Rigid Designation and Theoretical Identities

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Published online: 12 Sep 2014.

To cite this article: Ilhan Inan (2014) Rigid Designation and Theoretical Identities, International Studies in the Philosophy of Science, 28:2, 217-220, DOI: 10.1080/02698595.2014.932531

To link to this article: http://dx.doi.org/10.1080/02698595.2014.932531

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This book is one of the most comprehensive studies of the controversial issue of how Saul Kripke's (1980) notion of rigidity applies to what most take to be general terms such as ‘water’ and ‘pain’, and what role rigidity plays in our philosophical evaluation of theoretical identity statements involving such terms; most notably ones involving natural kinds such as ‘water is H2O’ and psychophysical identities such as ‘pain is the stimulation of C-fibres’. It is a must-read for anyone interested in these topics.

Contrary to common opinion, Joseph LaPorte takes such terms to be singular rather than general, and dubs them ‘property designators’ (as opposed to other singular terms that designate concrete objects). LaPorte rejects the common view that the theoretical significance of the rigid/non-rigid distinction is that it helps us to refute descriptivism. Despite the fact that LaPorte concentrates on statements involving what most would take to be natural kind terms throughout the book, contra Stephen P. Schwartz (1980) and others, he denies that the notion of rigidity allows us to distinguish between natural kind terms and artificial kind terms. Rather, the primary theoretical role of rigidity is to ‘support’ or ‘impugn’ theoretical identity statements. In the case of natural kind identities such as ‘water is H2O’, rigidity plays a positive role of supporting its necessity, whereas in the case of psychophysical identities such as ‘pain is the stimulation of C-fibres’, it plays a negative role of impugning the truth of the statement in question. Rigidity plays a more important role in our effort to discover the essence of the property in question in the case of a theoretical identity statement involving two property designators than in the case of a simple identity statement such as ‘Hesperus is Phosphorus’. In order for an identity statement to be ‘theoretical’ it is not sufficient for both terms to be rigid, though. LaPorte argues that a further condition is needed: there must be a ‘de jure connection’ between the two terms. The term ‘water’ is coined as a term designating the underlying ‘chemical’ of the stuff we observe on earth; once we find out that the chemical composition of water is H2O, then we have in hand two property designators that are both rigid with the right kind of de jure tie. LaPorte argues that in the case of psychophysical identities such as ‘pain is the stimulation of C-fibres’, that de jure tie is always missing. That is because the term ‘pain’ is coined to designate a certain type of sensation and unlike a natural kind term such as ‘water’, it is not coined to designate an underlying physical property.
The evidence science provides us with concerning the co-presence of pain and C-fibre stimulation will never be sufficient for us to conclude that the two are identical. This does not, by itself, show us that some form of mind/body dualism must be the correct view; rather it demonstrates scepticism with regard to the truth of any psychophysical identity statement.

The first four chapters lay down LaPorte’s position on rigidity and its theoretical significance, in which he argues in detail how the original definition of rigidity given for concrete object designators can be extended to cover property designators by taking the latter to be singular terms. In chapter 5, LaPorte tries to show that if a property designator is taken to be a ‘mere applier’ rather than a singular term, then rigidity could still do its theoretical work. He argues that, though Michael Devitt’s (2005) notion of ‘rigid application’ cannot fulfil this task (see also Inan 2008), Rudolf Carnap’s (1956) notion of ‘designation’ can. The last three chapters lay down LaPorte’s original position concerning the role rigidity plays in our evaluation of theoretical identity statements involving two property designators. In chapter 6, LaPorte discusses in detail what the semantic conditions for two property designators have to be with regard to their rigidity for us to come to know that an identity statement involving these terms is in fact a true theoretical identity and thus providing us with the essence of the entity in question; he shows how scientific statements such as ‘water is H2O’ meet these conditions. Chapters 7 and 8 contain a very detailed and technical discussion of Laporte’s sceptical conclusions concerning psychophysical identity statements for which, this time, LaPorte argues that the two property designators do not meet the conditions with regard to their rigidity. No scientific evidence can show us that a statement such as ‘pain is the stimulation of C-fibres’ is true. The first six chapters require a background in philosophy of language and the literature on rigidity in particular, whereas the discussion in the final two chapters requires also a background in philosophy of mind, and the literature on mind/body dualism in particular.

There are several ideas in the book that appear to be controversial.

1. The claim that the primary role of rigidity is not to refute descriptivism could be taken to be an overstatement. In arguing that proper names are rigid designators, Kripke’s intention was to show that a proper name cannot be synonymous with a definite description, which is normally non-rigid. LaPorte acknowledges that the argument from rigidity does indeed show that a naive form of descriptivism is false, though it is compatible with a sophisticated version, i.e. a view that takes the descriptive content of a term to be rigidified by being indexed to the actual world. Still, a refutation of the naive version of descriptivism is important. It seems that it is this naive version that Kripke attributed to Frege, Russell, Wittgenstein, and Searle among others, most of whom did not have the machinery of the rigid/non-rigid distinction and most probably subscribed to a naive version of descriptivism.

2. Throughout the book LaPorte talks about theoretical identity ‘statements’ rather than propositions. A statement, in his own words, is an ‘interpreted sentence’. The
reason for this is that he wishes to stay neutral with respect to the truth of direct reference theory. As is well known, on a Millian account the sentence ‘Hesperus is Phosphorus’ expresses the very same proposition as expressed by ‘Hesperus is Hesperus’ making the proposition a priori and uninformative (Salmon 1986). Now some, including Michael Levin (1987), have argued that the same is the case for the proposition expressed by a sentence such as ‘water is H₂O’, making it a priori. Given that he wishes to argue that theoretical identities are essence giving and therefore informative, LaPorte prefers to talk about statements rather than propositions. He claims that even if the proposition that water is H₂O is a priori, the statement ‘water is H₂O’ is not. This seems to me to be problematic. For one thing it makes the knowledge of theoretical identity statements metalinguistic. We would then have to conclude that science did not discover that water is H₂O, but only that ‘water is H₂O’ is true, making it a discovery about language. It is also not clear why the statement would be a posteriori if we take the proposition to be a priori. If the two terms in an identity sentence are simply Millian names, then there is a way of grasping such a sentence that would make it a priori. If the two names in the sentence are grasped via different associated descriptions, then we may claim that it is a posteriori under this way of grasping the sentence. But on the same grounds the proposition could then be taken to be a posteriori as well. After all there is a way of grasping or a ‘way of taking’ the proposition that would make it informative.

(3) The view that by utilizing a Carnapian notion of designation (by taking property designators to be mere appliers), we could still account for rigidity and its theoretical significance (see chapter 5) appears problematic. Under this new notion a term is not rigid simpliciter as it is in the original definition; the same term designates many properties, some rigidly and some non-rigidly. Therefore in an identity statement what becomes relevant is whether the two terms rigidly co-designate the same property. But according to the original definition we can observe that the two terms are rigid simpliciter, from which we can conclude that the statement must be necessarily true, if true. This theoretical role of rigidity seems to be lacking in the Carnapian approach, given that one would have to know that the sentence is true first, in order to come know that the two terms rigidly co-designate the same property.

(4) The notion of ‘de jure connection’ between two property designators plays a crucial role in LaPorte’s arguments in the final three chapters. Given its significance, one would have expected to get a clear definition of it and a discussion of how this notion relates to Kripke’s notion of reference fixing. Though the reader perhaps can infer the author’s views, given its significance it would have been better if these had been explicitly discussed in the book.

(5) For an identity statement such as ‘water is H₂O’ to be ‘theoretical’ it must provide us with knowledge of the essence of water. For that to be the case it would seem that the term ‘H₂O’ should have descriptive content. Otherwise it would simply be a second name for the same stuff. LaPorte appears to stay neutral on this, which seems problematic. It seems to me that at least one of the terms in an identity
statement should have some descriptive content (even if it is *de jure* rigid) for that statement to qualify as a ‘theoretical’ identity statement.

(6) A commonly shared view is that when the two terms in an identity statement are rigid, this tells us that the statement is necessarily true, if true. Many have taken this to be the theoretical work that rigidity plays in our evaluation of identity statements. It seems that for LaPorte the role of rigidity goes beyond that. In the case of psychophysical identities, by observing the rigidity of the two terms we of course can infer that the statement must be necessarily true, if true. But then our observation that the two terms do not have the right kind of ‘*de jure* connection’ gives us reason to be sceptical about any scientific evidence in favour of the truth of the statement. This seems to have the implication that from semantics alone (i.e. the rigidity of two terms plus a lack of *de jure* connection between them) we can deduce the sceptical conclusion that the truth of a psychophysical identity can never be established or even confirmed. This may raise suspicion for ones who would want to deny that something as substantial as that could follow from semantics alone.

Overall LaPorte’s book is one of the most detailed studies on the topic, with an extremely rich bibliography, making it a very substantial contribution to the literature on rigidity.

**Acknowledgements**

I thank my graduate students, Kerem Geçmen, Cem Şişkolar, and Alper Yavuz, for fruitful discussion.

**References**


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http://dx.doi.org/10.1080/02698595.2014.932531