Rigid Designation, Direct Reference, and Modal Metaphysics

by Arthur Sullivan (Nov/03 draft, forthcoming in "Pacific Philosophical Quarterly", comments to arthurs@mun.ca)

abstract

In this paper I argue that questions about the semantics of rigid designation are commonly and illicitly run together with distinct issues, such as questions about the metaphysics of essence and questions about the theoretical legitimacy of the possible-worlds framework. I discuss in depth two case studies of this phenomenon—the first concerns the relation between rigid designation and reference, the second concerns the application of the notion of rigidity to general terms. I end by drawing out some conclusions about the relations between rigid designation, semantic frameworks, reference, and essence.

1. Introduction

The aims of this paper are to ward off some widespread misconceptions about the notion of rigid

designation, and to work toward a better understanding of how rigidity relates to the semantic

phenomenon of reference and to the metaphysics of essence.

The discussion is framed around two cases in which the question of rigidity is conflated

with distinct issues. The first case concerns an argument of Marti's (2003)[1] about the relation

between rigid designation and direct reference, the second case concerns the debates over how

the notion of rigidity ought to be extended to general or kind terms. I will argue that, in these

cases, metaphysical considerations are given undue weight in deliberations about the semantics

of rigidity; and I will explain why, in this respect, the cases are illustrative of some prevalent

doctrines and assumptions. More generally, at least three distinct sorts of questions are too

commonly run together—i.e., questions about the semantics of rigidity, questions about the

metaphysics of essence, and questions about the theoretical legitimacy of the possible-worlds

framework. After explaining and justifying these allegations, I will draw out some conclusions

about the relations between rigidity, semantic frameworks, reference, and essence.

First a couple of preliminaries: I rehearse briefly Kripke's notion of rigid designation and Kaplan's notion of direct reference.

1.1 Rigid Designation

'Rigid designation' is Kripke's name for a concept that has been in the air at least since the development of quantified modal logics: (a token of [2]) a designator is rigid if and only if it designates the same individual in every possible world in which the individual exists. The concept of rigidity might have been baptized by Smullyan (1948), as it affords a neat way to state his response to one of Quine's (1947) arguments against the intelligibility of quantified modal logics—i.e., the argument depends on illicitly substituting the rigid 'nine' for the nonrigid 'the number of planets' within the scope of a modal operator.[3] Rigidity, unbaptized, is very much there in Kripke's (1959, 1963)[4] semantics for modal logic; and it lies just beneath the surface of much other semantic and logical work in the 1950s and 1960s. Kaplan (1968: 190) perhaps comes closest to explicitly defining the concept, in his search for a kind of designator whose "reference is freed from empirical vicissitudes".[5] However, like Smullyan, Kaplan's interests are more narrow, his goals less comprehensive, than Kripke's. Rigid designation is first baptized, in print, by Kripke (1971, 1972), in the course of developing a wide range of arguments about reference and content.[6] Subsequently, the notion has cropped up in many areas of philosophy.[7]

It used to be more or less widely thought that rigid designation is an obscure essentialist doctrine, but this objection was gradually countered in work by Marcus (1961), Kaplan (1968, 1986), Stalnaker (1986, 1997), and others.[8] The very intelligibility of such claims as that Kripke might have been a mathematician, or that he might have delivered the first Naming and Necessity lecture one day earlier than he actually did, depends on the rigidity of the terms 'Kripke' and 'he'—if this kind of de re modal attribution makes an intelligible claim about a

specific individual, then terms such as 'Kripke' and 'he' track their actual referent throughout counterfactual situations. (Surely, we would need some good arguments to be convinced that such claims are unintelligible, because, among other reasons, (a) people think and talk in this way all the time, and (b) it seems reasonably clear what they are thinking and talking about—i.e., how actual objects would have fared in different circumstances, or would endure alterations to some of their accidental properties.) So, even if discussions of rigidity only tend to come up in the course of attempts to defend or attack specific metaphysical theses, rigidity is itself not a metaphysical thesis at all, let alone an objectionable one. As Kaplan (1986: 265) puts a related point, rigidity is "prior to the acceptance (or rejection) of essentialism, not tantamount to it".

I should enter a caveat, which will recur below. Rigidity is not entirely indifferent to metaphysics or semantic frameworks, in the following minimal sense: A designator is rigid if and only if it designates the same individual in every possible world in which the individual exists; so, to the extent that one finds it unintelligible to ask whether individuals in different worlds are or are not the same, the question of rigidity will lack a clear sense. Apart from that minimal sense, though, among those who hold that there is a clear question of rigidity, the semantics of rigidity is not to be conflated with the metaphysics of essence.[9] Rigidity is a claim about the semantic link between an expression and its designatum, not a metaphysical claim about the essence of the designatum.

1.2 Direct reference

Kaplan (1977)[10] introduces the term 'direct reference' to designate a certain subset of the set of rigid designators:

> The semantical feature I wish to highlight in calling an expression directly referential is not the fact that it designates the same object in every circumstance, but the way in which it designates the same object in every circumstance. (1977: 495)

> … the intuitive idea [behind the concept of direct reference] is not that of an expression which <u>turns out</u> to designate the same object in all possible circumstances, but an expression whose semantical <u>rules</u> provide <u>directly</u> that the referent in all possible circumstances is to be the actual referent. (1977: 493)

Kaplan sees direct reference as an explanation of why certain terms are rigid:

> How could rigid designation not be based on some deeper semantic property like direct reference? It couldn't be an <u>accident</u> that names were rigid and descriptions were not. (1989: 571)

He also argues (1977: preface) that the claim that a term is directly referential is, in effect, one and the same doctrine as the claim that sentences in which the term figures express Russellian singular propositions (i.e., complex, structured entities that contain those individuals, as well as properties and relations, as constituents). However, this equivalence only holds given some contested assumptions about the structure and constituents of propositions.[11]

These contentious assumptions about the nature of propositions, though, are orthogonal to the focal questions of this paper. The critical issue is the way in which certain pairs of propositions differ. Consider the possible-worlds truth-conditions of the following:

> [1] Two is a positive integer.
> [2] The cube root of eight is a positive integer.
> [3] I am an orator.
> [4] The person who denounced Catiline is an orator.

[2] and [4] bring a descriptive condition from world to world, which might single out the same thing at each stop (as in [2]), or might not (as in [4]); but, in the cases of [1] and [3], "… the individual is loaded into the proposition … before the proposition begins its round-the-worlds journey …" (Kaplan, 1989: 571). That is, in cases like [2] and [4], the grammatical subjects express a compositionally determined conceptual condition, and the truth-value of the sentence at a context depends on (the antics of) whatever satisfies the relevant condition. However, no such compositional condition is at work in cases like [1] and [3], determining, at each context of

evaluation, upon (the antics of) what the truth-value depends. I will call propositions like those semantically expressed by sentences [1] and [3] 'object-dependent', because they are essentially about one specific individual; I will call propositions like those semantically expressed by [2] and [4] 'object-independent', because only a compositionally determined condition—and no specific individual—is essential to their content (i.e., the content of the proposition would stay constant across contexts in which distinct objects, or no objects, uniquely satisfy the relevant compositionally determined condition). Russellian singular propositions are but one way of cashing out object-dependence;[12] participation in these general debates about rigidity, reference, and essence should not be limited to those who endorse them.

Prima facie, there is an intimate connection between direct reference and object-dependent propositions, on the one hand, and indirect denoting and object-independent propositions, on the other. So, part of the business of a theory of direct reference is to answer such questions as:

(a) Which thoughts and utterances are object-dependent?
(b) How is the referent of the subject-term determined, in these object-dependent cases?

I come back to these questions in Section 2.2.

2.Rigidity and direct reference

The following is a pillar of contemporary philosophy of language that has gone virtually unquestioned since Kaplan (1977) first articulated it:

[T] All directly referential terms are rigid designators.

Recently, Marti (2003) has subjected [T] to critical scrutiny.[13] Marti identifies in the literature two conceptions of direct reference that have not been sufficiently distinguished. She argues that, although [T] is true on one important sharpening of the notion of direct reference, there is

another significant conception of direct reference on which [T] is false. If cogent, this finding would be very noteworthy, as it runs counter to some seminal and consequential doctrines concerning the relations between reference and rigidity.[14]

On the one hand there is what Marti calls the propositional characterization of direct reference: "This is the official characterization of Direct Reference, introduced by David Kaplan in Demonstratives …" (2003: 163). Following Kaplan, Marti tends to use Russellian façons de parler in elaborating this notion: "a directly referential term is one that contributes an object, its referent, to the propositions expressed by sentences containing it" (2003: 163); but, again, the crucial point here does not concern the metaphysics of propositions. The crucial point is the categorical difference amongst the propositions expressed by pairs such as [1]-[2] and [3]-[4]. Even if [3] is uttered by the person who denounced Catiline, the truth-conditions of [3] and [4] diverge across contexts of evaluation. Even if [1] and [2] express truths in all and only the same situations, so that this telltale truth-conditional divergence is not manifest, nonetheless the same semantic difference is operative, between the way in which the designatum is determined (and hence between the contents of the propositions expressed). One of the reasons why Russell (1905)[15] introduces the distinction between denoting and referring, and why Kaplan introduces the notion of direct reference, is to refine our understanding of this categorical semantic difference. Marti says, of cases like [1] and [3], as opposed to [2] and [4]:

> It is because of fundamental differences in what determines the truth conditions of these sentences that we are led to conclude that certain expressions are directly referential. Reflecting on these differences, proponents of new theories of reference have argued against … the thesis that it is senses, not the referents they determine, that constitute the contribution of expressions to the truth conditions of statements. (2003: 164)

So this first conception of direct reference, Kaplan's official propositional conception, has fundamentally to do with object-dependence.

On the other hand there is what Marti (2003: 163) calls the Millian characterization of direct reference. The classic source is of course Mill, who observes that proper names are "attached to the objects themselves, and are not dependent on … any attribute of the objects" (1843: 20).[16] The stress here is on the 'direct', and the core idea is that certain expressions are stipulatively linked to a referent, they simply tag or label them. Marti (2003: 164) employs Mill's 'Dartmouth' example to explain this second notion of direct reference—i.e., Dartmouth would not have to be re-named should the Dart River dry up or be re-routed elsewhere, or even if we discover that we had been mistaken all along, and that Dartmouth had never in fact lain at the mouth of the Dart.[17] Here is Marti's statement of the crux of the view:

> On the Millian approach the distinguishing mark of direct reference is the absence of a semantic mediator, the absence of a mechanism (be it a rule, a procedure, a mental representation or qualitative profile) whose role is to adjudicate, to determine the referent on a given occasion of use. (2003: 168)

The Millian conception of direct reference has to do with reference determination, with the (relatively direct) semantic link between certain expressions and their referents.

Henceforth, I will refer to the propositional conception of direct reference as 'DR$^+$', and to the Millian conception as 'DR$^-$'; this reflects the fact that the propositional conception is marked by the <u>presence</u> of something (an element, perhaps one of several elements each of which would suffice for the relevant effect,[18] in virtue of which the truth-condition is object-dependent), while the Millian conception is marked by the <u>absence</u> of something (a semantic mediator, as explained by Marti (2003: 168) in the latest cited excerpt). To say that a token of an expression is DR$^+$ is to say that the token is being used to express an object-dependent proposition; to say that a token of an expression is DR$^-$ is to say that there is no semantic mediator at work (i.e., no rule, procedure, mechanism, or qualitative profile to appeal to in determining who or what is the referent, across different contexts of evaluation).

Some things that these conceptions of direct reference have in common include that they are both opposed to descriptivist views about reference (i.e., to any view which holds that all referring expressions are semantically equivalent to descriptions) and Russellian singular propositions provides a graphic means of illustrating both sorts of point—i.e., both the DR^+-point about object-dependence, and the DR^--point about the lack of semantic mediators.[19] However, they are clearly distinct, for at least the following reasons. First, as Marti (2003: 165) points out, on Kaplan's (1977) influential view, demonstrative pronouns are DR^+ but not DR^-. (Even if one disagrees with Kaplan about this, the important point for present purposes is that such a view is coherent, not that it is the best theory of demonstratives.) So even if all DR^- terms are DR^+, the converse entailment does not hold. Second, neo-Fregeans can make good sense of the notion of a DR^+ term, by invoking object-dependent senses to accommodate the relevant intuitions about possible-worlds truth-conditions (cf. note 12). However, this does not commit such a neo-Fregean to endorsing DR^- terms; and, further, it is arguable that what puts the 'Fregean' in a neo-Fregean view is precisely the claim that no natural language expressions are properly characterized as DR^-. (Again, the present point just depends on the coherence of countenancing DR^+ terms but not DR^- terms, not on the merits of this speculative characterization of neo-Fregeanism.)

Thus, given Marti's distinction, our focal tenet [T] splits into two:

[T^+] All DR^+ terms are rigid designators.
[T^-] All DR^- terms are rigid designators.

2.1 Marti's putative counterexample to [T^-]

Marti argues that [T^+] is in good standing (2003: 170-3), but that [T^-] cannot withstand thorough scrutiny (2003: 168-70). As I will explain in 2.2, I agree with her views on [T^+]. My present aim

is to counter her argument against [T⁻]. I will argue that what Marti's argument shows is that countenancing DR⁻ expressions is compatible with all varieties of wishy-washiness on the question of rigidity. However, aversions to possible-worlds semantics, or skepticism about individual essence, cannot provide a counterexample to [T⁻]. Strictly speaking, such methodological and metaphysical qualms are relatively distant from our focal questions about rigidity and reference.

The argument aims to show that not only is "the notion of a Millian tag is independent of the notion of rigidity" (2003: 168), further, an expression could be DR⁻ but nonetheless a nonrigid designator. The crux is as follows:

> Consider, for instance, a Millian who accepts some of the fundamental ideas that inspire David Lewis's metaphysics. This Millian thinks, for instance, that possible worlds are causally disconnected regions of the universe, that the individuals who inhabit these worlds are different, but that, nevertheless, … objects in one world are counterparts of objects in other worlds. This Millian argues that "Hesperus" is not rigid: when someone utters "Hesperus is bright" the individuals relevant for the evaluation of what is said on that occasion of use are, strictly speaking, different in different possible worlds; which objects are relevant depends on the connections that make one object a counterpart of some other object. … Strictly speaking, any attempt to make rigidity and counterpart theory compatible yields a notion that is, simply put, not the notion of rigidity, no matter how similar to rigidity it is. (2003: 169)

This is alleged to afford a counterexample to [T⁻]:

> Like the descriptivist that Kripke criticizes, this Millian thinks that the object relevant for the evaluation of what is said by an utterance of "Hesperus is bright" varies from world to world. (2003: 169)

There are many layers piled up here, and so it will take some time to work this through.

A designator is rigid if and only if it designates the same individual in every possible world in which the individual exists. Individuals are world-bound on Lewis's view, so there is no question of a name referring to the same individual in different worlds. However, counterpart theory demands that, if we are to get satisfactory truth-conditions for de re modal attributions

such as 'David Lewis might have been a marine biologist', then the name 'David Lewis' must pick out Lewis's counterparts in other possible worlds. Lewis suggests the term 'quasi-rigid' for this counterpart-theoretic semantic notion (1986a: 256).[20] Quasi-rigidity is to rigidity as counterparthood is to identity: 'David Lewis' is a quasi-rigid designator if and only if, in any possible world, it designates the counterpart (or counterparts) of our actual David Lewis, if any such exist.

Thus far, all this is as it should be: here the caveat hatched in Section 1.1, that rigidity is not entirely indifferent to metaphysics, comes home to roost. Lewis deviates from received views about identity throughout counterfactual situations, and so Lewis's conception of rigidity will be, accordingly, deviant. If one follows Lewis, in favoring counterparthood over identity, then rigidity is, strictly speaking, off the table from the get-go. Note well, though, that is not yet to say that if one also admits that some expressions are Millian, then one thereby provides a counterexample to [T⁻]. Rather, such a counterexample would only come with a Lewis-Millian[21] who consistently denies that names are quasi-rigid. Only a term that is at once DR⁻ and nonrigid (or DR⁻ and non-quasi-rigid) constitutes a counterexample to [T⁻]; to say that a Lewis-Millian on whose view names are quasi-rigid, or who remains agnostic about the question of rigidity, provides a counterexample to [T⁻] is to conflate more or less distant metaphysical or methodological issues with the semantic question of rigidity.

So that is one layer separated out. Here is another: Lewis is himself no firm proponent of quasi-rigidity. Fundamentally, this is for metaphysical reasons—Lewis does not share the haecceitistic intuition that renders determinate questions of individual essence,[22] and so he holds that the question of whether any two given individuals are counterparts need not, in general, admit of an absolute, categorical answer. Standard possible-worlds semantics, as well as the

metaphysical intuitions that shape (and are shaped by) the possible-worlds framework, are decidedly haecceitistic. That is, the framework is geared to accommodate prevalent intuitions along the lines of: David Lewis might have been a butcher or a baker, he might have been an inch shorter, been totally bald his entire life, and been prone to spontaneous public outbursts of tap-dancing; but he could not have been a painting, a football, or a fungus, because the possibility of ever falling under such sortals is definitely ruled out by the particular individual essence in question.

Lewis is explicitly anti-haecceitist—cf. his "Against Haecceitsim" (1986a: 220-48). He rejects as hopelessly obscure the idea that individuals have a non-qualitative essential hook on which contingent properties contingently hang. There is no room for non-qualitative properties in Lewis's metaphysics; they are anathema to his austere Humean world-view (1986b: Introduction).[23] What for Kripke or Kaplan is a determinate question of trans-world identity—for instance, any given possible bald tap-dancing marine biologist either is or is not David Lewis—is for Lewis indeterminate and inconstant, a thoroughly context-relative question: "Two things may be counterparts in one context, but not in another; or it may be indeterminate whether two things are counterparts" (1986a: 254).

As one would expect, this fundamental metaphysical difference has effects on Lewis's semantics. There are many legitimate counterpart relations, many non-equivalent but correct ways to determine which things are counterparts of a given individual (1968: 118).[24] Also pertinent to our focal questions is the fact that Lewis is no proponent of direct reference. He categorically rejects related anti-descriptivist, causal-historical arguments about certain general or kind terms—for instance, he explicitly argues that such general terms as 'pain' (1994: 304) and 'heat' (1983: 44) are non-rigid designators[25]—and he defends the descriptivist tenet that

"representation <u>de re</u> is determined by qualitative character" (1986a: 223). For these reasons, Lewis is no more than lukewarm on the quasi-rigidity of proper names: "Given the inconstancy of counterpart relations, we may have to say that a name is quasi-rigid under some counterpart relations but not under others" (1986a: 256).

However, also for these reasons, Lewis is no place to look for a counterexample to [T¯]. Since he rejects received views about direct reference, he does not countenance terms that are DR¯ (i.e., Lewis is no Lewis-Millian); because of the inconstancy of the counterpart relation, it is far from clear that he holds that there is a determinate question of (quasi-) rigidity. Hence, Lewis's views will not provide a clear instance of a term that is at once both DR¯ and nonrigid.

This is progress, though—we have succeeded in separating off another of the layers piled up in Marti's argument. It is evident that Lewis wants there to be room within counterpart theory for the notion of quasi-rigidity, for someone who likes the theory but eschews his metaphysics, or does not share his skepticism about the received views of reference. So then, at the root, our question is: Is a Lewis-Millian committed to quasi-rigidity? If not, then [T¯] is in trouble, but if so, then Marti's argument is flawed.

By now, the groundwork is in place for me to explain why it is Marti's argument, not [T¯], that is in trouble. An expression is a nonrigid designator only if (holding linguistic conventions fixed[26]) what it designates from world to world varies according to contingent matters of fact (such as who denounced whom, how many planets there are, which individual satisfies which qualitative condition), and only a designator whose designatum (at a context) is determined via some sort of semantic mediator could possibly satisfy this condition. That is, no expression could satisfy both of the following:

> <u>Nonrigidity</u>: For a given token of an expression to designate different things in different
> contexts, what it designates must be contingent upon the sorts of accidental changes that

distinguish different contexts of evaluation. (Alternatively, only a token whose designatum varies across contexts of evaluation according to the distribution of accidental qualitative factors could satisfy the condition for nonrigidity.)

DR⁼: For a given token to be a DR⁻ expression is for it to be stipulated to tag a specific referent, to be "attached to the object itself, and … not dependent any attribute of the object" (Mill 1843: 20). So, by stipulation, DR⁻ expressions are indifferent to the sorts of accidental qualitative differences that distinguish different contexts of evaluation.

That is enough to rule out the possibility of a term that is both DR⁻ and nonrigid. Nothing could satisfy the defining conditions for membership in both of those categories, because a semantic mechanism by means of which the referent of the term could vary from context to context would have to be both present (for nonrigidity) and absent (for DR⁻).

Here is the 'quasi'-version of the point: A token of an expression is non-quasi-rigid if and only if, in any possible world, it designates things distinct from the counterpart (or counterparts) of its actual referent. Hence, a necessary condition for non-quasi-rigidity is the presence of some non-counterpart-invoking semantic mechanism that determines who the name designates, from context to context. Yet, to say that a token of an expression is DR⁻ is to say that there is no semantic mediator at work (i.e., no rule, procedure, mechanism, or qualitative profile to appeal to in determining who or what is the referent, across different contexts of evaluation). Some kind of semantic mediator is required, in order for the answer to the question of quasi-rigidity to be a definite 'No' (i.e., which individual the term designates, in a context, has to depend on the sorts of contingent matters that distinguish different contexts of evaluation) and that kind of semantic mediation is explicitly precluded by the definition of what makes a term DR⁻. Therefore, a Lewis-Millian is committed to the view that all DR⁻ terms are quasi-rigid.

A Lewis-Millian could be skeptical or agnostic about quasi-rigidity (for any number of good reasons). However, they have no means to come up with non-quasi-rigid DR⁻ terms,

because there is no semantic mechanism for them to appeal to, in accounting for how a DR⁻ term

(determinately, definitely) picks out different things in different contexts. Thus, it is misleading

to say that:

> Like the descriptivist that Kripke criticizes, this [Lewis-]Millian thinks that the object
> relevant for the evaluation of what is said by an utterance of "Hesperus is bright" varies
> from world to world. (2003: 169)

In this line of thought, the question of rigidity is run together with a tangle of metaphysical and

methodological issues. The semblance of a clear negative answer to the question of rigidity fades

away, once we pay heed to these distinctions. Hence, I conclude that Marti has offered no cogent

counterexample to [T⁻].

2.2 Conclusions about rigidity and direct reference

Marti's point still stands that there are these two distinct notions of direct reference. However,

the two notions are quite tightly connected. Consider again the two questions about direct

reference left open in Section 1.2:

> (a) Which thoughts and utterances are object-dependent?
> (b) How is the referent of the subject-term determined, in these object-dependent cases?

In any case where a thought or utterance is object-dependent, its subject-term is DR⁺, for that is

just what it means to characterize a token of an expression as DR⁺. Different answers to (a) (i.e.,

differing views as to the precise extent of the set of natural language expressions that are

properly characterized as DR⁺) vary according to different views about various sorts of

sentences—more specifically, about content of the propositions the sentences are used to

express. My aim here is not to enter into an argument about this question; for illustrative

purposes, assume the answer to (a) to be all and only the thoughts and utterances whose subject

terms are (i) proper names, (ii) demonstratives, (iii) indexical pronouns, and (iv) referential uses

of definite descriptions.[27] Given this, (b) splits us as follows:

    (bi) How is the referent of a token of a proper name determined?
    (bii) How is the referent of a token of a demonstrative determined?
    (biii) How is the referent of a token of an indexical pronoun determined?
    (biv) How is the referent of a referential use of a description determined?

DR^- is one candidate answer to (bi). It is far from uncontroversial, but it is not without

plausibility; and it enjoys some measure of support.[28] Obviously, though, DR^- has no plausibility

when it comes to (bii)-(biv). On this way of carving things up, demonstratives, indexical

pronouns and referential uses of descriptions are clearly DR^+ but not DR^-.

    So, Kaplan introduces the propositional conception of direct reference, DR^+, as a way to

formulate an answer (a); whereas the Millian conception of direct reference, DR^-, is part of an

answer to (b), but one that is only intended to apply to proper names. In general, if there are any

DR^- terms in natural language, then they are a subset of the set of DR^+ terms—i.e., if a term has

its designatum determined in the stipulative, immediate way distinctive of DR^- terms, then the

propositions expressed by sentences in which it occurs can only be object-dependent. (There is

no semantic mediator, mechanism, or condition to provide the object-independent contribution to

propositional content.) It follows that $[T^+]$ entails $[T^-]$: If all DR^+ terms are rigid, then all DR^-

terms are rigid. $[T^+]$ is a broad claim about an array of singular terms, whereas the scope of $[T^-]$

is just the uses of names that make up a proper subset of the scope of $[T^+]$. So, contra Marti, if

either of these tenets is vulnerable, it is $[T^+]$.

    However, given the distinctions drawn above, $[T^+]$ is in good standing. I take the above

critical work to vindicate the tenet that reference implies rigidity. If the subject-term refers to,

rather than denotes, an individual, then which individual the term designates, at a context, is not

contingent upon compositionally determined conceptual conditions or on contingent matters of

fact; and hence the possible-worlds truth-condition expressed by sentences whose subject term

refs (as opposed to denotes) can only involve one specific individual. Rigidity is a modal

consequence of reference: If there are referring expressions, as distinct from denoting

expressions, then they are rigid designators.

So, the key assumption given which both sharpenings of [T] are valid is that there is a

determinate question of rigidity (or quasi-rigidity). To the extent that there is a determinate

answer to the question whether two individuals in different counterfactual situations are identical

(or are counterparts), then anything that qualifies as either DR$^+$ or DR$^-$ is a rigid designator. There

are lots of reasons to be skeptical or agnostic as to the determinacy of the question of rigidity; but

such skepticism or agnosticism precludes the question of rigidity from arising, as opposed to

affording counterexamples to either [T$^+$] or [T$^-$].

3. Rigidity and semantic frameworks

Rigidity is a semantic claim about a designator, and neither a metaphysical claim about the

essence of its designatum, nor a claim about the theoretical legitimacy or worth of the possible-

worlds framework. I have argued that Marti (2003) runs afoul of both of these strictures; in the

next Section I turn to another case that illustrates similar confusions. First I briefly address a

question about the relation between rigidity and semantic frameworks.

To claim that a token of an expression is rigid is to say that it does not designate distinct

things across different contexts of evaluation. There are many different sorts of rigid designator.

For example, there is a good case on favor of the rigidity of at least each of the following:

> 'I', 'this', 'Jones', 'tiger', 'gold', 'the cube root of 8', 'the person who actually
> denounced Catiline', 'the element with atomic number 79'

There are of course considerable differences among the reasons for rigidity, among these cases.

Clearly, the claim that different sorts of terms are rigid designators is consistent with there being

all manner of important semantic differences between the terms, as well as metaphysical differences between what the terms designate. The one crucial thing that all rigid designators have in common is that the relation between (the token of) the designator and its designatum is impervious to the sorts of accidental changes that distinguish different contexts of evaluation.

The point that rigidity is not a methodological claim about the legitimacy or worth of the possible-worlds framework may seem idle, as someone with serious qualms about the possible-worlds idiom is not likely to be interested in arguing over the extent of the set of rigid designators. Nonetheless, toward the end of isolating the notion of rigid designation out from the nest of other issues with which it has become tangled, it is important to see that the question of rigidity is orthogonal to questions about the legitimacy of the possible-worlds framework. One could endorse the possible-worlds framework without qualification, for all manner of purposes, but nonetheless be skeptical of the idea that there are any rigid designators at work in our thought and talk. Lewis's views, discussed in Section 2.1, are an example of this sort of combination; or consider Follesdal's (1986)[29] argument that rigidity is a regulative ideal that natural language expressions tend toward, to varying degrees, but in no case completely instance. Once this area of conceptual space is pointed to, it is evident that aversion to the very idea of rigidity, or wariness of the idea that natural language expressions are rigid designators, is compatible with a serious commitment to some of the many uses and virtues of the possible-worlds framework.

In the other direction, one who is, for whatever reason, averse to possible-worlds semantics might nonetheless be interested in the sorts of semantic phenomena that are tied up with the notion of rigidity. For instance, such a possible-worlds skeptic might still be interested in various sorts of semantic differences between co-designative denoting expressions (such as 'the cube root of 8' vs. 'the number of 20th-century World Wars', 'the person who <u>actually</u>

denounced Catiline' vs. 'the person who denounced Catiline', or 'the element with atomic

number 79' vs. 'the element most highly prized by local jewelers'). Or, a possible-worlds skeptic

might be interested in semantic differences between the expressions 'I' vs. 'the speaker', 'this'

vs. 'the object the speaker is demonstrating', or 'Jones' vs. any description that picks him out.

Hence, embracing the possible-worlds framework is compatible with skepticism about

rigidity, and skepticism about the possible-worlds framework is compatible with serious interest

in some of the characteristic semantic differences between rigid vs. nonrigid designators.

Although some historical contingencies might suggest otherwise, the philosophical worth of the

notion of rigid designation is not tied to any particular, contentious approach to modal semantics.

Rather, rigidity is a significant discovery about the phenomenon of reference; and reference is

ubiquitous in our thought and talk.

4. Rigidity and general terms

A contemporary debate that illustrates some confusions between the semantics of rigidity and the

metaphysics of essence, which are closely related to the sorts of mistake that I have attributed to

Marti (2003), concerns the question of how the notion of rigidity ought to be extended to general

or kind terms. The general issue can be seen as a challenge bequeathed by Kripke (1972). Two

seminal conclusions for which Kripke argues are that proper names are rigid designators, and

that there are some deep semantic affinities between names and various sorts of general or kind

terms. Further, Kripke explicitly attributes rigidity to certain general or kind terms—"'Heat', like

'gold', is a rigid designator …" (1972: 136). However, Kripke never gives a definition of rigidity

that applies to general or kind terms. Thus the challenge: What should we take the criterion for

rigidity to be, for general or kind terms? There exists a considerable sub-literature on this question, stretching back over three decades.[30]

Thanks to work by Kaplan and Stalnaker, among others, alluded to in Section 1.1, most philosophers are now convinced that the rigidity of proper names is compatible with widely divergent views on the metaphysics of essence. That is, in the case of proper names, most would now reject Quine's (1977: 118) characterization: "A rigid term differs from others in that it picks out an object by its essential traits".[31] However, when it comes to the correlative point for general or kind terms, many still demand some metaphysical work of the concept of rigidity. It is still all too common to encounter the idea that to classify a general term as rigid is, in some sense, to make a metaphysical claim about the nature or essence of its designatum.[32] I will argue that this idea rests on confusion. First I take on the notion that rigid general terms are distinct in that they pick out their instances by their essential traits; second I address the notion that the very idea that some general terms are rigid designators smacks of objectionable metaphysics.

3.1 Rigidity and natural kinds

One central thread running through the literature on this issue is dedicated to the proposition that the set of rigid general or kind terms should line up with some interesting metaphysical boundary. Almost invariably, the target set are terms that are in some way tied up with other aspects of the arguments against descriptivism and for the causal-historical theory of reference; most specifically, a widespread desideratum is a general definition of rigidity that counts the natural kind terms in and various other sorts of terms out. Hence, Soames (2002: Chapter 9, especially p.249, p.260) searches for a general definition of rigidity according to which natural kind terms like 'gold' count as rigid but terms like 'bachelor' do not, because the thesis that natural kind terms are rigid designators would be trivial if we defined the notion of rigidity such

that "ordinary descriptive predicates" such as 'philosopher' and 'bachelor' count as rigid.

Similarly, Schwartz (2002: 266) says: "Clearly there is an important difference between natural

kind terms like 'gold' and nominal kind terms like 'bachelor'—and isn't this difference based on

the rigidity of the one and the non-rigidity of the other?" Putnam is a seminal root of this line of

thought—"… we may express Kripke's theory and mine by saying that the term 'water' is <u>rigid</u>"

(1975: 231).[33]

To be sure, I have no interest in denying that natural kind terms are distinctive, in various

deep and interesting ways. Also, I will not try to characterize precisely what those differences are

here. My main aim here is to argue that this idea that rigidity gets at what is distinctive about

natural kind terms is another clear instance of the semantics of rigidity becoming clouded by

tangential metaphysical concerns.[34]

Consider first why it is that many philosophers expect the boundary demarcating rigid

from nonrigid general terms to coincide with the boundary demarcating natural from nonnatural

kind terms. One key to the answer lies in the supposed essence-identifying aspect of natural kind

terms. Natural kind terms mark our best guesses as to the joints at which mind-independent

nature is most significantly carved. The properties designated by natural kind terms are thought

to be essential, not merely accidental, to their instances. To the extent that our guesses as to

which kind terms mark these natural joints are correct, then if something falls in the extension of

a given natural kind term, then it will fall in the extension of that same natural kind term in any

possible world in which that thing exists.

Thus, if something is (say) a tiger, then it is essential that it be a tiger—i.e., it is so in

every possible world in which it exists. This consideration makes it seem like 'tiger' is relevantly

similar to the rigid 'Aristotle', and relevantly different from the nonrigid 'the teacher of

Alexander'. So herein lies a main cause of the widespread view that rigidity gets at what is distinctive to natural kind terms—i.e., natural kind terms are distinctive in being essence-identifying, and essence-identifying terms track individuals across possible worlds.

However, according to the original proponents of rigidity (such as Kripke, Donnellan, and Kaplan), it is definitely and unequivocally not the case that names are rigid because they semantically specify essential properties of their referents. Rather, as explained in Section 2 (cf. note 31), names are rigid because they are DR⁻ (i.e., because they do not specify any properties at all). That is, the reason why an utterance of 'Jones' is indifferent to the sorts of accidental changes that distinguish different contexts of evaluation is essentially Mill's point that 'Jones' "is attached to the object itself, and is not dependent on any attribute of the object" (1843: 20). Names are rigid because they are (to coin a phrase) essence-indifferent, not because they are, like natural kind terms, essence-identifying. (To name a baby is not to put forward a hypothesis as to its criteria of identity.) Thus, the reason why an utterance of 'Jones' tracks one particular individual across possible worlds is entirely different from the reason why natural kind terms like 'tiger' tracks particular individuals across possible worlds. Although there are many lines of analogy between names and natural kind terms, this particular line of analogy, with respect to the source of rigidity, runs rather thin.[35]

Turning now to the original question of rigidity, Kripke articulates the intuition behind the thesis that names are rigid designators as follows:

> Not only is it true of the man Aristotle that he might not have gone into pedagogy, it is also true that we use 'Aristotle' in such a way that, in thinking of a counterfactual situation in which Aristotle didn't go into any of the fields and do any of the achievements we commonly attribute to him, still we would say that it was a situation in which Aristotle did not do any of those things. (1972: 62)

Clearly, this cannot be the root of what is distinctive of natural kind terms. The problem is not that this line of thought does not hold true of 'tiger' or 'gold', but rather that it holds true of various types of nonnatural kind term that many seek to classify as nonrigid. (For example, not only is it true that (say) bachelors might not have made up 80% of the market for expensive sports cars, it is also true that we use the term 'bachelor' in such a way that such a counterfactual situation is correctly described as one in which (well, what else?) bachelors do not buy so many expensive sports cars.) If that is the test of rigidity, then 'bachelor' is in. Any single word will pass this test for rigidity—except on the sort of descriptivist view that holds that some single words are somehow nonrigid descriptions in disguise.

Another way that Kripke (1972) articulates the question of rigidity is with the following sort of question: What would it take for a counterfactual situation to be correctly described as one in which Aristotle is fond of dogs? It would not suffice for the teacher of Alexander to be fond of dogs, or for the author of the Metaphysics to be fond of dogs, … —and so on, for any description believed to be true of Aristotle—for reasons developed by Kripke, Donnellan, and others. (No description that Aristotle contingently satisfies affords a means of specifying the correct truth-condition.) Now, one reason to think that the term 'dog' is rigid is that a similar point holds for it—i.e., a counterfactual situation in which kangaroos are the most popular housepets, and are known as human's best friends, and Aristotle is fond of kangaroos, could not be properly characterized as one in which Aristotle is fond of dogs; a situation in which squirrels bark and drool are very loyal to us and follow us around, and Aristotle is fond of squirrels, could not be properly characterized as one in which Aristotle is fond of dogs; and so on. (No description that dogs contingently satisfy affords a means of specifying the correct truth-condition.) Given that we use both proper names and terms for species as rigid designators, our

own Aristotle will have to be fond of the kind of thing that we call dogs, in order for a situation to be properly characterized as one in which Aristotle is fond of dogs.

However, again, what is true of 'Aristotle' and of 'dogs' is also true of 'bachelors', 'philosophers', 'pencils', 'unicorns', and so on—of various types of non-natural kind term that many seek to classify as nonrigid. Only a situation in which our own Aristotle is of the very marital status that we call 'bachelor' is truly described as one in which Aristotle is a bachelor; the sentence 'Aristotle was a philosopher' expresses a truth in a context only if Aristotle is, in that context, the sort of thing that we call 'philosopher'. (Cf. note 26.) No description that bachelors, or philosophers, contingently satisfy affords a means of specifying the correct truth-condition. These are uncontroversial facts about how we use these terms; and, on Kripke's criterion, they suffice to show that terms like 'bachelor' and 'philosopher' are typically used as rigid designators. More generally, once we distinguish the semantic question of rigidity from these distinct metaphysical doctrines and methodological issues, it is evident that rigidity—the question of relative variance in truth-conditions across possible worlds—does not distinguish any metaphysically interesting subset of the set of semantically unstructured general terms.[36]

So, contra widespread dogma, rigidity does not mark an interesting metaphysical boundary. This is not surprising, once we recognize that rigidity is not a metaphysical concept. The question of rigidity is rather a question of the way in which designata are semantically singled out—i.e., Does the designator specify something via one of its characteristics (e.g., 'the teacher of Alexander', 'the marital status of Prince William in 2003'), in which case, if the characteristic is accidental to the designatum, then the designator is nonrigid? Or, does the designator rather just simply specify—not describe—the designata (e.g., 'Aristotle', 'bachelor'), in which case it is rigid? Indeed, definite descriptions (such as 'the man drinking the martini',

'her husband') can be used rigidly, depending on precisely what the speaker uses the description to say.[37] Even if proper names and natural kind terms are rigid on their most typical uses, they also admit of uses on which they are nonrigid.[38] This is not to deny that some designators are typically rigid (e.g., 'nine', 'gold'), and others typically nonrigid (e.g., 'the number of planets', 'the element most highly prized by local jewelers'). Nonetheless, any sort of designator admits of many sorts of uses; in particular, many admit of both rigid and nonrigid uses. This is further reason to think that no metaphysical points, about the essences or natures of individuals or kinds, should be pinned on the notion of rigidity.

     3.2 Rigidity and the metaphysics of kinds

Another way in which the notion of rigid designation tends to get clouded by metaphysical questions about kinds is illustrated by the idea that the rigidity of certain general terms presupposes contentious metaphysical claims about the nature or essence of kinds.[39] To the contrary, just as the question of rigidity is orthogonal to the question of individual essence, the question of rigidity is also—and for exactly the same reason—orthogonal to the metaphysics of kinds. That this or that general term is rigid is not itself a metaphysical claim about kinds at all, but is rather compatible with a wide variety of views on the metaphysics of kinds.

     That is, in the case of names: Haecceitists and anti-haecceitists can agree that names are rigid designators, they would just have rather different views on precisely what names track from world to world—i.e., non-qualitative essences, or (something like) qualitative roles. Similarly, the view that names are nonrigid designators is not closed off by any stance on the metaphysics of essence. For instance, one could espouse a robust account of non-qualitative individual essence, but still favor a nonrigid descriptivism when it comes to the question of precisely what speakers use proper names to express. Similarly, in the case of general or kind terms: Just as

there is nothing incoherent about an anti-haecceitist who holds that names are rigid designators, or a haecceitist who holds that names are nonrigid, when it comes to the question of a general term's contribution to possible-worlds truth-conditions, a nominalist might favor rigid designation, and a Platonist might hold that kind terms are (sometimes, or usually, or always) used nonrigidly.[40] Platonism, conceptualism, and nominalism about kinds are one and all consistent with the view that kind terms are rigid designators (and with the view that kind terms are nonrigid designators); their dispute concerns the mind- and language-independent metaphysical status of what speakers use the terms to designate.[41]

Philosophers of all metaphysical stripes agree that there is a prima facie ontological commitment to kinds, in our ordinary thought and talk. What divides Platonists, conceptualists, and nominalists is not the question of rigidity—i.e., the question of relative variances in truth-conditions across contexts of evaluation. Rather, these factions get divided up in deciding what to make of this prima facie ontological commitment. The notion of rigidity is irrelevant to that kind of question. So, the existence, or nature, of essences or kinds—the question of what kinds really are (or whether such entities as the meanings of kind terms exist, somewhere out there)— is not quite pertinent to the question of rigidity. Rather, rigidity is a semantic claim about a designator, not a metaphysical claim about what it designates.

5. Conclusion

The concept of rigidity grew out of work in quantified modal logic. Subsequently, Kripke uses the notion to motivate a number of theses about reference and content; subsequent to that, philosophers influenced by Kripke have continued to try to put rigidity to further work. In some

cases, to suit these subsequent ends, things have become associated with the concept of rigidity that are, at least, distinct from, and, at worst, in tension with, the original notion.

The general problem is a widespread and multi-faceted tendency to conflate the question of rigidity with more or less distant metaphysical and methodological matters. My aim here has been is to clarify the question of rigidity by exposing and arguing against some of these conflations. If we are to attain a clear view of the notion of rigid designation, it is important to distinguish it from questions about methodological frameworks and metaphysical theses, to which the notion of rigidity is historically, but not intrinsically or conceptually, connected. Two specific morals are: [1] rigidity is a modal consequence of reference—even though there are instances of rigid designation without reference (e.g., 'the cube root of 8', 'the actual F'), no term that refers (as opposed to denotes) can fail to be a rigid designator, and [2] in the case of general terms, as in the case of proper names, the semantic notion of rigid designation is orthogonal to the metaphysics of essence.[42]

Department of Philosophy

New York University

---

[1] Marti, Genoveva (2003) "The question of rigidity in new theories of reference," *Nous* 37, pp.161-79.

[2] This token-relative qualification is required because some uses of pronouns are rigid designators, but different tokens of them rigidly designate different things. (Given that different people can have the same name, a similar point holds of proper names.) I will omit this qualification, for brevity, in contexts in which it is not necessary in order to avoid confusion.

[3] Quine, W.V. (1947) "The problem of interpreting quantified modal logic," *Journal of Symbolic Logic* 12, pp.43-8; Smullyan, Arthur (1948) "Modality and description," *Journal of Symbolic Logic* 13, pp.31-7.

[4] Kripke, Saul (1959) "A completeness theorem for modal logic," *Journal of Symbolic Logic* 24, pp.1-14; (1963) "Semantic considerations for modal logic," *Acta Philosophia Fennica* 16, pp.83-94.

[5] Kaplan, David (1968) "Quantifying in," *Synthese* 19, pp.178-214.

[6] Kripke, Saul (1971) "Identity and necessity," in Munitz, ed., *Identity and Individuation*, New York: NYU Press, pp.135-64; (1972) *Naming and Necessity*, Cambridge: Harvard University Press (page references are to the 1980 paperback edition). As Kaplan (1989) observes ("Afterthoughts," in Almog et al., eds., *Themes from Kaplan*, Oxford: Oxford University Press, 1989, pp.565-614), one theme that runs through Kripke's work (at least from the late 50s to the early 70s) is a gradually unfolding campaign to replace the paradigm of the description with the paradigm of the variable in the theory of reference. In model-theoretic modal logic, variables (trivially) function as rigid designators: the variables are assigned a value prior to, independently of, the specification of any particular model, and so each individual variable has one and the same value in every possible world—cf., e.g., Kripke (1959: 3, 1963: 85-7). One of the intuitions behind the causal-historical theory of reference is that many referring expressions in natural language are more like this than like descriptions. The initial semantic link is by fiat, dubbing, assignment; subsequent uses of the expression relate back to that link, rather than expressing a condition that searches about the world to find whatever best satisfies some property or properties.

[7] First and foremost, as the notion of rigidity is at the core of the causal-historical theory of reference, and of closely associated, wide-ranging criticisms of traditional ideas about language, the notion has been thought to have a deep implications for various issues in the philosophy of language and mind. Further, since rigid designation is historically connected with the Kripke-Putnam views about certain sorts of kind terms, the notion has made a splash in several debates within metaphysics, the philosophy of science, and epistemology. Even more generally, though, the impact of the concept of rigidity quickly spilled over beyond the bounds of metaphysics and epistemology—to cite two instances, David Brink argues (in Chapter 4 of *Moral Realism and the Foundations of Ethics*, Cambridge: Cambridge University Press, 1989) that moral terns such as 'good' and 'just' are rigid designators, and draws out some consequences, and J. Carney (in "A Kripkean approach to aesthetic theories," *British Journal of Aesthetics* 22, 1982, pp.150-7) provides similar arguments concerning aesthetic terms such as 'art' and 'beauty'.

[8] Marcus, Ruth (1961) "Modalities and intensional languages," *Synthese* 13, pp.303-22; Kaplan, David (1986) "Opacity," in Hahn and Schilpp, eds., *The Philosophy of W.V. Quine*, Chicago: Open Court, pp.229-89; Stalnaker, Robert (1986) "Counterparts and identity," *Midwest Studies in Philosophy* 9:, pp.121-140; (1997) "Reference and necessity," in Hale and Wright, eds., *A Companion to the Philosophy of Language*, pp.534-554.

[9] Precedent on this point is provided by arguments by Kaplan (1986) and by Stalnaker (1986, 1997) that show that the rigidity of proper names is compatible with a wide variety of views about individual essence.

[10] Kaplan, David (1977) "Demonstratives," in Almog et al., eds., *Themes from Kaplan*, Oxford: Oxford University Press, 1989, pp.481-563.

[11] For a recent overview of these debates about propositional structure and constituency, see Stephen Schiffer (2002) "Meanings," in Campbell et al., eds., *Meaning and Truth*, New York: Seven Bridges Press, pp.79-104.

[12] For instance, unstructured propositions can have object-dependent truth-conditions—cf. Robert Stalnaker (1984), *Inquiry*, Cambridge MA: MIT Press, and the discussion of Lewis's views in Section 2. Also, several neo-Fregeans have developed the idea that object-dependent senses can capture the relevant truth-conditional differences— for a good overview cf. Francois Recanati (1993) *Direct Reference*, Oxford: Blackwell.

[13] To be sure, I make no attempt at a comprehensive discussion of Marti's deep and broad paper. For the most part, I am just concerned with the arguments on pp.168-70. In order to situate these arguments properly, though, I do get into some of the paper's general themes.

[14] In addition to Kaplan (1977, 1989), Recanati (1993) and Stephen Neale (1993) "Term limits," *Philosophical Perspectives* 7, pp.89-124, also sketch and defend comprehensive views of contemporary philosophy of language in which [T] is a core pillar.

[15] Russell, Bertrand (1905) "On denoting," *Mind* 14, pp.479-93.

[16] Mill, J.S. (1843) *A System of Logic*, London: Longmans, 1947.

[17] Keith Donnellan (1970) "Proper Names and Identifying Descriptions", *Synthese* 21, pp.335-58, Kripke (1972), and several of Kaplan's works abound with similar, complimentary examples.

[18] The thought here is that many different types of expressions might all be DR⁺ (for example, proper names, indexical and demonstrative pronouns, referential uses of descriptions, and perhaps other expressions), but yet there could be significant variation amongst the semantic mechanisms operative in each case. This thought is developed in detail in Recanati (1993).

[19] Perhaps herein lies another reason to be wary of Russellian singular propositions, insofar as it encourages the conflation of these two different notions.

[20] Lewis, David (1986a) *On the Plurality of Worlds*, Oxford: Blackwell.

[21] Henceforth, 'Lewis-Millian' denotes those who both subscribe to counterpart theory and countenance DR⁻ terms.

[22] Kaplan (1975) "How to Russell a Frege-Church," *Journal of Philosophy* 72, p. 217, re-introduces the term 'haecceitism', describing it as: "… the doctrine that it does make sense to ask—without reference to common attributes and behavior—whether this is the same individual in another possible world, … that a common 'thisness' may underlie extreme dissimilarity or distinct thisnesses may underlie great resemblance." Haecceitists hold that (many, or most) de re modal questions—questions about what could or could not befall particular individuals—admit of determinate answer. (Presumably, a haecceitist need not hold that all de re modal questions are determinate. Haecceitism by no means commits one to full-blown metaphysical determinism.) It is, of course, a separate question whether, or how, agents like us could come to know these modal facts.

[23] Lewis, David (1986b) *Philosophical Papers*, volume II, Oxford: Oxford University Press.

[24] Lewis, David (1968) "Counterpart theory and quantified modal logic," *Journal of Philosophy* 65, pp.113-26.

[25] Lewis, David (1994) "Reduction of mind," in *Papers in Metaphysics and Epistemology*, Cambridge: Cambridge University Press, 1999, pp.291-324; (1983) "New work for a theory of universals," ibid, pp.8-55.

[26] "One doesn't say that '2+2=4' is contingent because people might have spoken a language in which '2+2=4' meant that seven is even" (Kripke 1972: 77). The link between an expression and its meaning must be held constant across counterfactual situations, if we are to study the modal properties of the content of our thought and talk.

[27] Again, I will not argue here for the claim that all and only these four are DR⁺. I use this assumption only to illustrate the relation between DR⁺ and DR⁻. If you think this list should be trimmed or appended, the points immediately following will remain cogent as long as they are trimmed or appended accordingly.

[28] To cite a recent example, Scott Soames (in *Beyond Rigidity*, Oxford: Oxford University Press, 2002) defends this view (i.e., all things considered, proper names are DR⁻). The view's detractors hold that, while individual variables in model-theoretic modal logic may be classified as DR⁻, no natural language expression could be DR⁻, because DR⁻ provides no answer whatever to some central questions about the epistemology of language use. (See, for instance, John Searle (*Speech Acts*, Cambridge: Cambridge University Press, 1969) for an argument against the possibility of DR⁻ expressions in a natural language. Strictly speaking, Searle's target is Russell's notion of a logically proper name, but I do not think he would object to this characterization.) The defenders of DR⁻ counter that this line of thought conflates questions of individual psychology with properly semantic concerns. I should go no further into this matter here.

[29] Follesdal, Dagfinn (1986) "Essentialism and reference," in Hahn and Schilpp, eds., *The Philosophy of W.V. Quine*, Chicago: Open Court Press, pp.97-113.

[30] For important early contributions see Schwartz, Stephen (1977) 'Introduction,' *Naming, Necessity, and Natural Kinds*, Ithaca: Cornell University Press; Salmon, Nathan (1982) *Reference and Essence*, Princeton: Princeton University Press, Ch.4-6; Donnellan, Keith (1983) "Kripke and Putnam on natural kind terms," in Ginet and Shoemaker, eds., *Knowledge and Mind*, Oxford: Oxford University Press, pp.84-104., and Linsky, Bernard (1984) "General terms as designators," *Pacific Philosophical Quarterly* 65, pp.259-76. For contemporary views see LaPorte, Joseph (2000) "Kind and rigidity," *Philosophical Studies* 97, pp.293-316; Schwartz, Stephen (2002) "Kinds, general terms, and rigidity: A reply to LaPorte," *Philosophical Studies* 109, pp.265-77; Soames (2002: Ch.9); Salmon, Nathan (2003) "Naming, necessity, and beyond," *Mind* 112, pp.475-92, and Marti, Genoveva (forthcoming) "Rigidity and general terms," *Proceedings of the Aristotelian Society*.

[31] Quine, W.V. (1977) "Intensions revisited," in *Theories and Things*, Cambridge MA: Harvard University Press, 1981, pp.113-23. If 'Aristotle' is rigid, it is because it is DR⁻, not because it semantically specifies one unique individual essence. In effect, Quine here takes descriptions like 'the element with atomic number 79' as the model of a rigid designator. 'Aristotle' (let alone 'I' or 'this') would surely come out nonrigid, if this were the criterion.

[32] For example, as I document below, Schwartz (2002) and Soames (2002) clearly espouse this notion. (I should note that I take Schwartz and Soames to be representative of majority opinion on this point. I single them out because they are uncommonly explicit in articulating these widespread but largely implicit, presumptions.) To cite two other examples, Alan Sidelle (1992) "Rigidity, ontology, and semantic structure," *Journal of Philosophy* 89, pp.410-30, and Michael Devitt and Kim Sterenly (1999) *Language and Reality*. (2nd ed.) Cambridge, MA: MIT Press, pp.93-101, provide other takes on the view that the notion of rigidity yields, or at least corresponds to, some substantive metaphysical distinctions.

[33] Putnam, Hilary (1975) "The meaning of 'meaning'," in Gunderson, ed., *Language, Mind, and Knowledge*, Minneapolis: University of Minnesota, pp.215-71.

[34] Some of the questions discussed in this Section are treated in greater depth in my ms. "A general definition of rigid designation".

[35] Another commonly cited reason why proper names and natural kind terms are put in the same category, with respect to the question of rigidity, is that both are non-descriptional. (Cf., e.g., Salmon (2003: 482), Soames (2002: 264-7), Devitt and Sterenly (1999: 93).) I agree that each of these sorts of term is non-descriptional, in some of the variety of senses in which the term 'non-descriptional' is used. However, I am skeptical that there is any one sharp sense of 'non-descriptional' that satisfies all of the following: (i) the classical descriptivists are committed to the view that proper names and natural kinds terms lack this property, (ii) Kripke (1972) shows that they were wrong about this, (iii) it is a distinctive property of proper names and natural kind terms, and (iv) it explains why these terms (and only these terms) are rigid designators.

[36] At a bit more length, in "A general definition of rigid designation", using an argument similar to that employed against Marti (2003) in Section 2.1, I argue that semantic structure is a necessary condition for nonrigidity, and hence that all semantically unstructured terms are rigid designators. With respect to the question of rigidity, the semantic glue that holds all semantically simple general terms to their designata (including non-natural kind terms, such as 'bachelor' or 'philosopher') is, relevantly similar to direct reference, and relevantly different from indirect denoting. Similar views are defended by LaPorte (2000), Salmon (2003), and Marti (forthcoming). It is becoming widely acknowledged that—as Donnellan (1983) argued—Putnam (1975: 231) was just simply mistaken to say that "… we may express Kripke's theory and mine by saying that the term 'water' is <u>rigid</u>." Putnam here runs rigidity together with other distinct factors—most notably, the causal-historical theory of reference—with which it is historically connected.

---

[38] For example, some uses of 'Shakespeare' are intended not to rigidly designate the (relevant) person who was so-called, but rather to nonrigidly designate whoever it is that wrote the poems and plays; some uses of 'water' are intended not to rigidly designate any particular stuff with a particular chemical structure but rather to nonrigidly designate (say) whatever-can-be-used-to-do-the-washing.

[39] In addition to the works cited in note 32, another good illustration is provided by Marti (1998) "Rigidity and the description of counterfactual situations," *Theoria*, pp.477-90, who worries that the claim that a general or kind term is a rigid designator runs into some tension with nominalism.

[40] To illustrate: one who thinks that (say) 'bachelor' makes exactly the same contribution to truth-conditions, across contexts of evaluation, but that, strictly speaking, there is no such thing as the kind bachelor, is a rigid-nominalist; one who thinks that (say) the semantics of the term 'heat' is given by the description 'the cause of the sensation of warmth', but nonetheless, in any context, the term 'heat' denotes a real objective kind, is a non-rigid-Platonist.

[41] Nominalists do not deny that speakers associate particular features or characteristics with general terms, or that one learning a language is prone to end up with (more or less, roughly) the same associations between general terms and features or characteristics as the people from whom one learns the language. Rather, what nominalists deny is that, at the end of the day, when we get down to the business of cataloguing the metaphysical furniture, abstract objects (such as features, characteristics, or kinds) should be said to exist. Approached down this avenue, nominalism is an error theory about kinds—i.e., we (in some sense) think and talk about such things all the time, and we (pretty well) know what each other is talking about; but, strictly speaking, this thought and talk is literally false.