# Property Designators, Predicates, and Rigidity Benjamin Schnieder

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#### Abstract:

The article discusses an idea of how to extend the notion of rigidity to predicates: predicates stand in a certain systematic semantic relation (which I call *signification*) to properties, such that this relation may hold rigidly or non-rigidly. The relation of signification can be characterised with recourse to *canonical property designators* that are derived from predicates (or general terms) by means of nominalization: a predicate *signifies* that property which the derived property designator designates.

Whether signification divides into rigid and non-rigid cases will then depend upon whether canonical property designators divide into rigid and non-rigid ones. But, I shall argue, they do not, and so the only notion of rigidity gained this way is trivial. To show this, I first focus on the kind of canonical property designators which could be thought to be non-rigid, canonical designators such as "having the colour of ripe tomatoes" which themselves contain non-rigid property designators. An argument to the effect that such complex canonical designators are non-rigid is rebutted, five arguments to the effect that they are rigid are formulated, and finally an explanation of their rigidity based on the general nature of canonical property designators is presented.

#### Structure:

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### 1. Extending the Notion of Rigidity to General Terms and Predicates

Ever since Kripke introduced the notion of a rigid designator, there has been much philosophical interest in it. The notion is meant to highlight a certain semantic feature of some sort of term. To be more precise, of some sort of *singular* terms; only a term which *designates* may designate *rigidly*.

However, there are some passages in Kripke's *Naming and Necessity* which suggested to some of his readers that he would be prepared to extend his ideas about rigid designation to terms of another class, to general terms (and/or predicates).<sup>1,2</sup> Whether this suggestion is correct or not I shall not discuss here.

Leaving behind the question of Kripke's intentions we may turn to the systematic question about whether an extension of the rigid/non-rigid distinction to general terms can be made in a reasonable way. Designation is a semantic relation holding between a term and a single entity. One way of how to extend the notion to general terms and/or predicates is to look for some sort of entity, which is such that a systematic semantic correlation holds between a general term and some single entity of that sort.<sup>3</sup> Properties seem to fit this description.<sup>4</sup> Though the objects of which a general term is true may well have several properties in common, one of them will be privileged in being designated by a *canonical* property designator derived from the term (see section 2). So we can call a predicate rigid if it corresponds to the same property in respect to every possible world. But will this yield a notion of predicate-rigidity which is of much philosophical interest? Such a notion should be at

<sup>&</sup>lt;sup>1</sup> The relevant passages can be found in the third lecture of *Naming and Necessity*, see especially pages 116-140.

<sup>&</sup>lt;sup>2</sup> Following standard usage, by general terms I mean nouns and noun phrases, whose combinations with the copulative "is" and, if needed, the indefinite article yield predicates. Thus, adjectives ("wise") and substantives ("man") are general terms, but there are also complex general terms, such as "wise man" or "extremely wise", which are components of the complex predicates "is a wise man" and "is extremely wise" respectively.

<sup>&</sup>lt;sup>3</sup> Another way was suggested by Monte Cook (1980). Cook does not try to find a *single* object to which a general term stands in a relation, but rather concentrates on the relation of correct application, in which a term may stand to a *plurality of things* (indeed, one might even speak of designation or reference here, since ordinary speakers seem to be happy with statements such as "the term 'cat' refers to (designates) cats"). Then *essentialist* predicates may be counted as rigid. For further discussion of this idea see Boër (1985, p. 131ff.) and Soames (2002, pp. 250-259).

<sup>&</sup>lt;sup>4</sup> Kinds, if they are to be distinguished from properties, would provide an alternative to properties here. For a recent discussion of this possibility see Laporte (2000) and Schwartz' criticism of it (2002).

least non-empty and not trivially true of all predicates.<sup>5</sup> I will argue that along this line no non-trivial notion of rigidity is up for grabs.

### 2. Canonical Property Designators

There are at least three principled ways of generating singular terms for properties by derivation from predicates:

- (i) by building the corresponding gerund (the predicate "is wise" yields "being wise");
- (ii) by combining the predicate in the infinitive with "to" (here "is wise" yields "to be wise");
- (iii) by deriving an abstract substantive (here "is wise" yields "wisdom").

Furthermore, we may combine expressions of the first and the third sort with a categorial appositive prefix like "the property of", "the quality of" etc. and speak about *the property of being wise* and *the property of wisdom*.

The three classes of expressions thus derived are often called *canonical* designators of properties. This title seems appropriate because they indisputably play a central role for our practice of talking about properties. But there are more substantial reasons for which they deserve this name. The terms in question have a peculiar semantic profile explaining this central role (see below, section 5).

It is worth noticing that there are few natural restrictions to the derivational means introduced above. In particular, you can start from logically complex general terms and build terms of the sorts (i) and (ii) ("to be a great philosopher", "being horrifically ruthless"). So we may conclude that the conception underlying ordinary discourse about properties is far from sparse – it

<sup>&</sup>lt;sup>5</sup> An additional requirement might be that the notion helps to explain the truth of theoretical identifications; cp. Soames op. cit.

<sup>&</sup>lt;sup>6</sup> The derived designators will of course inherit any ambiguities present in the original general term. Furthermore, if we derive a property designator from a general term containing indexical elements, the expression derived will be of an indexical character as well. So, it (the type of expression) cannot be said to designate any property, though particular uses of the expression will function as ordinary singular terms.

rather converges against an abundant conception in the sense of David Lewis. I shall work with this assumption in the following.

Now finally for some terminological convention: let us say that a predicate *signifies* the property designated by a corresponding canonical property term.<sup>7,8</sup> Then we can define a notion of *rigid signification*: a predicate signifies rigidly iff the corresponding nominalizations designate rigidly. Is the notion of rigid signification useful, i.e. is it both non-empty and non-trivial?

I shall defend the thesis that it is trivial, since all canonical designators of properties are *rigid designators*. Doubts about this claim, I will argue, result from some confusions about complex terms which may be explained easily. To begin with, I shall discuss (and reject) an argument to the effect that some property designators fail to be rigid. Then I turn to the positive case.

<sup>&</sup>lt;sup>7</sup> It is a substantial question whether the newly introduced "signification" (for which I take on loan from Künne, 2003, p. 4) is just a terminological variant of the term "designation". Its answer depends upon the question whether there are good reasons to distinguish between different semantic *relations* holding between singular terms and their referents on the one hand, and between predicates and correlated properties on the other. I will not try to decide this question; but if it is sensible, then there is more to withholding the title of rigid *designators* from predicates than just terminological dislikes. It is an act of neutrality in respect to an unsettled question. (I eschew the talk of a predicate *expressing* a property, by the way, since I hold that properties should not be conflated with *meanings* of expressions.)

<sup>&</sup>lt;sup>8</sup> I assume that for any predicate the different nominalizations are coreferential. Indeed, to be wise is a property, and it is nothing but the property of being wise, which is in turn identical to the property of wisdom. Holding that the different nominalizations are coreferential is not to deny that there are interesting differences in their usage; but I take those to be of purely syntactic and pragmatic character (one of the most important differences is that derived substantives behave somewhat like mass terms whereas gerundives do not; cp. Wolterstorff, 1970, p. 78, and Levinson 1978, p. 10ff.).

# 3. An Inconclusive Argument for the Non-Rigidity of Some Property Designators

An argument in favour of the non-rigidity of some canonical property designators was recently put forth by Dan López de Sa (2001). The designator whose rigidity is at stake is "to have the colour of ripe tomatoes" (equally we could use "having the colour of ripe tomatoes").

It seems intuitively correct to claim that

(1) To have the colour of ripe tomatoes is to be red.

But ripe tomatoes could have been blue. Then it would have been true that

(2) To have the colour of ripe tomatoes is to be blue.

This, so the argument goes, shows that "to have the colour of ripe tomatoes" is a non-rigid designator. It actually denotes the property of being red (otherwise it would be false to say that having the colour of ripe tomatoes *is* being red), but with respect to a world in which ripe tomatoes are blue, it denotes the property of being blue. So, among the canonical designators of properties we find some non-rigid ones.

The argument is flawed. For the above reasoning to be sound we have to interpret the "is" in statements (1) and (2) to be the sign of identity. But a short look at natural occasions on which utterances of the form "... is ..." are made, where the dots are replaced by canonical designators of properties, will tell us that the "is" usually plays quite a different role in such statements. Let us look at some quotations from English literature:<sup>9</sup>

- (3) Tell him, finally, I have found that to be a Roman is to be a brute. Farewell. (Lew Wallace, *Ben-Hur*)
- (4) And as to being loyal, what is that? It is being truthful! It is being faithful! (Joseph Conrad, *The Arrow of Gold*)
- (5) Whether or no being hopelessly vulgar is being 'bad' is a question for the metaphysicians. (Henry James, *Daisy Miller*)

To interpret the authors as making identity statements about properties here (or let their characters make such) is to vastly misunderstand their meaning.

<sup>&</sup>lt;sup>9</sup> All literary quotations are taken from the publicly accessible part of *The Modern English Collection at the University of Virginia, Electronic Text Center*.

Whoever holds that to be a Roman is to be brute is surely not even committed to the converse claim, i.e. to the claim that to be a brute is to be a Roman. Even less is he committed to regard the property of being a Roman to be just the same property as that of being brute. Similarly, whoever asserts that being loyal is being truthful will nevertheless be able to distinguish between loyalty and truthfulness fairly well. And, surely, no metaphysician is needed to answer the question whether the property of being bad is identical with the property of being vulgar – nobody would ever have found this credible for a single moment.

So we see that the "is" in the above statements is *not* the expression of identity. And it is not the copulative "is" either. We must acknowledge another function of the "is" here, particularly made for such property statements; it is the "is" of involvement. To be a Roman *involves* (or: implies) to be a brute, to be loyal involves to be truthful, etc. <sup>10</sup>

Notice that such an involvement need not be *logical* or *necessary* involvement, i.e. *subsumption* of properties (being a man, for example, subsumes the property of being an animal, and being scarlet subsumes the property of being red). The connection indicated in statements of the kind we are concerned with may well be contingent. Even if someone accepts that non-brute Romans *could have been born*, he could still defend that (3) expresses a factual truth. Or take the following example:

#### (6) To cross the street here is to break the laws.

Laws are a matter of contingent fact. (6) is true if, the laws being as they are, it is forbidden to cross the street at the indicated position. Of course, the laws might have been different. But this shows only that the claim *would have been false* under such circumstances, not that it is *actually* false.

Coming back to claim that

### (1) To have the colour of ripe tomatoes is to be red,

we can now see that its intuitive appeal may be conceded without any consequences for the rigidity of canonical property designators. Such consequences arise only if the "is" has to be read as the "is" of identity here. But since we have seen that this is just not the common function of the "is" in similar statements, whoever holds that it is here is in need of further arguments.

<sup>&</sup>lt;sup>10</sup> As an alternative to the "is", common speakers sometimes use the predicate "to mean" for the purpose of such statements: "Surely to be responsible means to be liable to have to give an answer should it be demanded […]" (Samuel Butler, *Erewhon*).

# 4. Having the Colour of Ripe Tomatoes is not the Same Property as Being Red

So let us now try to answer the question: does, after all, the property designator "to have the colour of ripe tomatoes" designate the property of being red? – or, alternatively, the question: is the property of having the colour of ripe tomatoes the same property as being red?

Of course, these are distinct questions – the first is meta-linguistic, the second is not. Nevertheless they demand the same answer. (Given two singular terms a and b, the statements  $\lceil a=b\rceil$ ,  $\lceil ``a"$  denotes  $b\rceil$ , and  $\lceil ``a"$  and "b" are coreferential $\rceil$  will have the same truth-value, though differing in sense as well as in modal status.)

We have seen that reliance on the acceptability of (1) cannot provide an answer to these questions. But other considerations can; I shall now present five arguments which show that the answer to the questions above must be a negative one. The two designators are *not* coreferential.

Argument 1: Let us begin with a Kripkean test case for rigidity. In the following schema, substitute for the dots the singular term whose rigidity is put to test. If this substitution results in a truth, the designator is not rigid, otherwise it is:<sup>11</sup>

#### ... might not have been ...

The inventor of formal logic might not have been the inventor of formal logic, for he might have chosen to work in a bakery instead of doing philosophy – "the inventor of formal logic" is not rigid. On the other hand, Robert Burke could not have failed to be Robert Burke, so "Robert Burke" is rigid.

What about the property of having the colour of ripe tomatoes? Could it have failed to be the property of having the colour of ripe tomatoes? To me this question sounds odd; I cannot see what a positive answer should be meant to assert. If the question has to be answered negatively, however, the term "to have the colour of ripe tomatoes" is rigid, and since it obviously does not designate the property of being red *rigidly* (remember, ripe tomatoes could have been brown), it does not designate it at all. But intuitions about that question may not be reliable here; after all, it is a question which would probably never occur to anyone but a philosopher. So let us turn to harder arguments.

<sup>&</sup>lt;sup>11</sup> See Kripke (1980, p. 48f.) and cp. Cartwright (1998, p. 67ff.).

Argument 2: Having the colour of ripe tomatoes is a *relational* property. Whatever has this property has it in virtue of standing in a certain relation to ripe tomatoes. Being red, however, is *not* a relational property. Or even if it is, it is at least not a property which things have in virtue of standing in a certain relation *to ripe tomatoes*. So, by *Leibniz' Law*, being red cannot be identical to the property of having the colour of ripe tomatoes.

Argument 3: Having the colour of ripe tomatoes is a property possessed by the things that have it in virtue of their standing in the relation of sameness of colour to ripe tomatoes. Since ripe tomatoes are red, things stand in the said relation to ripe tomatoes in virtue of being red. So, it is correct to say that things have the property of having the colour of ripe tomatoes in virtue of being red. However, things are not red in virtue of being red ("in virtue of" indicates some kind of explanatory relation and a thing's being red is surely not self-explanatory). So, again, there is something truly predicable of the one property while not so of the other: the things which have it, have it in virtue of being red. Leibniz' Law yields the non-identity of the two properties.

Arguments 2 and 3, though they make a point, are still not decisive; both involve the notion "in virtue of", which is somewhat tricky. If two terms embed differently in a context governed by this notion, this might sometimes rather indicate a difference in their *sense* than a difference in *reference*. So I shall not put too much weight on these arguments. Let me rather turn to purely modal contexts now, which indisputably are most relevant to questions of rigidity.

Argument 4: My shoes are brown and thus they lack the property of having the colour of ripe tomatoes. But my shoes would have possessed *this property* (while my red shirt would not) if ripe tomatoes had been brown. Hence there is a property, namely the property of *having the colour of ripe tomatoes*, which is possessed by my shirt, while under some counterfactual circumstances *it* would have been possessed by my shoes. In symbols:

 $\exists x \text{ (my shirt possesses } x \text{ & had ripe tomatoes been brown, then my shoes would have possessed } x).}$ 

There is such a property, we say, and we refer to it with the term "having the colour of ripe tomatoes". This property cannot be the property of being red – for *that* property would not have been possessed by my shoes, if ripe tomatoes had been brown (tomatoes having a different colour would not have affected the colour of my shoes). But the property actually possessed by my shirt and counterfactually possessed by my shoes cannot be the property of being brown either – my shirt is red, not brown. Therefore, the property of having the colour

of ripe tomatoes is identical with neither of the colour properties. Indeed, it cannot be specified in any more direct way than by the gerund "having the colour of ripe tomatoes". And, on the other hand, the reference of this phrase does not vary with respect to different worlds of evaluation; it is a rigid designator.<sup>12</sup>

Argument 5: For the final argument, I shift the example to a different pair of property designators (the reason for which will soon become apparent). Properties have themselves properties, since there are various things that are truly predicable of them. Wisdom, for instance, is both a virtue and often mentioned in philosophical writings, and last but not least it is the virtue that Socrates was most famous for. Whoever thinks in the above case that "having the colour of ripe tomatoes" non-rigidly designates the property of being red (since, after all, red is the colour of ripe tomatoes) should for reasons of parity hold the parallel claim that "to be the virtue that Socrates was most famous for" non-rigidly designates the property of being wisdom (since, after all, wisdom is the virtue Socrates was most famous for).

But now we may notice that

(7) To be the virtue that Socrates was most famous for is only an accidental feature of wisdom.

After all, Socrates could have been more famous for his piety than his wisdom. But whoever thinks that "to be the virtue that Socrates was most famous for" denotes the property of being wisdom cannot account for the truth of (7). Being wisdom, evidently, is an *essential*, not an accidental, property of wisdom. So the two property designators differ in reference.

The current example brings out the referential difference between the two canonical designators particularly well, because one of them denotes an accidental, while the other one denotes an essential property (of whatever has the property denoted). This distinguishes it from our first example of "having the colour of ripe tomatoes" and "being red", since here *both* designators denote accidental properties. Nevertheless, since the cases are parallel, the argument also weighs against the non-rigidity idea concerning the first example.

 $<sup>^{12}</sup>$  A similar argument is given by Tye (1981, p. 24). Tye's version has a slight disadvantage: he speaks about two objects a and b which exist at different possible worlds while holding that they have a property in common. One might reply that, as long as two objects do not coexist, they cannot literally have a property in common, for an entity does not have any properties "in" a world where it does not exist. The argument given above avoids this potential reply.

Enough arguments for now; the question with which I opened this section should, I conclude, be answered in the negative. Before ending the discussion, it might be helpful for a complete understanding of the issue to ask ourselves the question: what could have made people think that designators such as "having the colour of ripe tomatoes" are non-rigid? Two confusions may contribute to this erroneous belief: firstly, the term has an evident similarity to the definite description "the colour of ripe tomatoes" which is indeed non-rigid. However, the two terms are to be distinguished; while the latter is just an ordinary definite description, 13 the former is not (what is it then? See below for the sketch of an answer). But there is a second source for error here: suppose one distinguishes between the two terms and recognises that the canonical designator indeed contains the definite description. Then one might think that the more complex term should inherit the non-rigidity of the enclosed description. But why should it? There are some systematic ways of constructing singular terms which yield rigid ones, no matter whether non-rigid terms enter into them or not. An example for illustration: given a general term F such that the corresponding definite description  $\lceil$  the  $F \rceil$  is non-rigid, we may construct a rigidified counterpart by adding an "actual", thus getting  $^{\mathsf{T}}$ the actual  $F^{\mathsf{T}}$ . Another example: given a sentence s containing a non-rigid designator, the singular term The proposition that  $s^{7}$  will be a rigid designator of the proposition expressed by s (thus, "the proposition that the inventor of formal logic died young" is rigid, though it contains a non-rigid component, "the inventor of formal logic"). Derivation of canonical property designators is just one rigidifying construction among others.

<sup>&</sup>lt;sup>13</sup> It is slightly inaccurate to classify an *expression* as a definite description. Since some expressions can be used both as descriptions and in some other function, it would be better to call the expression *in a particular use* a definite description. And indeed, the term "the colour of ripe tomatoes" seems to have a use as a *general term*, such as in "my new shirt is the colour of ripe tomatoes".

# 5. A General Argument for the Rigidity of Canonical Property Designators

Examples of the kind discussed (designators containing a non-rigid description) seem to be the only plausible candidates of canonical property designators to be non-rigid. Since we have seen that and why the assumption that they are non-rigid is misguided, I conclude that all canonical property designators are rigid. In this final section I shall try to provide a general explanation of this fact.

Canonical property designators are singular terms of a very special sort. Those of the first two kinds distinguished (gerunds and infinitives + "to") obviously are semantically complex and contain descriptive components. Their semantic profile differs, however, crucially from that of definite descriptions, because the descriptive material contained is in general not true of the referent of such a term, but rather of those things which *have* or *possess* this referent (the property of *being verbose* is not itself verbose, but people who have verbosity are). <sup>14</sup>

The semantical complexity of canonical property designators points to three crucial features of them:

- (i) Their conditions of understanding are systematically dependent upon the conditions of understanding the embedded terms. We understand expressions of the form  $\lceil \text{being } F \rceil$ , and  $\lceil \text{to be } F \rceil$ , on the basis of our understanding the corresponding general term F. (Indeed, the same is true of derived substantives. We understand "wisdom", for example, on the basis of our understanding of the corresponding general term "wise".)
- (ii) The reference of a canonical designator is a function of its meaning; thus the meaning of F determines what  $\lceil \text{being } F \rceil$  (and  $\lceil \text{to be } F \rceil$ ,  $\lceil F \rceil$  ness $\rceil$ ) refers to. 15
- (iii) Knowledge of the meaning of a gerund (or a property designator of the other kinds) suffices for knowledge of its referent. 16, 17

<sup>&</sup>lt;sup>14</sup> Canonical property designators also lack the definite article, which is characteristic of definite descriptions. However, the presence of the definite article should not be regarded as a *conditio sine qua non* of descriptions, since there are good reasons to count genitive constructions, such as "John's son", as definite definitions (cp. Neale 1990, p. 35).

<sup>&</sup>lt;sup>15</sup> Cp. Strawson (1953/54, p. 256f.). Notice that in certain cases (paradox-engendering predicates like "does not exemplify itself") the meaning of a canonical designator may also render the term empty.

A reflection on dependency that is talked about in (i) will provide us with an argument for the rigidity of the terms. Understanding a canonical property term of either of the three forms ( $\lceil \text{being } F \rceil$ ,  $\lceil \text{to be } F \rceil$ ,  $\lceil F \text{-ness} \rceil$ ) requires not only knowledge of the meaning of the correlated general term F, but also the knowledge that all and only those things which are F possess the property denoted. Furthermore, to understand talk about properties one must have a primitive grasp of a principle of individuation of properties. <sup>18</sup> Being F (to be F, F-ness) might be, by pure accident, co-exemplified with the property of being G, such that both of them are possessed by all and only those things which are F. Such a coincidence will not render the two properties one. The reason is that the property of being F is essentially such that all and only Fs possess it, whereas it will be only an accidental feature of the property of being G to be possessed by all and only Fs - if, as supposed, their being co-exemplified is only a contingent fact.<sup>19</sup> So we can lay down the following principle which reveals both the reference conditions for canonical property terms and the nature of the properties denoted:

(P) Being F (to be F, F-ness) is the property which is essentially such that it is possessed by all and only Fs.

We may also put the principle more formally as follows:

<sup>&</sup>lt;sup>16</sup> Principles (ii) and (iii), though obviously connected, are nevertheless to be distinguished. (ii) is a purely semantic principle while (iii) in addition deals with the epistemic notion of knowledge.

<sup>&</sup>lt;sup>17</sup> Cp. Künne (1983, p. 177f.), Levinson (1978, p. 16), and Schiffer (1990, p. 604). An exception to principle (iii) arises in cases of paradox ("being non-selfexemplifying"), where some further reflection (though no factual knowledge) is required to recognise the emptiness of a canonical property designator.

<sup>&</sup>lt;sup>18</sup> Here I rely on the idea that we should not interpret a certain kind of discourse as involving reference to φs (and predication about φs) if it is not a requirement of mastering the discourse to know some identity-conditions for φs (a thesis defended for example in Evans, 1975, p. 355f.). Of course, the required knowledge need not be explicit; it may rather be some form of implicit knowledge manifesting itself in a basic understanding of how to *count* and *re-identify* φs, and thus in the ability to distinguish between a good many true and false identity statements about φs. In the case of properties, an indication of this implicit knowledge is, for example, the reluctance of ordinary speakers to accept an identity claim about properties on the basis of their being co-exemplified.

<sup>&</sup>lt;sup>19</sup> There is a dispute about whether the notion of essence should be regarded as a purely modal notion or as a more fine-grained one (cp. Fine 1994); depending upon the answer, the proposal above will yield a more or less coarse-grained individuation of properties. In either case, however, properties are conceived of as rather "wordly" entities, in contrast to meaning-like entities which are individuated in terms of their cognitive role.

## (P\*) Being F = the property x such that $\Box \forall y \ (y \text{ has } x \leftrightarrow y \text{ is } F).^{20}$

Now if principle (P) is correct, it straightforwardly explains why canonical property designators are rigid. If the meaning of canonical property designators determines its reference in the described way, then "being F" will, with respect to any given possible world, denote the property which, by its essence, is had by all and only Fs. Obviously, the chosen world does not contribute anything to the determination of the reference. Furthermore, being F is *essentially*, and therefore across all possible worlds, such that all and only Fs possess it. The rigidity of canonical property designators thus is a natural outcome of their semantic complexity and the nature of properties.

A last remark: That canonical designators of properties are all rigid leaves, of course, room for other interesting differences between them. Let me mention one such difference that is intertwined with the issues discussed here. I have pointed out that the canonical designators which might be thought to be nonrigid contain non-rigid definite descriptions of properties. Because of this they exhibit some interesting variance with respect to different possible worlds: an object possesses the property of having the colour of ripe tomatoes, we have said, in virtue of its being red. But it could have possessed it in virtue of having some other colour. Similarly for the property of having the virtue Socrates was most famous for. Actually, objects possess this property in virtue of being wise. But there are counterfactual situations in which they possess the property in virtue of being, say, honest. So we may say that these properties possess a varying basis; with respect to different possible worlds there are different properties such that in virtue of possessing them, an object possesses the relational property. This surely is an interesting ontological feature of a certain sort of properties (most likely this sort will comprise not only relational properties like the ones discussed) but it is nothing that should be described in terms of the rigidity of predicates (or general terms) or canonical property designators.

<sup>&</sup>lt;sup>20</sup> We may interpret the box in (T\*) either as the modal operator of necessity or, following the ideas proposed in Fine (1994), as a stronger operator of essentiality.

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#### References

- Boër, Steven E. (1985), "Substance and Kind: Reflections on the New Theory of Reference", in: Matilal, B. K. / Shaw, J. L. (eds.), *Analytical Philosophy in Comparative Perspective*, Dordrecht: D. Reidel Publishing Company, 103-150.
- Cartwright, Richard (1998), "On Singular Propositions", in: Kazmi, Ali M. (1998), *Meaning and Reference (Canadian Journal of Philosophy Suppl. Vol.* 23), 67-83.
- Cook, Monte (1980), "If 'Cat' is a Rigid Designator, What Does it Designate?", *Philosophical Studies* 37, 61-64.
- Evans, Gareth (1975), "Identity and Predication", Journal of Philosophy 72, 343-363.
- Fine, Kit (1994), "Essence and Modality", in: Tomberlin, J. (ed.) (1994), *Logic and Language* (Philosophical Perspectives 8). Atascadero: Ridgeview, 1-16.
- Kripke, Saul (1980), Naming and Necessity, Oxford: Blackwell Publishers.
- Künne, Wolfgang (1983), Abstrakte Gegenstände, Frankfurt am Main: Suhrkamp Verlag.
- Künne, Wolfgang (2003), Conceptions of Truth, Oxford: University Press.
- Laporte, Joseph (2000), "Rigidity and Kind", Philosophical Studies 97, 293-316.
- Levinson, Jerrold, (1978), "Properties and Related Entities", *Philosophy and Phenomenological Research* 39, 1-22.
- López de Sa, Dan (2001), "Theoretical identifications and Rigidity for Predicates", in: Sagüillo, Fernández-Vega, José Miguel *et al.* (ed.) (2001) *Formal Theories and Empirical Theories*, Santiago de Compostela, 611-622.
- Neale, Stephen (1990), Descriptions, London, Cambridge: MIT Press.
- Schiffer, Stephen (1990), "Meaning and Value", Journal of Philosophy 87, 602-614.
- Schwartz, Stephen P. (2002), "Kinds, General Terms, and Rigidity: A Reply to Laporte", *Philosophical Studies* 109, 265-277.
- Soames, Scott (2002), Beyond Rigidity, Oxford: Oxford University Press.
- Strawson, P.F. (1953/54), "Particular and General", *Proceedings of The Aristotelian Society* 54, 233-260.
- Tye, Michael (1981), "On an Objection to the Synonymy Principle of Property Identity", *Analysis* 41, 22-26.
- Wolterstorff, Nicholas (1970), On Universals, Chicago / London: The University of Chicago Press.