

NATHAN SALMON

ARE GENERAL TERMS RIGID?*

I

5 On Kripke's intended definition, a term designates an object *x* rigidly
 6 if the term designates *x* with respect to every possible world in which
 7 *x* exists and does not designate anything else with respect to worlds in
 8 which *x* does not exist. Kripke evidently holds in *Naming and*
 9 *Necessity*, hereafter *N&N* (pp. 117–144, *passim*, and especially at 134,
 10 139–140), that certain general terms – including natural-kind terms
 11 like “water” and “tiger”, phenomenon terms like “heat” and “hot”,
 12 and color terms like “blue” – are rigid designators solely as a matter
 13 of philosophical semantics (independently of empirical, extra-lin-
 14 guistic facts). As a consequence, Kripke argues, identity statements
 15 involving these general terms are like identity statements involving
 16 proper names (e.g., “Clark Kent = Superman”) in that, solely as a
 17 matter of philosophical semantics, they express necessary truths if
 18 they are true at all. But whereas it is reasonably clear what it is for a
 19 (first-order) singular term to designate, Kripke does not explicitly say
 20 what it is for a *general* term to designate.¹ General terms are stan-


* The present article was presented to the interdisciplinary Princeton Workshop on Semantics in May 2003, where Robert May was commentator. I am grateful to May and the other discussants for their reactions, especially Scott Soames. I am also grateful to May for subsequent correspondence. I respond below to what I take to be his central criticisms. The reader is hereby cautioned, however, that I do not know the extent to which those criticisms represent his current thinking. Thanks go also to Alan Berger, Delia Graff, and Teresa Robertson for discussion.

¹ The phrase “singular term” is used throughout as a meta-linguistic term for any object-language expression of a certain logical *type* – specifically, any first-order expression whose primary logico-semantic function is to designate (with respect to a given context, time, place, and possible world, and under a given assignment of values to variables) a single individual, and which attaches to (or fills an argument place of) a first-order predicate to form a (open or closed) formula. A general term, by contrast, is of a logical type that is potentially applicable (with respect to semantic parameters) to any number of individuals.



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21 dardly treated in modern logic as predicates, usually monadic pred-
 22 icates. There are very forceful reasons – due independently to Church
 23 and Gödel, and ultimately to Frege – for taking predicates to des-
 24 ignate their semantic extensions.² But insofar as the extension of the
 25 general term “tiger” is the class of actual tigers (or its characteristic
 26 function), it is clear that the term does not rigidly designate its
 27 extension, since the class of tigers in one possible world may differ
 28 from the class of tigers in another. What, then, is it for “tiger” to be
 29 rigid?

30 In his recent book, *Beyond Rigidity* (Oxford University Press,
 31 2002), Scott Soames considers the two interpretive hypotheses that he
 32 deems the most promising, strongly favoring one of the two (pp. 249–
 33 263, 287–288, and *passim*). On the preferred interpretation, a general
 34 term is *rigid*, by definition, if it expresses a property (e.g., being a
 35 tiger) that is essential to anything that has it at all, i.e., a property of
 36 an object that the object could not fail to have (except perhaps by not
 37 existing). Soames characterizes this hypothesis as a “natural exten-
 38 sion” to predicates of *N&N*’s definition of singular-term rigidity.³ I

Footnote 1. (*Continued*)

In the English sentence “Tony is a tiger”, “Tony” functions as a singular term, “tiger” as a general term. (See footnote 13 concerning the copula.) Proper names, personal pronouns, and individual variables are taken to be paradigm cases of singular terms, whereas common nouns, most adjectives (other than determiners), and intransitive verbs are taken to be paradigm cases of general terms. In the spirit of the literature on possible-world semantics and rigid-designator theory (dating back at least as far as John Stuart Mill), I assume for the most part that an English first-order definite description, [the *NP*], is a singular term – ignoring the prospect that it is instead (in the rival spirit of Bertrand Russell and Richard Montague) a first-order uniqueness-restricted quantifier equivalent to [a unique *NP*].

² Cf. my *Reference and Essence* (Princeton University Press and Basil Blackwell, 1981), at pp. 48–52. The *metaphysical extension* of a property *P* (in a possible world *w* at a time *t*) =_{def} the class of possible objects that have *P* (in *w* at *t*). The *semantic extension* of a predicate (with respect to semantic parameters) =_{def} the metaphysical extension of the property semantically expressed by Π (with respect to those same parameters). The *metaphysical intension* of a property *P* =_{def} the function that assigns to any possible world *w* (and time *t*) the metaphysical extension of *P* in *w* (at *t*). The *semantic intension* of a predicate Π =_{def} the metaphysical intension of the property semantically expressed by Π .

³ Cf. pp. 251–252. Soames defended this interpretive hypothesis at an international conference on Kripke’s work at the *Instituto de Investigaciones Filosóficas, Universidad Nacional Autónoma de México*, Mexico City, October 1996, which Kripke and I both attended. The other interpretive hypothesis that Soames considers is mentioned below in footnote 11.



39 deem it a non-starter. One obvious problem with the proposal is that
 40 color terms then emerge as non-rigid, contrary to Kripke's apparent
 41 labeling of them as rigid. Also the definition does not provide any
 42 obvious candidate to be the rigid designatum of a predicate like "is a
 43 tiger". The proposal might be based on a notion of *poly-designation*,
 44 whereby a predicate "designates" one by one each of the things
 45 individually to which the predicate correctly *applies* semantically, i.e.,
 46 each of the elements of the semantic extension.⁴ A predicate for an
 47 essential property applies to anything *x* that has the property in
 48 question with respect to every world in which *x* exists, while a
 49 predicate for an accidental property does not do this. But an essen-
 50 tial-property predicate equally applies to the other things *y* in its
 51 extension besides *x*, and *does so with respect to worlds in which x does*
 52 *not exist*. This interpretation, therefore, does not fit the intended
 53 definition of rigid designation.

54 If the predicate "is a tiger" is to be regarded as designating the
 55 property of being a tiger (rather than as multiply designating each
 56 individual tiger, and rather than as designating the class of actual
 57 tigers), then it would appear that any predicate should be seen as
 58 designating the property that it expresses. But in that case, every
 59 predicate, even "is a bachelor", emerges as a rigid designator, since
 60 the attribute (property or relation) expressed by a predicate with
 61 respect to a possible world does not vary from world to world.
 62 Nothing special about natural-kind predicates, color predicates, etc.
 63 has been identified to demarcate them from the rest. So it is that *N&N*
 64 leaves us with the question: What is for a general term to be a rigid
 65 designator?⁵

66 One way to proceed that is more promising than the failed strat-
 67 egies Soames considers would be to define a notion of designation
 68 (*simpliciter*) for both singular and general terms in such a way that,
 69 applying the intended definition of rigid designation *as is*, without

⁴ Soames does not explicitly suggest this. On the contrary, he says repeatedly that a natural-kind predicate designates a natural kind. It is difficult to reconcile this idea with Kripke's labeling of natural-kind terms as rigid designators, on Soames's proposed interpretation of the latter. (My best guess is that Soames attempts to provide a reconstruction of the notion of rigidity for general terms that is divorced from the notion of designation.) Cf. Monte Cooke, "If "Cat" is a Rigid Designator, What Does it Designate?" *Philosophical Studies*, 37 (1980), pp. 61–64.

⁵ Cf. *Reference and Essence*, pp. 44–54.

70 modification, a natural-kind general term (and a color general term, a
 71 natural-phenomenon general term, etc.) designates its designatum
 72 rigidly whereas some other sorts of general terms designate only non-
 73 rigidly.⁶ What object, then, should a general term like “tiger” be said
 74 to *designate*? And which contrasting sorts of general terms designate
 75 only non-rigidly?

76 The first question has an obvious and natural response: The term
 77 “tiger” designates the species, *Tiger (Felis tigris)*. In general, a bio-
 78 logical taxonomic general term should be seen as designating a bio-
 79 logical taxonomic kind (a species, a genus, an order, or etc.), a
 80 chemical-element general term (“gold”) should be seen as designating
 81 an element (gold), a chemical-compound general term as designating
 82 a compound (water), a color general term as designating a color (red),
 83 a natural-phenomenon general term as designating a natural phe-
 84 nomenon (heat), and so on. The semantic content of a single-word
 85 general term might then be identified with the designated kind (or the
 86 designated substance, phenomenon, etc.). So far, so good. But now
 87 the threat is faced anew that every general term will emerge as a
 88 rigid designator of some appropriately related universal or other.
 89 If “bachelor” designates the gendered marital-status category,
 90 *Unmarried Man*, it does so rigidly. Even a common-noun *phrase*, like
 91 “adult male human who is not married”, emerges as a rigid desig-
 92 nator.

II

94 Such is the notion of designation for general terms that I proposed
 95 in *Reference and Essence* (pp. 52–54, 69–75), and which I continue
 96 to believe is fundamentally correct.⁷ Soames objects on the grounds

⁶ Soames complains (p. 248) that Kripke’s original definition of rigidity is restricted to singular terms. I see no conclusive evidence of this in Kripke’s writings. I assume instead that the notion of designation *simpliciter* that Kripke invokes extends to general terms (as does, for example, the notion of designation invoked in the work of Carnap). I believe Kripke intended his definition of rigidity to apply to general as well as singular terms. (It is possible that *N&N* uses the word “reference” for the special case of singular-term designation.)

⁷ See also Joseph Laporte, “Rigidity and Kind,” *Philosophical Studies*, 97, 3 (2000), pp. 293–316.

97 that “there is no point in defining a notion of rigidity for predicates
 98 according to which all predicates turn out, trivially, to be rigid” (p.
 99 251).⁸ Ultimately he decides that there is no notion of rigidity that
 100 is simultaneously analogous to singular-term rigidity, a natural
 101 extension of singular-term rigidity to general terms, and a notion on
 102 which certain general terms (especially, natural-kind terms) are rigid
 103 but many other general terms are non-rigid (p. 263). And this, he
 104 argues, paves the way for a “demotion of the status of rigidity in
 105 Kripke’s overall semantic picture” of terms singular and general (p.
 106 264).

107 I sharply disagree. It is true that Kripke’s thesis that proper names
 108 and certain general names alike, including natural-kind terms, are
 109 rigid designators is secondary to a more fundamental thesis: that
 110 these names are *non-descriptional*.⁹ However, the corollary that they
 111 are therefore rigid is correct, and its philosophical significance should
 112 not be missed or undervalued. Soames’s discussion suffers from a
 113 failure to distinguish sharply between a general term like “tiger” and
 114 its corresponding predicate, “is a tiger”. Even if every common count
 115 noun (whether a single word or a phrase) emerges as a rigid designator
 116 on my counter-proposal, it does not follow that every general
 117 term is rigid. As Bernard Linsky noted in an unduly neglected paper,

⁸ On Soames’s “Extended Millianism” (pp. 278–279), the content of a natural-kind phrase like “matter sample composed exclusively of molecules consisting of two hydrogen atoms and one oxygen atom” is a property, whereas the content of a single-word natural-kind term like “water” is a natural kind (which Soames identifies with the metaphysical intension of a property). This account makes room for a distinction between descriptionality (connotativeness) and non-descriptionality for some general terms analogous to John Stuart Mill’s insights concerning definite descriptions and proper names, though only among natural-kind general terms and the like. (Mill, by contrast, classified all general terms as “connotative”.) Although Soames opposes extending this account to all general terms – presumably on the ground that doing so would render even an institutional-kind term like “bachelor” a rigid designator – there is no obvious principled reason why single-word non-natural-kind terms should differ from single-word natural-kind terms (and single-word color terms, single-word natural-phenomenon terms, etc.) in this respect. I suspect there is no such deviation. See footnotes 14 and 23.

⁹ Or not descriptional in a certain way; cf. *Reference and Essence*, Chapters 1–2, especially pp. 14–23, 32–36, 42–44, 54–56.

118 some general terms, in fact, are manifestly non-rigid.¹⁰ This is most
 119 evident with certain English definite descriptions. Definite descrip-
 120 tions are typically singular terms – or alternatively (following the
 121 great philosopher-lord), quantificational expressions that go around
 122 impersonating singular terms – but some English definite descrip-
 123 tions, unlike ordinary singular terms, function rather as if they were
 124 adjectives or, more likely, mass-noun phrases. One example is the
 125 description “the color of the sky”, as it occurs in the sentence

(P1) My true love’s eyes are the color of the sky.

127 Soames sees the definite description in the predicate of (P1) as a
 128 singular term rather than a general term (p. 261).¹¹ Yet the copula
 129 “are” here cannot be the pluralization of the “is” of identity, since the
 130 color blue is a single universal whereas the speaker’s lover’s eyes are
 131 two particulars, and hence not both identical to a single thing. Nor
 132 can the copula be the so-called “is” of constitution. One might argue
 133 that the copula in (P1) is a fourth kind of “is”, over and above the
 134 “is” of predication, the “is” of identity, and the “is” of constitution:
 135 the dyadic “is” of possession. Soames is evidently committed to
 136 positing such an alternative sense. This rather strained account raises
 137 the question of why “to have” should come to masquerade as “to

¹⁰ Bernard Linsky, “General Terms as Designators,” *Pacific Philosophical Quarterly*, 65 (1984), pp. 259–276. See also John Heintz, *Subjects and Predicables* (The Hague: Mouton, 1973), at p. 88. Although my account differs significantly in certain details from Linsky’s (cf. footnote 22 below), I have benefited from his observations. In particular, as Linsky notes, it is highly likely that the notion of a general-term definite description (a “definite ascription”) underlies Kripke’s labeling of certain contrasting general terms as *rigid designators*. (See footnote 25 below concerning Kripke’s reaction to this alternative to Soames’s preferred account.)

¹¹ More accurately, he sees the description as a quantifier phrase, which he “assimilates to the broader class of singular terms” (p. 316n17). Soames neither sees the description in (P1) as a general term nor assimilates it to one.

I presented my objections to Soames’s proposed interpretation of *N&N*, as well as this counter-proposal regarding designation, in the discussion following Soames’s paper at the 1996 *Universidad Nacional Autónoma de México* conference on Kripke. (See footnote 3 above.) There is some discussion in Soames that was evidently prompted by my objections and counter-proposal, but in which he considers instead a significantly different proposal (one which I reject), according to which a general term (“predicate”) is to be labeled *rigid*, or *non-rigid*, according as some relevantly associated *singular* term is rigid or not (pp. 364n9, 260–262, 289–292, 307–311). Soames objects that on the counter-proposal he considers, every general term (“predicate”) is rigid. This contradicts the very point of (P1), as it is intended. (Soames does not consider the prospect that the description “the color of the sky” functions as a general term rather than a singular term.)

138 be". It is considerably more plausible that the "are" in (P1) is the very
139 same copula that occurs in

(C) My true love's eyes are blue

141 *to wit*, our old and dear friend, the "is" of predication (in its plu-
142 ralized conjugation). This common form of "be" cannot coherently
143 combine with an English expression functioning as a (first-order)
144 singular term to form a meaningful English predicate. Any English
145 term (or English expression that functions as a term when occurring
146 in a predicate) that combines with the "is" of predication to form a
147 monadic predicate, must function as a general term in the predicate
148 so formed.¹² (I take these principles to be partly "criterial" of the
149 distinction between singular and general terms.) Just as the adjective
150 "blue" is a general term in (C), so the definite description "the color
151 of the sky" is a general term in (P1). The former rigidly designates the
152 color blue; the latter designates the color non-rigidly.

153 How can a definite description combine with the "is" of predi-
154 cation while designating something? In the same way as the adjective
155 "blue" or the mass noun "water". Let us formally represent the
156 copula in "is blue" as a predicate-forming operator on adjecti-
157 ves (whether single words or adjective phrases) and mass nouns, "*is*
158 { }", and let us represent the "is a" in "is a tiger" as a similar
159 predicate-forming operator on count nouns, "*is-a* { }", so that the
160 predicate "is blue" is formalized as "*is* {blue}" and the predicate "is
161 an albino tiger" as "*is-a* {albino tiger}".¹³ The term "the color of the

¹² See footnote 1. Numerous linguists and philosophers have argued that a first-order definite description following the verb "be" is at least often a general term (or "predicate"), and the copula the "is" of predication rather than the "is" of identity. See, for example, George Wilson, "On Definite and Indefinite Descriptions," *The Philosophical Review*, 87 (1978), pp. 48–76; and Delia Graff, "Descriptions as Predicates," *Philosophical Studies*, 102, 1 (January 2001), pp. 1–42. If a first-order definite description can combine with the "is" of predication to form a monadic predicate, then the description must function predicatively in the predicate so formed rather than as a singular term.

¹³ In light of the previous note, it might be advisable to introduce also a third predicate-forming operator, "*is-the* { }", whereby "*is-the*{author of *Waverley*}" is equivalent to "*is-a*{unique author of *Waverley*}".

I remain neutral here concerning whether the copula in "Tony is a tiger" is the "is" of predication or the "is" of identity ("is identical with some tiger"). If it is the latter, the predicate-forming operator "*is-a*" may have a complex definition invoking existential quantification and identity. Some device may still be needed, however, to convert the count noun into a predicate, as for example in:

162 sky” may then be formally rendered as a second-order definite
163 description:

$$(\iota F)[is-a^2\{color\}(F) \ \& \ is\{F\}(\text{the sky})],$$

165 where “*F*” is a variable ranging over appropriate universals. (The
166 superscript “2” indicates that the resulting predicate is second-order.)
167 As a second-order term, the description designates even while combin-
168 ing felicitously with the “is” of predication.¹⁴ Indeed, so under-
169 stood, (C) is a straightforward logical consequence of (P1) taken
170 together with the empirical premise,

(P2) Blue is the color of the sky.

172 This inference is best seen as a special instance of Leibniz’s Law, or
173 Substitution of Equality. In the words of a great English poet, it’s
174 easy if you try. According to (P2), the color blue is identical with the
175 color of the sky. Since the speaker’s true love’s eyes are the color of
176 the sky, it follows by Substitution that those same eyes are blue. All
177 you need (besides love) is to see the copula in (P2) for what it surely
178 is: an “is” of identity, attached to general terms instead of singular
179 terms, and forming a sentence that is true if and only if the terms
180 flanking the “is” are co-designative.

181 Formalization of the inference might help to make the point:

Footnote 13. (*Continued*)

$$(\lambda F)(\lambda x)[(\exists y)(\{F\}\text{-izes}(y) \ \& \ x = y)]$$

where the “-izes” operator applies to a count noun to yield a predicate (see footnote 22). Since an analysis of indefinite descriptions combined with “be” to form a monadic predicate does not eliminate the need for converting a count noun into a predicate, it may be more plausible to see the indefinite article in such constructions as syncategorematic – a purely cosmetic grammatical convenience (or inconvenience!) – rather than as signaling its alternative function as an existential-quantificational operator.

¹⁴ Using this formal device one may even form non-rigid count-noun general terms, e.g.

$$(\iota F)[is-a^2\{gendered\ marital\text{-}status\ category\}(F) \ \& \ is-a\{F\}(\text{Hugh Hefner})].$$

This application of the device to count nouns does not obviously correspond to any legitimate construction of English, but neither is there any obvious reason why such a construction could not be appended to English. (Sentences like (P1) might be taken as evidence that English already has some characteristics of a second-order formal language.)

- (P1') $(x)[is-a\{eye\ of\ my\ true\ love\}(x)$
 $\rightarrow is\{(\iota F)[is-a^2\{colour\}(F) \ \& \ is\{F\}(the\ sky)]\}(x)]$
- (P2') $blue = {}^2(\iota F)[is-a^2\{colour\}(F) \ \& \ is\{F\}(the\ sky)]$
- $\therefore (C')$ $(x)[is-a\{eye\ of\ my\ true\ love\}(x) \rightarrow is\{blue\}(x)]$

183 (Then again, it might not.) The copula in (P2) is evidently the same
 184 “is” of identity that occurs in the conclusion of “There are exactly
 185 three volumes of Russell and Whitehead’s *Principia Mathematica*;
 186 therefore, three is the number of volumes of *Principia Mathematica*”.
 187 Soames contends instead (pp. 364n9, 289–290) that the syllable/
 188 vocable “blue” represents a pair of English homonyms: one an
 189 adjective (blue₁), the other a noun (blue₂) that is parasitic on the
 190 adjective. This perspective yields a markedly different rendering of
 191 the inference:

- (P1'') $(x)[x \text{ is an eye of my true love}$
 $\rightarrow Is(x, (\iota y)[y \text{ is a color} \ \& \ Is(\text{the sky}, y)])]$
- (P2'') $blue_2 = (\iota y)[y \text{ is a color} \ \& \ Is(\text{the sky}, y)]$
- $\therefore (C'')$ $(x)[x \text{ is an eye of my true love} \rightarrow x \text{ is blue}_1]$,

193 where the dyadic predicate “Is” occurring in the premises represents
 194 the alleged “is”M of possession. This argument, however, is invalid as
 195 it stands. The argument (and also the parallel invalid argument ob-
 196 tained by interchanging the major premise and conclusion) may be
 197 validated by supplementing the premises with a striking Carnapian
 198 “meaning postulate” (perhaps as a tacit premise): “Something is blue
 199 iff it is blue’, taken in the alleged sense of:

- (P3) Something is_{predication} blue₁ iff it is_{possession} blue₂,

201 and formalized as

- (P3'') $(x)[x \text{ is blue}_1 \leftrightarrow Is(x, \text{blue}_2)]$.

203 But how plausible is it that both of the words “is” and “blue” making
 204 up the English predicate are ambiguous (quite independently of a
 205 third meaning, the “is” of identity), and in such a way that, solely as a
 206 matter of English semantics, the predicate applies under one meaning
 207 exactly when it applies under the other as well? Indeed, solely as a
 208 matter of English semantics, the two alleged readings would have to
 209 be *logically equivalent* – sharing not only the same semantic extension,
 210 and not only the same modal intension, but even the very same



211 logical content, i.e., the same function from models to intensions.¹⁵
 212 This degree of duplication – duplication of spelling, phonetics,
 213 structure, etc., and in addition, duplication of logical content –
 214 strongly suggests that something has gone wrong in the analysis.
 215 Rather than exposing an unnoticed convergence, our distinction
 216 without a difference more likely indicates an erroneous proliferation
 217 (“is_{predication} blue₁” vs. “is_{possession} blue₂”). The fact that the word
 218 “blue” can occur alternatively as a noun or as an adjective does not
 219 imply that the word is ambiguous with regard to semantic extension
 220 or intension, let alone that there are two words “blue” rather than
 221 one – let alone that there is in addition to the standard “is” of
 222 predication another predicative “is”, the alleged “is” of possession.
 223 To quote Kripke (slightly out of context): “It is very much the lazy
 224 man’s approach to philosophy to posit ambiguities when in trouble.
 225 . . . [The] ease of the move should counsel a policy of caution: Do not
 226 posit an ambiguity . . . unless there are really compelling theoretical or
 227 intuitive grounds to suppose that an ambiguity really is present”
 228 (“Speaker’s Reference and Semantic Reference”, p. 19).

III

230 Robert May has argued in response to these considerations that
 231 insofar as “the color of the sky” is to be classified either as a singular
 232 term or as a general term, it is a singular term even in (P1).¹⁶ He
 233 endorses this conclusion on the ground that definite descriptions are
 234 nominal phrases that can occur in positions occupied by singular
 235 terms – as, for example, in “Max and the color of the sky are two of
 236 my favorite things”. In addition, May cites the particular sentences,

¹⁵ See my “On Content”, *Mind*, 101, 404 (October 1992), pp. 733–751, concerning the relevant notion of logical content. As I use the term, the *logical content* of an expression *e* is the function that assigns to any model *Z* for the language, the principal semantic value (classically the extension, in modal logic the intension) of *e* in *Z*. Meaningful expressions are logically equivalent when, and only when, they have the same logical content. For example, “ $(p \vee q) \wedge \sim (p \wedge q)$ ” and “ $\sim (p \equiv q)$ ” have the same logical content – since they have the same truth table – even if they do not have the same semantic content *simpliciter* (i.e., even if they express different propositions).

¹⁶ “Comments on Nathan Salmon, ‘Are General Terms Rigid?’,” presented to the 2003 Princeton Workshop on Semantics.

237 “Max is the man for the job” (due to James Higgenbotham) and the
 238 sarcastically understated “Max isn’t the best cook in town”, as fur-
 239 ther examples – allegedly like (P1) – of the “is” of predication com-
 240 bined with an English singular term rather than a general term to
 241 form an English monadic predicate.

242 As a rejoinder to May’s objections, and in order to clarify the
 243 position I am defending, I offer the following observations:

244 (i) The possibility of grammatically occupying singular-term po-
 245 sition is a necessary condition on singular terms, not a sufficient
 246 condition. Mass terms in English, for example, can occur in singular-
 247 term position (“Water is H₂O”, “Max and gin are two of my favorite
 248 things”), but they also occur in general-term position, combining
 249 with the “is” of predication to form English monadic predicates
 250 (“The liquid in this cup is water”). Likewise, canonical color terms
 251 and number terms (“three”) can occur in singular-term position (as in
 252 (P2) and “Nine is the number of planets”), but they also combine
 253 with predicational “be” to form a predicate (as in (C) and “The
 254 planets are nine”)¹⁷ Contrary to May, the latter is something singular
 255 terms cannot do, at least not while functioning as singular terms, or
 256 even as first-order restricted quantifiers in the manner of Russell and
 257 Montague. (See footnote 1 above. The fact that mass terms and the
 258 like can occur grammatically in singular-term position in addition to
 259 general-term position might be taken as independent grounds for
 260 recognizing at least some general terms as *second-order singular*
 261 *terms*.)

262 (ii) English also includes sentences like “What I am is nauseous”,
 263 in which the subject is a general term – or, at least, would appear to
 264 be one. Indeed, this sentence appears to be an identity statement, and
 265 its subject a second-order definite description (or, alternatively, a
 266 second-order restricted quantifier). Insofar as English includes sec-
 267 ond-order definite descriptions, phrases like “the color of the sky”,
 268 “Henry’s favorite beverage”, and “the chemical compound composed

¹⁷ The predicate formed by combining “be” with a canonical number term might be regarded as *multi-adic* (rather than as monadic, or dyadic, etc.). More accurately, such numerical predicates should be seen as applying collectively rather than individually (or equivalently, as applying to pluralities or multiplicities, i.e., to groups having a number which may be other than one). See my “Wholes, Parts, and Numbers,” in J. Tomberlin, ed., *Philosophical Perspectives 11: Mind, Causation, and World* (Atascadero, CA: Ridgeview, 1997), pp. 1–15.

269 of two parts hydrogen, one part oxygen” are as good candidates as
 270 any.¹⁸ Although these descriptions can occur in singular-term posi-
 271 tion, they also combine with the “is” of predication to form monadic
 272 predicates, wherein they cannot function as singular terms. In fact, at
 273 least some of these same definite descriptions appear to function as
 274 mass-noun phrases and/or as color-term noun phrases. (Consider
 275 (P2') and “Water is the chemical compound composed of two parts
 276 hydrogen, one part oxygen”.) As such, these descriptions would be
 277 general terms rather than singular.

278 (iii) The copula in May’s examples – “Max is the man for the job”
 279 and “Max isn’t the best cook in town” – is normally and plausibly
 280 construed as the “is” of identity rather than the “is” of predication.
 281 For example, “Max is the man for the job” is logically equivalent to
 282 its converse, “The man for the job is Max”, and also to Russellian
 283 paraphrases of its identity construal – “Someone is both a unique
 284 man for the job and Max”, “Max, and no one else, is a man for the
 285 job”, etc. Likewise, “Max is the man for the job” supports Leibniz’s-
 286 Law substitution, e.g., “Therefore, Max speaks Japanese iff the man
 287 for the job speaks Japanese”. By contrast, (P1), on its relevant
 288 reading, is not equivalent to **“Something is both a unique color of
 289 the sky and each of my true love’s eyes”*.¹⁹ Neither does (P1) support
 290 logical substitution (e.g., #*“Therefore, my true love’s eyes have cat-
 291 aracts iff the color of the sky has cataracts”*). Since the copula in (P1),
 292 on its relevant reading, cannot be read as the “is” of identity, and
 293 should be read instead as the “is” of predication, the definite
 294 description does not function in (P1) as a singular term.

295 (iv) May’s claim that some first-order definite descriptions, like
 296 “the man for the job”, can combine with the “is” of predication to
 297 form an English monadic predicate, rather than with the “is” of

¹⁸ The threat of Russell’s Paradox applies pressure to see some definite descrip-
 tions as differing from others in logical form, despite sharing the same syntactic
 form. The kinds that come readily to mind are always of the following sort (*R*): *a*
kind K that is not itself something of kind K. The species, *Tiger*, for example, is not
 itself a tiger. (Indeed, precious few kinds are not of this kind (*R*.) Consider now the
 very kind just specified: the kind (*R*) such that, necessarily, something is of (*R*) iff it is
 a kind *K* that is not itself something of kind *K*. The preceding definite description,
 despite its syntax, cannot be first-order on pain of contradiction (assuming that it
 designates a kind, and assuming obvious logical properties of definite descriptions).

¹⁹ The converse of (P1), **“The color of the sky are my true love’s eyes”*, is
 acceptable only in stylized discourse, wherein it is a stylistic variant of the original
 (and the copula functions as the converse of the “is” of predication).

298 identity, is controversial. (See footnotes 12 and 13 above.) If the
 299 thesis is correct, the description in the predicate so formed is equiv-
 300 alent to a predicative indefinite description – as perhaps the indefinite
 301 description in “is a unique man for the job”. A predicative indefinite
 302 description (e.g., the phrase “a tiger” in the predicate “is a tiger”) is
 303 not a singular term, and does not function as one in its containing
 304 predicate. May’s examples therefore cannot be instances of a mo-
 305 nadic predicate formed by combining the “is” of predication (func-
 306 tioning as such in the predicate) with a singular term (functioning as
 307 such in the predicate).²⁰

308 (v) That “blue” and “the color of the sky” are general terms is a
 309 fact about logical form. It is not a fact about syntactic form – or
 310 about *grammar* in a syntactic sense of the term (which does not
 311 conform to current usage in theoretical linguistics). The following
 312 sentences, on their standard readings, have the same syntactic form.

- (1) Henry’s favorite shirt is the color of the sky
- (2) Henry’s favorite color is the color of the sky

314 Each is a copular sentence constructed from a definite description of
 315 the form [Henry’s favorite *N*] as subject, the appropriate conjugation

²⁰ May contends that the definite description in “Henry is the best man for the job” may be seen as functioning simultaneously as a first-order singular term and predicatively. He argues that this dual function is illustrated by the definite description in “Oscar considers Henry the best man for the job”. This sentence provides no clear support for the claimed schizophrenia. On the contrary, the description cannot function in the latter sentence as a customary-mode singular term. If it did, it would support Leibniz’s-Law substitution, but it does not. (If Oscar judges Henry the best man for the job, while the best man for the job is in fact the man who is having an illicit affair with Oscar’s wife, it does not follow that Oscar considers Henry the man who is having an illicit affair with Oscar’s wife.) Neither does the description in “Oscar considers Henry the best man for the job” function straightforwardly predicatively – e.g., in the manner of the indefinite description in the predicate “is a unique best man for the job”. For, again, if the description functioned in the manner of a customary-mode, predicative, uniqueness-restricted, indefinite description, it would support logical substitution. Rather the description occurs in a non-extensional context of cognitive attitude; its function in “Oscar considers Henry the best man for the job” is the same as in “Oscar thinks that Henry is the best man for the job”. As Frege has taught us, the description here is not a singular term designating its customary designatum. Rather it is in *ungerade* (oblique, indirect) mode, designating its *ungerade* designatum, which is its customary content. Moreover, as Frege also noted, the customary content is (in some sense) objectual rather than function-like, so that the description also does not function predicatively. In sharp contrast, the description in (P1) is in customary mode, wherein it designates its customary designatum, the color blue.

316 of the verb “be” as copula, and the definite description “the color of
 317 the sky” as predicate nominal. Nevertheless, they differ sharply in
 318 logical form. Sentence (1) is a monadic predication, whereas sentence
 319 (2) is (equivalent to) an identity/equation, on a par with (P2) and with
 320 May’s examples (e.g., “Max is the man for the job”). Correspond-
 321 ingly, (2) is logically equivalent to its converse and supports Leib-
 322 niz’s-Law substitution; (1) is not and does not.

323 It would be a mistake to infer that, since they differ in logical form,
 324 (1) and (2) also differ in syntactic/grammatical form. Compare the
 325 following two sentences, on their standard readings.

- (3) Henry’s favorite shirt is blue
 (4) Henry’s favorite color is blue,

327 These sentences are semantically related exactly as (1) and (2). All
 328 four sentences, (1)–(4), share a common syntactic structure. Like the
 329 pair (1) and (2), (3) and (4) differ in the replacement in their subjects
 330 of “shirt” by “color” (count nouns both), and are otherwise struc-
 331 turally identical. Here the lexical switch in the subject issues a cate-
 332 gorical (non-structural) switch in the predicate. The word “blue”
 333 occurs as an adjective in (3), as a noun in (4), reflecting the change in
 334 logical form. This grammatical switch in the predicate does not occur
 335 with (1) and (2). As already noted, abstracting from their meanings
 336 and their logic – which are indeed very different – (1) and (2) share the
 337 same syntactic analysis in terms of both constituent structure and
 338 lexical and phrasal categories. Yet the same change in logical form
 339 that occurs in (3) and (4) also occurs in (1) and (2), where it is
 340 concealed behind a veil of superficial syntactic similarity. Though
 341 “the color of the sky” is a nominal phrase, it plays exactly the same
 342 logico-semantic role in (1) and (P1) that the adjectival “blue” plays in
 343 (3) and (C) – a role reflected in the grammar of the word but not in
 344 that of the description.²¹

345 Here again, contrary to May, recognition that the copula in (P1),
 346 on its standard reading, is the same “is” of predication that occurs in
 347 (3) and (C) reveals that the predicate nominal in (P1) – regardless of

²¹ The original version of the present paper, to which May replied, used the word “adjectival”, inadvisably, in a logico-semantic (and consequently artificially broad) sense, to include any term whose logical form allows it to combine with the “is” of predication, without an intervening article, to form a monadic predicate (one that is not logically equivalent to the result of combining instead with the “is” of identity).

348 its syntax – is a general term, since a term that combines with the “is”
 349 of predication (without an intervening article) to form a monadic
 350 predicate cannot function as a singular term in the predicate so
 351 formed.

352 (vi) Having misclassified “the color of the sky” as a (first-order)
 353 singular term, May is prepared to classify the copula in (1) and (P1)
 354 as an expression that sometimes operates on a singular term to form a
 355 monadic predicate. The predicate-forming operator “*is* { }” in (P1’)
 356 and (C’) is not an operator of this sort. On the other hand, the
 357 envisioned “is” of possession in (P1’’) is exactly that. And indeed,
 358 May defends the second analysis of the argument about my true
 359 love’s eyes. May’s stance thus fails to appreciate the implausibility of
 360 its commitments, e.g., that each of the words making up the English
 361 predicate “is blue” has two separate readings (independently of a
 362 third meaning – the “is” of identity), but only in such a way that,
 363 solely as a matter of English semantics, the two resulting readings of
 364 the predicate are logically equivalent.

365 Given that the noun/adjective “blue” designates the color blue,
 366 that the definite description “the color of the sky” designates the

Footnote 21. (*Continued*)

If I am correct, this class includes at least mass terms and some second-order definite descriptions, which are nominals rather than adjectival. Some of May’s original criticisms were directed at showing that the central example, “the color of the sky”, is grammatically not an adjective phrase but uniformly a noun phrase. This observation, though correct, is irrelevant to my argument.

It is at least likely that each of (1)–(4) has a non-standard, surrealistic reading on which it has the same logical form that its pair-mate has on its standard reading. Thus (1) might be read as expressing that a certain particular (a shirt) and a certain universal (a color) are one and the very same thing; (2) might be read as expressing the alternative category mistake that a certain universal is colored. (Some deny that (1)–(4) have these alternative readings. But the very fact that one can routinely dismiss such readings as category mistakes seems to indicate that we have *some* understanding of the sentence on the purported alternative reading. Mere gibberish does not express a category mistake or anything else.) Insofar as each of the sentences has an alternative, surrealistic reading in addition to its standard reading, the ambiguity of (3) is grammatically signaled by a toggle between adjectival and nominal “blue”. Similarly for (4). There is no such toggle accompanying the ambiguity in (1), nor that in (2). The point of the contrast between (1) and (2) is not that they cannot be read as having the same logical form. It is, rather, that whatever logical form, or forms, (1) may have is a matter of its semantics, not its syntax, and similarly for (2). The syntactic form of (1) and (2) is the same, and constant, throughout.

367 color of the sky, and the empirical fact that the sky is blue, the general
 368 terms “blue” and “the color of the sky” are co-designative.²² (No
 369 surprises here.) But whereas the former is surely rigid, the latter
 370 designates red with respect to some worlds, making (P2) contingent.
 371 (Again, no surprise.) If the copula in (P2) is indeed an “is” of identity
 372 to be placed between general terms, then Kripke’s claim is vindicated
 373 that identity statements in which rigid general terms occur are, unlike
 374 (P2) but like identity statements involving proper names, necessary if
 375 true at all. Examples are close at hand: “Furze is gorse”; “Gold is
 376 *Au*”; “Water is H₂O”. As already noted, even some descriptive
 377 general terms, like “adult male human who is not married”, are rigid
 378 designators. Still, non-rigid general terms are everywhere. These in-
 379 clude such definite descriptions as “the species that serves as mascot
 380 for Princeton University”, “the liquid compound that covers most of

²² Though the general-term description “the color of the sky” designates blue, the corresponding predicate “is the color of the sky” semantically expresses the property of having the same color as the sky, as opposed to the more specific property of being blue (in color). The two properties share the same metaphysical extension – *to wit*, the class of all blue things – but they differ in metaphysical intension. It is important to notice also that whereas “the color of the sky” is a non-rigid general term, the gerund phrase “being the color of the sky” evidently rigidly designates a particular property – that of having the same color as the sky.

In “Bob and Carol and Ted and Alice” David Kaplan says, “almost all single words other than particles seem to me to be rigid designators” (p. 518n31). He once suggested to me (in conversation) that whereas the common noun “tiger” rigidly designates the species, the corresponding predicate “is a tiger” rigidly designates the property of being a tiger. Cf. his “Afterthoughts” to “Demonstratives,” in *Themes from Kaplan*, at pp. 580–581n30. On this view, whereas “the color of the sky” may be a non-rigid general term, its corresponding predicate “is the color of the sky” is rigid – all the more reason to distinguish sharply between a general term and its corresponding predicate. Linsky holds, by contrast, that “is the color of the sky” (non-rigidly) designates the property of being blue, rather than (rigidly) designating the property of having the same color as the sky (*op. cit.*, p. 270). I prefer to regard the predicate “is the color of the sky” as designating its extension (non-rigidly, of course) while expressing the property of having the same color as the sky, as the predicate’s semantic content. On this view the copula/operators formalized above may be taken as designating (with respect to a possible world and time) the function that assigns to any universal its metaphysical extension (in that world at that time) – making each copula/operator roughly analogous to the functor “the metaphysical extension of”.

381 the Earth”, “the most valuable of elemental metals”, “the color of the
382 sky” and so on.²³

383 It was once maintained by many that a general term like “blue” is
384 synonymous with a description like “the color of the sky”, that
385 “water” is synonymous with a description, such as perhaps “the
386 colorless, odorless, potable, thirst-quenching liquid that fills oceans,
387 lakes, and streams”, and that “pain” is synonymous with a descrip-
388 tion of the form “the physiological state that occupies such-and-such
389 causal/functional role.” Some consequences of these views are that
390 “The sky is blue” and “The oceans are filled with water” express
391 necessary, *a priori* truths, whereas “Water is the chemical compound
392 of two parts hydrogen, one part oxygen” and “Pain is the stimulation
393 of C-fibers” expresses contingent identities. Today we know better –
394 many of us anyway – thanks in large measure to *N&N*’s lasting in-
395 sight that “blue” and “water” and “pain” are, and the allegedly
396 synonymous general-term descriptions are not, rigid designators in
397 the original sense of that term.²⁴ The relevant notion of general-term
398 rigidity results directly from recognizing expressions like “blue”,
399 “water”, “the color of the sky”, and “the liquid that sustains ter-
400 restrial life” as general terms designating appropriate universals

²³ Some definite descriptions are rigid, e.g., “the even prime integer”. In *N&N*, Kripke calls such descriptions *rigid de facto*, in contrast to proper names, which are termed *rigid de jure* (p. 21n). There is a question whether the rigidity of “bachelor” is *de jure* or *de facto*. (Cf. footnote 8 above.) The word “tiger” is presumably *rigid de jure*, something like a logically proper name of the species. By contrast, the general-term description “the gendered marital-status category *K* such that necessarily, someone is of *K* iff: he is an adult & he is male & he is human & he is unmarried” is *rigid de facto*. Perhaps an English common noun phrase (*sans* article/determiner) is typically synonymous with a general-term description of the particular form: *the Φ-kind/category K such that necessarily, something is of K iff it is such-and-such & it is thus-and-so & . . .* This would explain exactly how common noun phrases – and hence also single words that are definably synonymous with such phrases (if such there be) – are descriptive, while simultaneously explaining why they are nevertheless uniformly rigid. A modification of this form would be required for noun phrases employing adjectives like “suspected”, “alleged”, etc. (Cf. footnote 14 above.)

The word “bachelor” seems to me, on the other hand, rather like a logically proper name, rather than a description, of the gendered marital-status category, *Unmarried Man*. If that is how it does function, then its rigidity is *de jure* and, contrary to the common view, it is not strictly synonymous with the corresponding description, even though it is closely tied to the description – as the name “Hesperus” is closely tied to some description of the form “the first heavenly body visible at dusk from location *l* at time *t*.”

²⁴ Cf. David Lewis, “Mad Pain and Martian Pain,” in his *Philosophical Papers I* (Oxford University Press, 1983), pp. 122–132; and Soames, pp. 364–365n12.

401 (colors, substances, etc.), and then applying Kripke's definition of
 402 rigidity without modification – with the result that some general
 403 terms are rigid, some not. This notion is analogous to singular-term
 404 rigidity in every way that matters.²⁵

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²⁵ Responding to my comments during the discussion of Soames's presentation at the 1996 *Universidad Nacional Autónoma de México* conference (see footnotes 3, 11), Kripke said that this proposed interpretation of *N&N* on general-term rigidity is basically correct. Soames reports that in November 1997, when he presented what is essentially the same interpretation proposed in the book with Kripke in attendance, Kripke this time expressed sympathy with Soames's assessment that there is no notion of rigidity for general terms relevantly analogous to singular-term rigidity (p. 366n22). I am puzzled by the apparent inconsistency between Kripke's response in Mexico City and his reported response only 1 year later. My confidence is unshaken, however, that the counter-proposal correctly indicates an extremely close analogy between singular and general terms, and with it a general notion of rigidity applicable to some (but not all) terms of either sort.