule that applies *not to its* truth-value, but
402 rather to its status as truth-at or not true-at the actual world.¹⁹ So the argument goes
403 wrong in concluding that Never- p is true based on the fact that it is a conjunction of
404 true claims.

405 Admittedly, these examples like Never- p do bring out a feature of D that is genu-
406 inely odd. Since, according to D an RV-kind counts as true in virtue of being such
407 that, were it tokened, its tokens would be true, untokened RV-kinds count as true,
408 not in virtue of describing the world as it is, but in virtue of having tokens that
409 would describe the world as it is *if the world were otherwise*. Since being otherwise
410 in this way (i.e. having tokens) can be part of what the RV-kind describes, we can
411 potentially get RV-kinds that are false despite describing the world correctly or are
412 true despite misdescribing it. This, I submit, is just a consequence we should accept
413 if we take seriously that truth is fundamentally a property of token representations.
414 RV-kinds are only means of categorizing tokens according to their semantic similar-
415 ity, and it is only in an extended sense that kinds themselves have truth-values or
416 represent anything. Although we can recognize a sense in which Never- p expresses a
417 condition that holds of our world, it is an abstraction from (possible) token represen-
418 tations that can only ever be false.

419 5 Conclusion

420 I began with a puzzle: truth seems to be a property of particular representations,
421 but there is pressure within common sense to countenance truths that cannot be
422 identified with any particular representation—truths that have not and never will be
423 articulated. I have argued that it is compatible with the RV-first view that there are

18FL01 ¹⁸ Supposing, of course, that truth at a world is defined for token sentences in an ordinary way.

19FL01 ¹⁹ One might object: this property *being true at the actual world* is an artifact of possible worlds model
19FL02 theory which is itself of dubious metaphysical import; so it is no real consolation to be told that RV-
19FL03 claims form a Boolean algebra with respect to this artificial property. In fact, although it is convenient
19FL04 for expository purposes to work with a possible worlds ontology, the property can be identified without
19FL05 talking about possible worlds at all. (Buridan draws the truth-at/truth-in distinction—perhaps invented
19FL06 it—without any possible worlds apparatus.) We could instead talk about these RV-kinds having fulfilled
19FL07 truth-conditions—keeping in mind that this fails to make them true.

424 untokened RV-kinds and that these RV-kinds can be assessed for truth-value in a
425 derivative sense, that stated by *D*: for an RV-kind to be true is for it to be such that,
426 were it instantiated, its tokens would be true. I considered putative counterexamples
427 to *D*, but found them to rest on ignoring the truth-at/truth-in distinction and, for that
428 reason, argued that they fail. *D* provides us with a sound principle that allows us
429 to maintain that token representational vehicles are the fundamental truth-bearers
430 while also recognizing a domain of truths that do not owe their truth to being articu-
431 lated by anyone.

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435 References

- 436 Aquinas, T. (1952). *Truth: A translation of quaestiones disputatae de veritate* (Vol. 1, Questions I–IX).
437 Translated by Mulligan, Robert W. Chicago: Henry Regnery Company.
- 438 Aristotle. *Metaphysics*. (2016). Translated by Reeve, C.D.C. Hackett Publishing Company, Inc.
- 439 Augustine of Hippo. (2010). *On the Free Choice of the Will, on Grace and Free Choice, and Other Writ-*
440 *ings*. Cambridge University Press.
- 441 Burge, Tyler. (2010) *Origins of Objectivity*. Oxford University Press.
- 442 Burge, Tyler. (2019) “Psychological Content and Egocentric Indexes.” In *Blockheads! Essays on Ned*
443 *Block’s Philosophy of Mind and Consciousness*, edited by Pautz, Adam and Stoljar, Daniel, pp.41–
444 69. MIT Press.
- 445 Buridan, Jean. (1966) *Sophisms on Meaning and Truth*. Appleton-Century-Crofts.
- 446 Descartes, René. (1991) *The Philosophical Writings of Descartes, Vol. 3: Correspondence, Trans. by*
447 *John G. Cottingham, Robert Stoothof, Dugald Murdoch, and Anthony Kenny*. Cambridge University
448 Press.
- 449 Fine, Kit. (1985) “Plantinga on The Reduction of Possibilist Discourse.” In *Alvin Plantinga*, edited by
450 Tomberlin, J.E. and van Inwagen, P. Vol. 5. Profiles (An International Series on Contemporary Phi-
451 losophers and Logicians). Dordrecht: Springer.
- 452 Frege, Gottlob. (1997) *The Frege Reader*. Edited by Beaney, Michael. Blackwell Publishing Ltd.,
- 453 Fritz, P., & Goodman, J. (2017). Counting impossibles. *Mind*, 126(504), 1063–1108.
- 454 Grzankowski, A., & Buchanan, R. (2019). Propositions on the cheap. *Philosophical Studies*, 176(12),
455 3159–3178.
- 456 Hanks, P. (2011). Structured propositions as types. *Mind*, 120(477), 11–52.
- 457 Hanks, P. (2013). What are the primary bearers of truth? *Canadian Journal of Philosophy*, 43(5),
458 558–574.
- 459 Hoffman, Joshua, and Rosenkrantz, Gary S. (2005) “Platonistic Theories of Universals.” In *The Oxford*
460 *Handbook of Metaphysics*, edited by Loux, Michael J. and Zimmerman, Dean W. Oxford University
461 Press.
- 462 Kant, Immanuel. (1998) *Critique of Pure Reason*. Edited by Guyer, Paul and Wood, Allen. Cambridge
463 University Press.
- 464 Klima, G. (2004). Consequences of a closed, token-based semantics: The case of John Buridan. *Bulletin*
465 *of Symbolic Logic*, 10(4), 592–593.
- 466 Leibniz, Gottfried Wilhelm. (1989) “The Principles of Philosophy, or, the Monadology (1714).” In *Philo-*
467 *sophical Essays*, by Leibniz, G.W., 213–225. edited by Ariew, Roger and Garber, Daniel. Hackett
468 Publishing Company, Inc.
- 469 Mates, B. (1970). Leibniz on possible worlds. *Critica*, 4(10), 123–127.
- 470 Merricks, Trenton. (2015) *Propositions*. Oxford University Press.
- 471 Radulescu, Alexandru. (2018) Token-reflexivity and repetition. *Ergo: An Open Access Journal of Phi-*
472 *losophy* 5, 745–763.
- 473 Salmon, N. (1987). Existence. *Philosophical Perspectives*, 1, 49–108.

The problem of unarticulated truths

- 474 Soames, Scott. (2014) Cognitive propositions. In *New Thinking About Propositions*, by King et al.,
475 91–124. Oxford University Press.
476 Stalnaker, Robert. (2011) *Mere Possibilities: Metaphysical Foundations of Modal Semantics*. Princeton
477 University Press.
478 Williamson, Timothy. (2013) *Modal Logic as Metaphysics*. Oxford University Press.
479 Williamson, T. (2010). Necessitism, contingentism, and plural quantification. *Mind*, 119(475), 657–748.

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