

Essentialism, reference and the necessary *A posteriori*

Essencialismo, referência e o *A posteriori* necessário

Mihai Rusu¹
Babes-Bolyai University

Abstract

This paper elaborates on the epistemological incongruencies and shortcomings identified in Kripke's view on reference. I question the consistency of Kripke's notion of a *posteriori* necessity and show that all purported examples of necessary a posteriori truth are in principle amenable to a *priori* knowledge. The relevance of the notion of epistemic modality is also put in doubt, at least in a realist framework. This conforms not only to Kantian usage, but also to the actual way we use names and natural kind terms. Conclusions about a more permissive view of reference that conciliates causal and descriptivist theories, but also essentialism and the skepticism engendered by any valid assessment of the limits of human knowledge, are supplemented by examples and arguments showing that our overall conception about the nature of reality and knowledge reflects strongly upon our view of language and reference.

Key words: essentialism, theory of reference, epistemic possibility, *a priori*, *a posteriori*, Saul Kripke, Scott Soames.

Resumo

Este artigo discorre sobre as incongruências e lacunas epistemológicas identificadas no ponto de vista de Kripke acerca das referências. Questiono a consistência da noção de Kripke sobre uma necessidade *a posteriori* e demonstro que todos os exemplos propostos de uma verdade necessária *a posteriori* são em princípio vinculadas a um conhecimento *a priori*. A relevância da noção de modalidade epistêmica é igualmente posta em dúvida no mínimo numa estrutura realista. Isto coincide não só com o uso que Kant faz, mas também com o modo atual em que usamos nomes e termos de tipo natural. Conclusões sobre uma mais permissiva perspectiva de referência que concilia teorias causais e descriptivistas, mas também essencialismo e o ceticismo gerados por qualquer avaliação válida dos limites do conhecimento humano, são completados por exemplos e argumentos que mostram que a nossa concepção geral sobre a natureza da realidade e o conhecimento reflete fortemente nosso ponto de vista sobre a linguagem e referência.

Palavras-chave: essencialismo, teoria das referências, possibilidade epistêmica, *a priori*, *a posteriori*, Saul Kripke, Scott Soames.

¹ Babes-Bolyai University, str. Mihail Kogalniceanu, nr. 1, 400084, Cluj-Napoca, Romania. E-mail: mihai@ifilosofie.ro

Introduction

The work of Kripke and Putnam in the 1970s engendered a new interest in essentialism, a doctrine that seemed to have succumbed under the blows of empiricists from Locke to Quine.² Before Kripke and Putnam, most philosophers of the analytic tradition rejected the essentialist philosophy as a metaphysical error. The development of modal logic brought essentialist thinking back to the forefront of philosophy. Quine's doubts about modalities and modal logic are partially based on the anti-essentialist ideas that were prevalent in early analytic philosophy. Modal logic's most serious enemy from the mid-twentieth century, Quine criticized mostly the incompatibility of reducing necessity to analyticity and the use of quantified modal logic, which he thought to be committed to the doctrine that there are necessary properties of things (*de re* necessity), whereas other properties are only contingent (Carnap and Lewis were primarily targeted, as they were the ones who reduced necessity to linguistic necessity, thus rejecting the traditional Aristotelian view that necessity resides in things themselves, but used quantified modal logic without any reserve, although, as Quine argues, it implies an Aristotelian point of view).³ Marcus (1967, 1971) and Parsons (1967, 1969) have shown that the type of essentialism required by quantified modal logic is minimal and every intensional theory is, in fact, committed to it.

The extra step in the rehabilitation of essentialism is due to the development of modal logic that made possible the theses and arguments of Kripke and Putnam.⁴ The elaboration of a more robust form of essentialism may be seen as a complex form of responding to Quine's and Quine-inspired critics, but this was not the sole or the primary goal of Kripke and Putnam. Marcus and Parsons assume the essentialism of quantified modal logic, but argue that it is not substantive (systems of quantified modal logic have essentialist models, so Quine's "invidious" distinction makes sense, but there are also anti-essentialist models for such systems, so essentialism is not the only alternative that the proponent of quantified modal logic has). Kripke and Putnam take the defense one step further and endorse theses with a much stronger essentialist commitment. Essentialism becomes more than a philosophical doctrine that is respectable only while it is espoused in a neutral form, it may be the right way of seeing things. Although the theses of Kripke and Putnam have become landmarks of contemporary analytic philosophy, their views are still subject to controversy.

Two major types of essentialism can be drawn out of Kripke and Putnam's famous work: an essentialism concerning individuals and a natural kind essentialism (the latter asserts that there are some properties that are necessary for membership in a certain natural kind). In this paper, I will approach these two kinds of essentialism in the same manner, as the differences between them are not crucial to my arguments. The aim of my work is to put under scrutiny the necessary a posteriori and the way Kripke reaches it. The necessary a posteriori is yielded, according to Kripke, by the cases of identity statements and of essence (see, e.g., Kripke, 1980, p. 159). If Kripke and others are wrong to think of these cases as sure instances of the necessary a posteriori, then this calls for a revision of Kripkean doctrines.

² We define essentialism in the standard way, as the philosophical doctrine according to which a thing has certain properties or stands in certain relations necessarily, if it exists. We will not enter here into the controversies regarding contemporary essentialism and its differences from traditional Aristotelian essentialism. For more on this, see Klima (2002) and Oderberg (2007).

³ Classic references for Quine's criticisms of modal logic are Quine (1953, 1966), but these are not the only places where Quine expressed his doubts about modal logic. One may find valuable insights about Quine's arguments and their importance in Føllesdal (1968, 1998).

⁴ The landmark philosophical contributions of Kripke and Putnam concerning these issues are to be found in Kripke (1980) and Putnam (1975).

I will make use of the interpretation given by Soames to Kripke's theses, most notably in Soames (2002, 2006, 2011). Soames identifies two routes to the necessary *a posteriori* in Kripke's work. He argues that one of them is unsound, while the other – the one he calls the essentialist route – is sound. I argue that the soundness of the essentialist route is also doubtful. My arguments lead to a semantic and epistemological account that combines a causal theory of reference with the possibility of associating descriptive senses to terms. The conclusions I reach don't mean that essentialism is to be totally rejected, as it is a versatile doctrine not dependent on the existence of the necessary *a posteriori*. However, the epistemological argument I will outline should bring a correction to Kripke-type views on necessity and the relation between essentialism and reference.

Kripke's Two Routes to the Necessary *A Posteriori* according to Soames

The essentialist doctrine is already assumed in order to arrive at necessary *a posteriori* propositions. This is apparent in what Soames calls Kripke's essentialist route to the necessary *a posteriori* (see, e.g., Soames, 2006, p. 168-172). Arriving at true propositions that are necessary *a posteriori* is the result of the discovery of what Kripke and other philosophers believe to be essential properties of things, such as origin or composition. The way Kripke's reasoning goes is roughly like this: we can know *a priori* that if a thing has a certain composition or origin or is identical or non-identical with something, then it necessarily has that property or is necessarily identical or non-identical with that thing. According to Kripke, we are able to know *a priori* only that certain kinds of properties or relations (such as the ones mentioned above) are essential to a thing, but when some types of properties and relations, like identity, non-identity, origin, composition, etc. are concerned, we always need empirical evidence in order to know what properties or relations can really be attributed to an individual. A Kripkean essentialist assumes that there must be certain essential properties of things and rejects a reversion of these properties to the *a priori*. This is the basic content of Kripke's argument against the old-school identification of the necessary with the *a priori*.

Soames (2002, 2006, 2011) delineates two Kripkean routes to the necessary *a posteriori*, holding that only one of them is sound. In what follows, I shall discuss the two routes and attempt to cast a doubt on their absolute distinctness, as advocated by Soames. As I will argue, both rest on similar epistemological principles and arguments. Each route assumes an initial state of ignorance concerning the attribution of a property to a thing (or a relation to two or more things) and this will be crucial to the argument. This section of the paper relies heavily on Soames's work on a Kripkean semantic theory that is building upon the insights of *Naming and Necessity*.⁵ One option would be just to send the reader to these works, but I believe this would be detrimental to the overall argumentation of the paper. Soames's rendition of Kripke's conception is, I believe, the clearest and most faithful in the literature. But I also believe and will argue that he is

⁵ Of course, Soames's main problem is Kripke's own disdain for theories of any sort (see Kripke, 1980, p. 64). But once we get passed Kripke's quietist wisdom concerning philosophical theorizing (or his rather facile way to dodge any critics concerning the unity of his view, depending on the way you prefer to look at it), we should realize that a Kripkean semantic theory is salutary. After all, isn't this what philosophy does? If we really accepted this or any other anti-theoretical stance, then philosophical inquiry and debate would be nothing more than petty squabble. And one may argue that some of the discussions from the literature surrounding Kripke's work are just that. On a general note, the need to acknowledge at least some minimal theoretical assumptions in order to arrive at necessary truths will be discussed later.

finally wrong to separate thoroughly the two distinct routes to the necessary a posteriori. In order for the reader to see that, I think it is better to give a detailed account of Soames's interpretation of Kripke's view. I don't fault Soames, however, for believing that there are two routes to the necessary a posteriori. The fact that the two routes are in fact one is a consequence of a conceptual tension in Kripke's philosophy that also appears more clearly if one follows Soames's account.

I have already discussed some of the aspects concerning Kripke's first route to the necessary a posteriori. I shall now give an account of it, following Soames (2006, 2011). The relevant passage in Kripke's work for this first route is Kripke (1971, p. 152-153). As I said above, there are certain properties, such as composition or origin, that are essential properties of anything that has them. Also there are relations (such as identity or non-identity, according to Kripke) that hold essentially of any pair they relate (in the case of identity, the pair actually comprises two instances of the same thing). This means that we know a priori that if any particular individual or natural kind has these properties or stands in these relations, then it does so necessarily. But, for some properties and relations, in order to find out if a particular individual or natural kind has a certain essential property or stands in a necessary relation, we have to discover this by "looking into reality". Such facts are always discovered by empirical investigation and cannot be the subject of any type of a priori investigation – this is the crux of Kripke's first (essentialist) route to the necessary a posteriori. Two types of arguments can be levelled against Kripke's contention that some statements are necessary a posteriori. One type lists every type of a posteriori necessity according to Kripke (please note that we haven't made an exhaustive enumeration of all the types of properties and relations that are the source of this type of necessity) and shows for any given case from Kripke's work that it is not indeed a case of the necessary a posteriori. Such an inductive argument may put under serious doubt the consistency of a posteriori necessity, but in order to completely reject it, one needs a general argument, that I aim to give in the following pages. Of course, this argument will be illustrated with examples similar to the ones of Kripke, but we believe that it can be applied to any other possible property or relation that might be linked to necessary a posteriori propositions.

Let's return to Kripke's first route. Soames (2006, p. 168-169) reiterates the famous distinction made by Kripke between metaphysical and epistemic possibility or between the way things could really be and the way things could coherently be conceived to be. Metaphysical possibility would be then a special case of epistemic possibility, the latter comprising also the cases that cannot be known a priori not to be possible, but that cannot, nevertheless, take place in any possible state of the universe. My argument addresses this last type of modality.

Epistemic possibility comprises all the cases that are possible for all we know. For all we know, this table right in front of me could be made of ice... that is until I put my hand on it and realize it is much warmer than ice could be. Our knowledge of things is not exhaustive; therefore, there are always stages in our knowledge when we can entertain epistemic possibilities that are not really compatible. At one point, I see a table right in front of me. I have no idea just yet if it is made of wood or any other material, be it ice, glass or plastic. So, at this point it is epistemically possible that the table be made of wood, but it is also epistemically possible that it not be made of wood. Or it is epistemically possible that the table be made of wood, but it is also epistemically possible that the table be made of plastic.⁶ In all of these cases,

⁶ When referring to the composition of the table, I shall make the simplifying assumption that the table must be made of one single type of material. *Mutatis mutandis*, similar examples for cases of items composed of multiple types of material yield the same conclusions.

I have before me a series of possibilities concerning this thing which are all compatible with my knowledge of the world at a given point, but incompatible with each other (the table cannot be really made of wood and not made of wood and also it cannot be made of wood and plastic, if it is made out of a single type of material).

Every such possibility engenders its own system of epistemic possibilities (propositions that are metaphysically possible in relation to the designated state of affairs and epistemically possible to us). When one finds out through empirical investigation which of these purported possible propositions is true (do not forget we are discussing propositions that predicate essential properties and relations), the multiplicity of systems of epistemic possibility, that were all coherently conceivable considering the state of our knowledge, is eliminated and we are left with a single system that corresponds to actualized possibility. Only this system determines metaphysical possibility, which depends on the actual state of things. My first thesis is really simple: epistemic modality is not substantive from a causal, externalist point of view because the so-called epistemic possibilities do not in fact regard the same thing or state of affairs.

Let's pin the problem down. According to Kripke's views, there should be an initial state of ignorance about some properties or relations that are essential to an individual or natural kind if had by that individual or natural kind. So, we cannot find out *a priori* if an individual or natural kind has certain properties or stands in certain relations essentially. I believe that the problem revolves around what one understands by "*knowable only a posteriori*" in this case, but it is not just a terminological difficulty. What does it mean that something, in our case a proposition, is knowable only a posteriori? Kripke notably never defines what he understands by "*a priori*" or "*a posteriori*". The traditional meaning, coming from Kant, is that a proposition is knowable a posteriori if it can be known only by way of sensory experience. An *a priori* proposition is, of course, one that can be known entirely by reflection on the concepts involved in it. This doesn't mean that any proposition that includes empirical concepts is a posteriori. Any analytic proposition, like Kant's famous

(1) Gold is a yellow metal.

will be *a priori* because no further experience is needed outside the concept that is in question in order to have this piece of knowledge and know it is true (Kant, 1997, p. 17). We can already raise one important question: why shouldn't this be the case with Kripke's examples and other similar ones? Just because we need empirical evidence to settle the matters doesn't mean that experience is always necessary to validate a proposition even when this proposition is about objects from experience.

Returning to Kripke's essentialist route, we remark again that, according to Kripke and Soames, we pass from the identification of a property or relation to the necessitation of the attribution of that property or relation through *a priori* reasoning, that is through the acknowledgement of some properties or relations as essential.⁷ If a proposition is knowable only a posteriori, it must be knowable only a posteriori that the individual or natural kind has the property or stands in the relation predicated by that proposition. In our opinion, it is here that the route stops without reaching its end.

In order to build my argument, I will review Kripke's second route to the necessary *a posteriori* according to Soames. The relevant passages are mostly in lecture 2 of *Naming and Necessity* and concern the case of the identity of Hesperus and Phosphorus that is expressed by the sentence

⁷ This point has been made by other philosophers such as Bealer (1987, p. 292, 310-317), Sidelle (1989, p. 86-104) and Hanna (2006, p. 175-176). This is an important aspect that will be discussed again later.

(2) Hesperus is Phosphorus.

According to Kripke, the proposition expressed by (2), while necessary, cannot be a priori. The author of *Naming and Necessity* bases his case on the observation that the evidence available to a competent speaker who understands both names is not sufficient for determining their coreferentiality. There may be, says Kripke, counterparts of ours in a world *w* that are in evidentiary situations qualitatively identical to ours (before the astronomical discovery of the fact that it is the same planet Venus that bears the two names), with "evidence qualitatively indistinguishable from the evidence we have" (Kripke, 1980, p. 104), determine the reference of the names the same way our ancestors did, by the position of the thing they saw in the sky at a certain time of day, and refer to two different things. Soames argues that the situation where some counterparts of ours could use the sentence (2) to express a false proposition is in no way relevant to the truth of the proposition actually expressed by (2) and, knowing that actually the two names have the same semantic content, the proposition actually expressed by (2) could be known a priori as the simple identity that it is (Soames, 2006, p. 176-177). I believe he is right.

In this case at least, the problem of aposteriority comes down for Kripke to the initial reference fixing. In his view, the proposition that asserts the identity of Hesperus and Phosphorus cannot be known a priori. That means that if the knowledge of the baptizer, her intention and the manner in which she conducts the determination of reference cannot provide decisive reasons to know that the names refer either to one or to two... or to *n* objects, then identities such as the one asserted by the proposition expressed by (2) cannot be a priori. But if this is right, then any identity concerning empirical objects will be a posteriori, even (contrary to Kripke) the one expressed by the sentence

(3) Hesperus is Hesperus.

That will be because there is always a certain possibility that there exist agents with the same qualitative evidence as ours that, say, use actually coreferential names to refer to different objects. Maybe a variant of me living in a sort of quasi-Berkeleyan world believes that the picture right in front of him is in fact a continuous series of almost completely similar pictures that are constantly being produced by God and maybe he is right. Moreover, maybe the quasi-Berkeleyan world really is our world.⁸ Actually, we don't need a quasi-Berkeleyan me to notice that as in the case of Hesperus and Phosphorus, where the two actually coreferential names could refer to different objects, so an observer could introduce the name "Hesperus" to refer to what she believes to be a single planet she sees in approximately the same point in the sky at two different times when she is in fact looking at two or more different celestial bodies. Of course, once she or other people discover the error, they would do well to find a different name for one of the planets, but this does not affect in any way my argument. One should acknowledge the fact that being given some empirical evidence, a baptizer (and the ones that learn and use the terms

⁸ This world I am talking about would not conform entirely to Berkeley's doctrine. As we know, he argued in favour of a subjective idealist point of view that regarded all things as ideas continually inserted in one's mind by God. I have a somewhat different thing in mind, more akin to the idea of the continuous generation of the world by the divine being, but with real objects, albeit distinct at every moment in time. This is an extreme example used to point out that determining reference is not as stable as a partisan of Kripke or Putnam's views usually assumes and also that our conception of the nature of reality can influence our views on language and reference. I will make further use of this example. For Berkeley's philosophical doctrine, see Berkeley (2009).

she introduces) cannot ever be absolutely certain as to what and exactly how many objects she is referring to by the names she puts.⁹

Kripke's second route also needs an initial state of ignorance or uncertainty to proceed to its conclusion. But this uncertainty has proven, as I think I showed, to be too much. Once we accept the fact that one (and one can be anybody, even the baptizer) cannot know for sure what one's names refer to in reality, then, given the relation propounded by Kripke between apriority and reference fixing, any necessity concerning objects from experience cannot be a priori (even a proposition such as the ones expressed by (2) or (3), that assert the identity of an object or of a natural kind with itself, cannot be a priori). We recollect Kripke's insistence in lecture 1 of *Naming and Necessity* for separating necessity and apriority (Kripke, 1980, p. 34-39). As it seems, he is not that keen on separating apriority and certainty. We cannot know with certainty that Hesperus is Phosphorus because there could be agents in similar epistemic situations that refer to two different celestial bodies by these names. Therefore we cannot know it a priori. As I see it, the background of the argument is much simpler. The form exposed above is a classic case of putting the cart before the horses. The traditional philosophical (Kantian, but also Platonic) separation between a realm of the intellect and a realm of the senses, between a priori and a posteriori, with the latter being the place of inevitable and ubiquitous uncertainty, is already supposed in Kripke's second route. Simply put, I believe that Kripke is tempted to treat any proposition concerning empirical things as a posteriori, even such simple identities like the one expressed by (2), if that proposition is not evidently true in virtue of its form or meaning. And many philosophers have followed suit. The fact that we can have counterparts in identical evidentiary situations that refer to different objects by our coreferential names is a consequence of our incapacity to be absolutely certain of the determinacy and stability of our referential practices concerning what we call the real world, the supposedly external world that we experience. Kripke's second route violates, albeit tacitly, Kripke-Putnam style theories of reference. If we endorse a causal point of view in the matters of reference, the status of the proposition expressed by (2) should not be affected by a possible situation regarding different possible objects.

Soames (2002, p. 7-9) rejects Kripke's second route and his considering of simple identities as necessary a posteriori, insisting that it is possible to know a priori the truth of propositions such as the ones expressed by (2) and (the very similar natural kind case)

(4) Cougars are pumas.

Kripke doesn't explicitly adhere to any theory regarding reference (as said above, he thinks any philosophical theory is bound to be wrong). However, in lecture 3 of *Naming and Necessity*, he endorses Mill's view that proper names have no connotation (or Fregean sense) that determines their extension, while disputing him on the issue of general names (or natural kind terms), that Mill held to have connotation. Kripke argues that natural kind terms are more akin to proper names in that they don't have a Fregean sense either. No descriptive property, conjunction or cluster of properties associated with them by speakers determine(s) their extension (Kripke, 1980, p. 127, 134). The semantic content of the terms "Hesperus" and "Phosphorus" will be the same – their identical referent, the planet Venus. But then the proposition actually expressed by (2) asserts the identity of planet Venus with

⁹ Do not blame me for this ludicrous example. I only gave it following Kripke's views on the aposteriority of simple identity propositions.

itself and thus is knowable a priori. Possible uses of the same names in identical evidentiary situations are simply irrelevant.

Kripke explains his point of view in the same lecture where he acknowledges the fact that a necessary truth, whether a priori or a posteriori, cannot be otherwise. The role of empirical evidence is to rule out possible states where the sentence (2) expresses something false. This is meant to appease our intuition that things could have turned out otherwise even if they could not have been otherwise. And Kripke admits that this intuition links (2) to a descriptive belief such as *the body seen there in the evening is the same as the body seen there in the morning* (cf. Kripke, 1980, p. 140-143). According to the author of *Naming and Necessity*, we need empirical evidence to rule out the possible falsity of this descriptive proposition (which covers all possible identical evidentiary situations in which we would correctly use (2)) and this makes the proposition actually expressed by (2) and similar ones a posteriori, albeit necessary. Soames rejects this second route arguing that simple identity propositions between names or natural kind terms are knowable a priori, as the terms mentioned have the same semantic content. But not all rests on the semantic here and I think we would do well to insist on the more general philosophical reason that underpins Kripke's tendency to consider all propositions regarding things from "the real world" (even simple identities) as a posteriori: the indeterminacy and instability of our referential practices, that is (i) the fact that when naming and using our names, we never know for sure what and how many objects we are referring to and (ii) the fact that reference can always shift.¹⁰ But these reasons actually cast the shadow of doubt over causal theories of reference and their externalist consequences. This is the fundamental problem: balancing a strict causal view that regards reference as determined solely by the particular individual or natural kind that was singled out by the baptizer and the limitations of our faculty of knowledge.

Soames believes that all the other examples validated by Kripke's essentialist route to the necessary a posteriori still stand. I believe that for similar epistemological reasons, these other examples are also doubtful. Here is my case, supported by the remarks I made about the second route.

The Epistemological Argument against the Necessary A Posteriori

Let's recapitulate how the first of Kripke's routes to the necessary a posteriori was laid out. Soames believes that this route validates all of Kripke's examples of the necessary a posteriori, except simple identities like (2) and (4). Just as the second route, the first one starts with an initial state of ignorance. I consider a thing that may or may not be in front of me, be it Kripke's lectern, the Queen, or what have you. I don't know that it possesses a certain property or stands in a certain relation. What

¹⁰ Føllesdal (1998, p. 111) makes a similar point about our fallibility in keeping track of reference: "Rigidity, or genuineness, as I see it, is not incompatible with such a reference shift. Instead, I look upon rigidity as an ideal, something like a Kantian regulative idea, that prescribes the way we use language to speak about the world. There is in our use of names and other genuine singular terms a *normative pull* towards always doing our best to keep track of the reference and keep on referring to it. Sometimes we go wrong and it is unclear both what we believe and what our beliefs are about until a new usage has been established. All our talk about change, about causation, ethics and knowledge and belief, as well as about the other modalities, presupposes that we can keep our singular terms referring to the same objects. To the extent that we fail, these notions become incoherent." My views have largely benefited from Føllesdal's proposal to see rigidity as an ideal, but my argument raises additional epistemological doubts about the initial act of reference fixing and, on a general note, about the notion of real necessity and results in a rejection of the necessary a posteriori.

I do know is that if it possesses that property or stands in that relation, then it does so of necessity (that it is an essential property or relation I am focusing on) and this I know *a priori*. As I remarked earlier, we may consider that the most important part of my knowledge concerning the possession by an object of an essential property or its standing in an essential relation is this and therefore the fundamental part of such knowledge is *a priori*. However, for Kripke, this kind of knowledge is *a posteriori* because I need empirical investigation to find out that the object indeed possesses the property or stands in the relation. At that initial moment of ignorance, I am confronted with different and incompatible systems of epistemic possibility just one of which is the real, metaphysical possibility generated by the object I am considering. But shouldn't I ask myself what is this object I am talking about?

As I noted earlier, the notion of epistemic modality is fundamental for finding the necessary *a posteriori*. The intuition Kripke is trying to pin down by this modal notion is the one where I think or say something like this: for all I know, this lectern may be made of ice from the Thames or wood from the Amazonian rainforest or marble from the Carrara quarries or what have you (please recollect the assumption that the table is made out of a single type of material). All these hypotheses are epistemically possible. However, only one of them is true and it determines the system of real metaphysical possibility. If the lectern is really made of wood from the Amazonian rainforest, then it is necessarily so. Be that as it may, I proceed to ask the same question. What is this strange object I am taking to be the subject of epistemic modality? What kind of object can be made of ice from the Thames and wood from the Amazonian forest and marble from the Carrara quarries, being at the same time made out of a single material? Who is this Queen that can have King George VI and Elizabeth Bowes-Lyon, but also the Duke of Kent and Vivian Leigh or Johnny Weissmuller and Mrs. Simpson as biological parents? Certainly not the real lectern or the real Queen, according to Kripke. The subject of epistemic modality cannot be the real thing itself, as the real thing cannot cease to have the essential properties it has and still exist, but it is rather my knowledge, the way I picture and describe objects at certain moments in time. Then why should I lump these two together – the real object with its properties and my approximate knowledge of it? When building the alternate systems of epistemic possibility, I actually consider the incompletely described (in what regards essential properties) real object and a great many very similar counterparts which at that stage of knowledge might be the real object itself. At this moment in time, I cannot see the difference as I don't yet know many of the thing's essential properties.

Kripke is after a seemingly consistent intuition, one that we all seem to acknowledge – the fact that whenever we are confronted with an object (be it an individual particular or a natural kind) we don't know something essential about, we are allowed to think that it may have a lot of different incompatible essential properties (of course knowing that it cannot have any two or more incompatible properties at once). As I see it, this situation generated by ignorance coupled with imagination is fairly unreliable. But we don't owe that just to the unreliability of our imagination when determining what is really possible, as the Kripkean would have it. I have already pointed out one other reason, as it stood out when considering Kripke's second route to the necessary *a posteriori* – the indeterminacy and instability of our referential practices concerning real world objects (as I shall argue, this may actually be seen as a part of a larger incapacity, so to say – the fact that humans lack the ability to know the essential properties and relations of things – that is, real necessity). This engendered the possible epistemic alternatives of the second route. However, at first glance, Kripke's first route doesn't have to deal with the problem of reference fixing. Or does it?

According to Soames, Kripke's first route proceeds by way of essential properties, properties that belong necessarily to an object if they do at all. Many incompatible essential properties can epistemically belong to an individual or natural kind, but only one of each category (such as origin or composition) really does. The same goes for essential relations. Suppose that I found one of these essential properties, say, that I know that the Queen is essentially the daughter of King George VI and Elizabeth Bowes-Lyon. Suddenly, if I am right, all the other possible parents of the Queen can no longer be her parents. But could they ever have been? Not according to a causal theory of reference. All the other possibilities never were so for the real Queen, but for anything with just the properties I knew back then the Queen had and other compatible essential and non-essential properties. The picture the first route paints is that of multiple candidates for each category of essential property. But if I succeed in referring to a real object (and this is the view of direct reference theorists), then I must also admit that none of what seemed to me to be a possible essential property can be a candidate for essentialness, with the exception of the real essential property. Real essential properties stay that way even if I know them or not (mind you, I am talking from the point of view of the causal reference theorist). But doesn't this look suspiciously familiar? Remember that, when talking about the second route, I insisted on the fact that it was not really possible for Hesperus and Phosphorus to be different, it was just possible for agents to have identical qualitative evidence to the one we or rather the reference-fixers (as the initial act of reference fixing is what is important to Kripke) have and to refer to different things by the same names. Or we could just as well say it wasn't possible for Hesperus to be different from Phosphorus, but it was so for the insufficiently (as regards what we deem essential properties) described object(s) from the moment we acted out the reference fixing (any object that could have the descriptive properties that are known at the moment of reference fixing). It is not possible for the real thing to be different from itself, but for the object I see there in the morning to be different from the object I see there in the evening. But then shouldn't reference-fixing acts including an essential property make the proposition stating their attribution to the individual or natural kind *a priori*? One may think so, but a Kripkean would reply that there is always the possibility of error and then the reference should follow the object that was initially referred to and not the apparently false description expressing an essential property attribution that served as reference-fixer.

But the second route is actually a special case of the first one, where the essential property or relation that is ignored at first and then discovered is identity (the identity of Hesperus and Phosphorus, in this case). Epistemic possibility isn't a possibility for real objects. It is a possibility exactly for the insufficiently (in what regards essential properties) described object(s) from my knowledge that have the properties I know the real things have and other compatible essential and non-essential properties. The only difference is that in the second route, the problem of *apriority* or *aposteriority* is always reported back to the initial moment of reference fixing, whereas in the first route it is not, at least not explicitly. However, the two routes are actually pretty much one and the same. One can see the initial moment of reference fixing as the moment of maximal epistemic possibility concerning the thing(s) named (or maybe we should believe that epistemic possibility regarding something is always determined by the situation in the moment of reference fixing). I noted that, at least in what concerns the domain of our experience, it is always impossible to be absolutely sure that we secure reference and are always keeping track of objects correctly, which sometimes makes reference-fixing acts fickle guides. Now this can be seen to be part of a larger case that concerns any ascription of (essential) properties to things from the world, for how can we know

for sure that a property really (and necessarily) belongs to some object? So, if one route to the necessary *a posteriori* is inconsistent (as Soames argues), so should be the other, I believe.

This discussion has been kept to a minimum of theorizing up until now, but I think it is the time to make a more fundamental point. The fact is that *one can never eliminate the epistemic possibility that we might be wrong in attributing essential properties of any kind* (this is true in principle for even the simplest mathematical truths, so it is all the more the case for the knowledge of objects in the so-called “outside world”). When Kripke admits the relevance of cases where agents in identical epistemic situations refer to two celestial bodies instead of one, he actually admits to the possibility that we might be wrong in what we think of as objective knowledge (and how could he not admit to that?). There is no metaphysical possibility that Venus is not Venus, if indeed what we refer to by this name is one single thing. But can we ever be sure about that? I think at this point of the argument, the need for a philosophical justification of objective knowledge is needed. Sadly, *Naming and Necessity* doesn’t provide us with one. But even if this were the case, it is now clear that the modal job (identifying and justifying the metaphysical necessities) is to be done by these theoretical (and thus *a priori*) instruments and without any such theory there simply isn’t any case for metaphysical modality.

As I see it, Kripke wants to uphold a strong notion of metaphysical necessity by arguing in favour of direct reference unmediated by descriptions and actually reaching an external object, but at the same time tacitly holds a sceptical theory of knowledge concerning external reality. That is what really engenders the necessary *a posteriori*. I believe he must give up one of these views. Either he keeps his strong externalist and direct reference assumptions and then gives up the *a posteriori* part (in the ways I show below), or he remains faithful to the sceptical theory of knowledge, but this affects his strong theses concerning reference and any sort of essentialist commitment.

Giving up the *a posteriori* part

We saw that (using the Kripkean frame of reference) the epistemic possibility that an individual or natural kind had other essential properties is never definitively put to rest. That is a hard blow to the essentialist, as she must admit that even if metaphysical necessity exists in the real world, we never have the means to assess it once and for all. We may always be wrong about necessity, but this point can be seen to extend to any type of necessity (even logical and mathematical ones). This wouldn’t be a problem for some philosophers (such as Hume and Quine) and their followers: just leave it that way, they would say. But this paper is meant to be an exploration of the theoretical alternatives an essentialist has in order to maintain that (at least) some things that appear in our experience do have necessary properties or that there are in fact necessary propositions stating attributions of properties to things.¹¹

One important point I made just above is that theoretical justification for objective knowledge is inescapable if one wants to hold that we do somehow reach real necessity (or necessity concerning the real world). But I found Kripke’s account rather poor (or even completely lacking) in this respect. I also noticed that if this is so, then the modal work is done rather by using these assumptions (and not some sort of mysterious intuition of the real nature of things). Is this to mean that there

¹¹ I don’t regard the *de dicto-de re* distinction as philosophically fundamental, but I will not pursue this here.

is actually no sense in talking about real necessities? Well, *not really*, so to say. I believe that some classic insights from Kant's work can (maybe surprisingly) let the essentialist out of this predicament. There are actually two options to still hold that (some of) Kripke's examples of necessary a posteriori truths are indeed necessary. Sadly for the Kripkean, due to the reasons detailed above, the thesis that they are a posteriori would be best left aside.

(i) *Synthetic a priori truths*

One such option is the rehabilitation of the Kantian notion of synthetic a priori knowledge. This idea is explored by Hanna (1998, 2006, p. 140-187). For a detailed account of Kant's doctrine, I refer the reader to these two works. I will only discuss here the most important issues and their relevance to the problem of the necessary a posteriori.

For Kant, natural laws are indeed necessary because of their a priori status, that is to say because of their grounding in the transcendental conditions of any possible experience, for example: "Even laws of nature, if they are considered as principles of the empirical use of understanding, at the same time carry with them an expression of necessity, thus at least the supposition of a determination by grounds that are a priori and valid prior to all experience" (Kant, 1998, p. 283). As Hanna (2006, p. 184) rightfully points out, Kant is aware that there is a difference between laws of nature that are universal, being derivable from transcendental laws concerning the fundamental ingredients of our experience of the physical world, and particular laws (for this or that particular natural kind, we would say). The latter are only indirectly derivable from the transcendental laws, as they contain some kind of empirical information. Nevertheless, if we are to talk about the necessity of natural laws, for Kant this comes only because of their transcendental a priori background, in other words it is a consequence of our nature and the way it influences the way we experience the world. Therefore, following Kant, one may say that there may be no necessity in the world of things, that any structure, organization or distinction comes from the understanding (the natural world doesn't contain any natural kinds and any governing laws). Even if we grant this, it doesn't mean that we cannot maintain a weak notion of metaphysical necessity. Once we grant that our faculties of knowledge impose some kind of structure and organization on the world, we might proceed to take the necessity that they engender as simply real. Our epistemic position makes any hope of getting to know the real properties of *noumena* absurd, a Kantian would say. But in the world of phenomena (the only one we can know), such an assumption is not inconsistent. And it is not inconsistent to attribute necessary properties to these phenomena either, even though this necessity is already "informed" by our faculties. Phenomena seem to behave in a lawful way and we will never be able to see beyond them anyway: why not take this necessity as objective (and that is the aim of transcendental philosophy, to account for objectivity) and thus real?

Of course, Kant's doctrines are complex and often enough puzzling. I don't aim to settle matters here. This is only a very brief description of his view on these matters: Kant thinks that laws of nature (necessary a posteriori truths concerning natural kinds, for Kripke) are synthetic a priori, that means their necessity comes from our own nature and the way it conditions us to "see" things, so to say, but this necessity is not analytic according to Kant, as these laws are not necessarily true in virtue of the content of our concepts. Supposing that there is some kind of necessity in the phenomenal world is not inconsistent, however, as the world of our experience is already objectively informed by our faculties. This "as if" supposition is also very useful for sciences, who must take their object at face value.

In this type of view, necessity is imposed *downwards*, so to say, from our minds (knowledge, understanding, or whatever you favour) to things. The important thing is to grasp again the fact that were it not for a theoretical justification (one that in this case extends “down deep” in the ontological realm), again no necessity could be assessed. The case can be extended to Kripkean cases of essential properties of individuals citing similar rational reflection on our conceptualization. At this point, one should just remark that Kripke’s necessary *a posteriori* propositions are a part of what Kant would think of as the synthetic *a priori*. It is important to notice that the authors mentioned above (Bealer, Sidelle), who argue for the need of theoretical *a priori* assumptions in order to derive Kripke’s examples of necessary *a posteriori*, do not dispute him on the fact that these are genuine cases of *a posteriori* knowledge. They just point out the fact that the importance of these findings is limited. But it is actually the same point of view we are confronted to, albeit in different philosophical frameworks. Kripke just takes his examples to be *a posteriori* because they have empirical content, even if this content just “fills in” some sort of *a priori* principle. A Kantian would say that even if these propositions have empirical content, their necessity comes from the *a priori* and can be acknowledged as such only at the level of *a priori* reflection. The main reason why Kripke doesn’t explore the possibility of the interpretation of his examples as cases of necessary synthetic *a priori* truths is that he just doesn’t take synthetic *a priori* knowledge seriously. In this, he is just following the analytic tradition of his time, with its strong empiricist commitment, that came to identify the synthetic with the *a posteriori* and the analytic with the *a priori*. Once we try to take a step back outside dogmas of any kind, however, we see that a Kantian account is not very different in this respect. Moreover, Kant was aware of (not just tacitly accepting) the implications of the fact that, due to our epistemic limitations, we can never be assured of the existence of metaphysical necessities, and sought a systematic philosophical solution to this problem. The synthetic *a posteriori* hypothesis is, as far as I can see, an interesting and coherent solution for the essentialist, even if it can warrant only a second hand type of essentialism. But...

(ii) *Analytic a priori truths*

Couldn’t (shouldn’t) we just bite the bullet and think of all of Kripke’s cases and any possible similar ones as just analytic and *a priori*? Many philosophers may baulk at the thought that, say,

(5) Water is H₂O

is analytic, but again (once we attempt to take a step back behind this or that tradition, however difficult this may seem) we find that this is not at all unacceptable or strange. The reflection that will follow was inspired by Kant’s famous “Gold is a yellow metal” example from the *Prolegomena*, but I don’t hold that this was necessarily his view. As will be seen, this solution is independent of the transcendental idealism that he espoused.

Kant deems the proposition expressed by (1) analytic and *a priori*, because no other concept outside my concept of gold is needed in order to validate it, and this concept includes this particular colour and the fact that the substance is a metal as necessary properties (see Kant, 1997, p. 17). So, for Kant, analytic propositions can contain empirical concepts. But the fact that propositions of the type of (1) are thought of as analytic is actually very important, because it illuminates the fact that there is a constructive aspect to our knowledge, that philosophers (including Kripke) too often seem to ignore. What is today seen as synthetic and *a posteriori* may

tomorrow become analytic, if there are strong enough reasons to make this move. One of the reasons philosophers may fail to see this is because they discarded the traditional Kantian definition of analytic truth in terms of concept containment and opted to think that analytic propositions are so because of the conventions of our language. Holding that laws of nature, for instance, are analytic and a priori would be interpreted by such philosophers as holding that they are entirely the product of our mind. To this I may answer only by citing once again Kant's gold example – it may be that there was no convention at first to use yellow colour as some sort of criterion for gold, and this can be extended to categories of essential properties according to Kripke. It may be that atomic number was not at first analytically associated to chemical elements, origin or composition to things (or the necessity of these attributions was not derivable from some set of fundamental a priori truths), but somewhere along our way, through empirical discovery (yes) and reflection on these discoveries, these facts became so steeped in our language and way of thinking that they are now the material of analytic propositions.

Let me now make my case. For reasons of simplicity, I will discuss mostly cases of natural kind terms and the necessity of laws of nature, but the examples can be shown to work for names and I will mention such cases once my argumentation is developed enough.

As remarked earlier, in order for Kripke's route to go through, the fact that an individual or natural kind possesses an essential property or stands in an essential relation must be *knowable only a posteriori*. Soames is right to assert this strong condition (and not the weaker one that such propositions are just *knowable a posteriori*), otherwise the necessary a posteriori would be a highly trivial matter. Probably all traditionally deemed a priori truths are also knowable a posteriori (but it is sufficient that one such example is given). For instance, mathematical truths (such as, say, '78 X 12 = 936') can be known by somebody who doesn't make the required mental operations, by using a calculator (or some other type of automatic machine) or by relying on somebody else to do the job. Note again that in each case (the person does the math herself, uses a machine or relies on somebody else) some theoretical justification is given for the validity of our rational algorithms.

The point that has to be made here is rather simple. In principle, any such purportedly knowable only a posteriori proposition is amenable to a priori status if we have enough rational justification to do that. It doesn't have to happen in the case of all essential properties and relations, this just has to work as a matter of principle. The case has been made for the synthetic a priori, but now we will make it for analytic propositions.

All the argument we need can be built just upon the personal level: any individual may associate some property to a thing as some sort of *criterion* (note that this criterion need not be sufficient for identifying something). Then this criterion will become part of the meaning of the expression denoting that thing (individual or natural kind) and the proposition expressing the attribution of the property to the object and all others that can be derived from it are to be thought of as analytic. One can in principle associate with the term "gold" any sort of criterion, be it a particular colour, its atomic number, its atomic mass and what have you. So, in principle, any once a posteriori proposition can become a priori, analytic and necessary by simply building a given characteristic into the meaning of a term. But this is too easy for me, you would say, just acknowledging any kind of stipulation whatsoever can make terms stand for who knows what (maybe the natural kind term "dog" will denote electrons, John will actually be Sally and so on). It just doesn't work to *apriorize* everything. Again, as a matter of principle, this is all the argument we need against the necessary a posteriori. At a personal level, it works. But I do

agree that we need more than that in the way of philosophical argument for this approach to be convincing. Notably Kripke wouldn't think so. When discussing his famous examples of essential properties in *Naming and Necessity*, he just makes use of his own intuitions concerning them (Kripke, 1980, p. 110-116). The "seems to me" strategy works fine as long as you find favourable interlocutors. But what happens when you run into the Quinean crowd, for instance? The need for rational justification is inescapable.

We may then want to build more into our case, as general arguments are concerned. The principle, however, stays the same, as seen in the following example. Suppose some person has never seen gold in her life, but encounters the word "gold" in the dictionary or in some chemistry textbook, where she finds that gold is defined as "the yellow metal with the following properties..." or, simply, as "the chemical element with atomic number 79". She then comes to associate the property with the term analytically, again as some sort of criterion. When asked "Do you know what gold is?", she will answer "Sure, it is the chemical element that has atomic number 79". But this time, it is not just an arbitrary decision on her behalf. Through the dictionary or textbook, she came in contact with the chain of reference that the Kripke-Putnam style theorist thinks that it leads to the original sample of gold. And of course, I cannot stress this enough, she came in contact with the best theories that humans have concerning the element and a generally accepted use of the word in her community. So she learned some theoretically justified criteria that she analytically associates with the term. Someday someone might show her the sample of gold and she will probably say: "So that is the element with atomic number 79."

Once again, you might tell me this is just too easy. Maybe it is. So, let's add some more examples to our arguments. One might argue, using Putnam's idea of the division of labour, that it is just irrelevant what kind of descriptive criteria the layman associates with some natural kind term. We should appeal rather to the way scientists use these terms. Well, I didn't ask a chemist for a definition of 'water', but I am pretty sure that if I do it, she will just answer that water is the substance that has a molecular composition of two atoms of hydrogen and one of oxygen. Has she ever actually seen atoms of hydrogen or oxygen or electrons or whatever? Certainly not. Has she conducted the experiments that enable one to know the chemical composition of water? Maybe yes, but maybe no. I don't know exactly what experiments are an essential part of the training of a chemist. The point is rather that nobody *can* or at least *will* do all the experiments that led to the stating of laws that one acknowledges as such, there is no point in doing that. What matters is that there is a mature science, like chemistry or physics, that has a great deal of success in explaining phenomena in the real world and in theoretically directing our interaction with that world by means of our artifacts. Mature sciences of nature present themselves as systematic bodies of knowledge, which makes any statement declared as a law to be quasi-unanimously accepted as such by the people working in the field (and then by people outside the scientific community) if the methodology used for the experiments that enable scientists to declare something a law is acceptable and clearly explained. Chemists have not actually seen an atom of gold – they work with a theoretical model that explains some facts we can only acknowledge at the macrophysical level. It is the explanative power and the success of these theories that makes us trust that their laws are necessary. But many of these essential attributions made by sciences are today so steeped in our way of thinking that it is no error, it is even probable to suppose that the propositions stating them are simply analytic. *In principle, every such law statement can become analytic, even if according to current use some of them are not.* As a matter of fact, sciences like

physics or chemistry need not actually be rigorous or systematic: this is again too strong an assumption for what I need. I can only argue that they are reasonably regarded by the extended community as reliable providers of necessary truths. Then every purported law that comes from such providers is to be accepted as necessary even if the ones accepting it don't have an actual confirmation that the procedures of these sciences really are sound and trustworthy. Of course, philosophers (like the rascals they are) need a justification for objective knowledge, but this is usually tacitly assumed in the methodologies of experimental sciences and most of the times not even questioned by people without philosophical or advanced scientific training. Every science has a set of categories of essential properties of natural kinds that lead to the stating of laws when such a particular essential property is discovered to hold of a natural kind. The importance of theory becomes more palpable when one finds out that many of the elements of the periodic table that are not to be found in nature were at first theoretically defined and only then synthetically produced and some of them still are not so produced yet – they are only theoretical entities, that nevertheless have necessary properties (like atomic number) according to science. This fact can be used to see that once laws are introduced one way or another into a rational, systematic and powerful corpus of knowledge (and this can be done by empirical knowledge, but also by exclusively theoretical work), they are not to be questioned and verified each time they are stated. I believe that the more fundamental they are (that is the closer they are to the principles of some science), the more they are likely to be deemed analytic, even if they contain empirical concepts. The principle is the same as the one invoked to drive home the examples above: like in the Kantian example of gold, some piece of knowledge can become analytic even if it contains empirical concepts – if one needs a theoretical justification for this, then the fact that in some scientific theory or philosophical view that is largely accepted the criterion expresses an essential property or relation is, as far as I can see, perfect. Simply put, taking the example of gold again, essential properties deemed so by our theories (colour is not such a property, but this doesn't matter) become part of the concept of gold to the effect that any proposition stating their attribution and all the consequences of such propositions *become* analytic, *a priori* and necessary. If one wants to use the traditional Lockean notions, we may say that there are at least some cases when the real essence "passes into" (becomes included in) the nominal essence.

This way of arguing against the existence of the necessary *a posteriori* is independent of Kantian assumptions, but I believe it can be made to work in a Kantian framework. However, the tendency to think of necessary analytic truths concerning real individuals or natural kinds as products of our own mind would then be hard to avoid. I believe that my arguments are not congenial to such a view, however. The model of "building" necessity that I favour and believe is adequate for this approach is an *upwards* model (as for the case of the Kantian synthetic *a priori*, this is only a metaphor). The necessity comes *upwards* from the real world and builds into our way of thinking and our language (again, theoretical assumptions are of course needed in order to justify necessity). One can imagine that laws (necessary truths) stand in some sort of hierarchy – some of them are closer to experience, some of them are further.¹² None of them is actually totally removed from experience, but *pace* Quine, this is not a reason to renounce necessity, once we realize that experience can indeed provide us with necessary truths. It is only important to notice that none of these propositions is immune to revision – recalcitrant ex-

¹² This way of thinking is very similar to the one expressed by Quine (1951) but taking a step behind traditional use again, it can work in a modality-friendly framework.

periences can enter this “holy” hierarchy and if they are recalcitrant enough they can wreak havoc. In principle, they can even lead to a fundamental questioning of rationality. The more established and important they are, the more they are likely to *become* analytic, but as a matter of principle, any of Kripke’s purported examples of necessary *a posteriori* can *become* *a priori* (synthetic or analytic, as shown) and this is all we need to finish with his notion of the necessary *a posteriori*.

Some more reflection would be beneficial to this account. The most important misconception I want to remove is that if natural laws (or propositions stating attributions of essential properties or relations to individuals) are analytic, then they are a product of our own mind. The classic conventionalist view goes somewhat like this: there are some fundamental principles that are considered true by stipulation and all other laws are somehow consequences of these truths. But, if the model given above is right, each necessary proposition can become analytic on its own, once it is accepted as such: even a scientist doesn’t have to see the connection to other necessary propositions from that particular science. All that is needed is a justification that some form of knowledge (intuition, science, philosophy) really leads to necessary truths. Again, I would like to emphasize that there is a constructive aspect to our knowledge that is largely ignored by some philosophers and in appropriate conditions (the most important being the existence, promise or supposition of a justification for essentialness), what is thought of as synthetic *a posteriori* can *become* analytic *a priori*. The main worry of Kripke and Putnam and the other philosophers that contributed to what has been called “the new theory of reference” is that if names and natural kind terms really have something like Fregean senses and refer through them, then when through some new stipulation required in order to accommodate some recalcitrant experience, we change the meaning associated to the term, we simply lose the object we referred to before and end up with another natural kind or individual. If names and natural kind terms are just abbreviations for some general descriptive senses, the cases of necessity they take part in will be just trivial linguistic ones. The direct referential character of names and natural kind terms is meant to reinstate precisely a strong principle of reality in our knowledge. Such philosophers want to recuperate the thought that we might be wrong about this or that necessary property without losing track of the thing we consider. But it is exactly at this point that Kripke-Putnam style views of reference meet and can join a corresponding strong “*apriorist*” view of necessity. If there really is an individual or natural kind in reality that we keep track of through a name or natural kind term, then it *really* has some necessary properties and relations (such as the examples given by Kripke, of course with the addition of a justification for the relevant form of knowledge). Once we realize that and reject the view that the term follows completely and inextricably some description (with no limit, in principle), then this fact should exert some constrain on our concepts and representations. Gold with another atomic number is simply not gold, the Queen with the Trumans as parents is simply not the Queen, etc. Well then, you will say: but isn’t this in fact the big problem? Once one accepts that essential properties are somehow *a priori* linkable to their bearers, doesn’t that just make him a descriptivist? Not necessarily, I would answer.

The saving idea has been best expressed by Føllesdal (1998, p. 111-112): he states that in the case of referential expressions *par excellence* (Føllesdal speaks of singular terms, but the case can be extended to natural kind terms as well) there is a *dominance* of reference over sense. That is, names and natural kind terms partially refer in virtue of their senses, but their referential role remains fundamental. Referential expressions could thus lose all their descriptive content and keep referring to the same object. Such an amendment to Kripke-Putnam style views is, I believe, more than welcome. We can thus keep a causal theory of reference and also accom-

moderate the fact that names and natural kind terms have some type of descriptive content built in. Then the problem of analytic a priori necessity concerning such terms is a problem no more. Names and natural kind terms are thus privileged means of expressing necessity. They don't always function as cleanly as Kripke would want them to, but usually they do so. The assessment of necessity comes upwards, but it would best not elude the need for some theoretical justification – I think however that *full necessity* cannot be understood, integrated and asserted if it doesn't become part of our way of thinking and language. After all the required justification work is done, then we would best commit ourselves to just excluding all alternative epistemic possibilities for incompatible essential properties that we have seen don't really concern the thing from reality, but some fuzzy object of our knowledge. But even if such a criterion-type constraint is made on primarily referential expressions and it really engenders necessary a priori truths, this doesn't mean that this type of necessity is immune to revision. The idea of the dominance of reference over sense is an elegant way to concede to the fallibility and limitations of our knowledge (we may lose rigid reference, shift reference, be wrong about other essential properties of things), but still keep a strong notion of necessity.

This second approach is a way of conciliating some of our most important intuitions concerning the modal status of propositions regarding things in reality. It may seem complicated, but the idea behind it is simple. Essences can be discovered empirically of course, more than that, in a rather Quinean fashion, I think that experience is the ultimate (but not the absolute) proof and disproof of all types of necessity. But the controversy around whether a piece of knowledge is necessary a posteriori, synthetic a priori, analytic a priori or whatever is more or less the result of historical contingencies, of misunderstandings and sometimes of the incapacity or unwillingness to see the bigger picture. So, I believe it is not that important if, at one moment in time, some piece of knowledge is synthetic a posteriori, or analytic or whatever. We would best analyze these facts from the point of view of the source of necessity. I believe an analogy with a mathematical case is significant.

Consider a set, say $A = \{1, 2, 3\}$. This mathematical entity may be introduced to me as the set my colleague Jones used as an example on the blackboard in classroom 1. Another colleague called Smith, ignoring all relevant aspects about the set, except that it was used as an example by Jones, may invite me to see the blackboard in class 1 and discuss the example. At the time Smith first talks about Jones's set A , I know nothing about it, except where I can find details concerning it. So at this moment, it is epistemically possible that set A has one or two or sixty elements. I accompany Smith into classroom 1 and find out that A is composed of the members 1, 2 and 3. I find this out through empirical discovery, but the fact that, say, set A has three members is a necessary a priori property of it, as the number of elements is a necessary feature of any set and we can come to have this piece of knowledge simply by reflecting on the concepts involved. Set A could never have had one or two or sixty elements (of course, some malevolent student might have played a prank on us, knowing that we will rush in to see Jones's famous example and might have erased or added one or more elements, so I might be wrong). I don't see any impediment to translating this case and the conclusions that we can draw based on it to the cases of the Queen or of Kripke's lectern, even if they concern empirical objects. If it is necessary properties we are talking about, then they must also be a priori (whether synthetically or analytically) linkable to the things they are properties of. Moreover, and this can be viewed as a slogan of this conception: if necessity there is, then let it be necessity. There are different sources of it; of course, necessity may come from experience, reason, language, knowledge, or rather from the interplay of all/some of the above. Even logical and mathematical necessities are open to epistemic doubt and subject to possible

revision. But we also have some rationally justifiable intuitions that tell us that we shouldn't consider them any less necessary while they have not been invalidated. The case is actually similar for the necessity that comes from experience – if knowledge of the real world can provide us with real necessity, then let it be so. Building essential properties of individuals or natural kinds into our way of thinking and language is the only way to fully acknowledge and integrate the challenge levelled by a strong principle of reality. If not, all these necessities will enjoy a doubtful and fragile status – “yes, this might seem necessary here and now, but still I can imagine...”, one would say. But instead of rejecting necessity entirely because of this, we have now found the means to accommodate it together with our fallibility.

Giving up the (non-trivial) necessity part

This alternative unfolds in the well-known way. We must give up the claims of necessity of propositions such as the ones expressed by (2) or (4). We can do this by assuming a descriptivist point of view, namely that every name and natural kind term is the abbreviation of a definite description that uniquely identifies the particular individual or natural kind in question. Then propositions such as (2) and (4) will become either contingent, or trivially necessary if the abbreviated description actually contains the property(ies) deemed essential in the other framework (the important thing here is that we give up a causal theory of reference and the primarily referential role of names). As this is a very well-covered subject, I won't dwell on it. Just let me note that this will be the end of all non-trivial or strong forms of essentialism. Giving up (non-trivial) necessity when treating things from our experience of the real world means that Kripke's purported examples of essential empirical properties are not so at all. They are just some other contingent *a posteriori* propositions that at most single out some important (but not at all essential) properties in some framework of knowledge. And as our initial interest was in interesting forms of essentialism and their theoretical possibilities and commitments, this case should not be of any interest to us further. Giving up necessity in this case means giving up essentialism.

Conclusions

The principal goal of this article is to give a valuable contribution to a better understanding of essentialism. The doctrine of essentialism has been linked by contemporary philosophers to necessary *a posteriori* propositions. By putting in doubt the correctness of qualifying propositions with essentialist import as necessary *a posteriori*, I show that essentialism need not and should not be connected with this type of propositions. Moreover, I argue that generally the status of necessary *a posteriori* propositions is doubtful, and all the purported cases of such propositions may be viewed as cases of the necessary *a priori*.

Soames shows that Kripke's examples concerning simple identities between particular individuals or natural kinds, usually assumed to be *a posteriori*, are not so at all.¹³ I show that all the other cases of necessary *a posteriori* propositions in Kripke's work and, I believe, all other imaginable cases are subject to

¹³ This shouldn't be taken to mean that Soames was the first to develop arguments that some (all) of Kripke's examples of necessary *a posteriori* are in fact *a priori*. Fitch (1976), Tichy (1983) and Salmon (1986) put forth similar ideas. I discuss Soames's case mostly because of his attempt to separate thoroughly between the two routes to necessary *a posteriori* propositions and because of the importance he places upon the existence of this kind of propositions.

serious doubt. My case benefits largely from Soames's rejection of an example of the necessary a posteriori – the identity of Hesperus and Phosphorus – that is almost unanimously considered as uncontroversial. The lack of problematization of this case and other similar ones is due to the tacit philosophical prejudice that propositions about particular empirical individuals designated by names or about natural kinds designated by natural kind terms are to be thought of as a posteriori when they are not evidently true in virtue of form or meaning. Kripke bases his case on the fact that there is apparently nothing about the names "Hesperus" and "Phosphorus" and the way they were invented and first acquired that can account for their coreferentiality. I show that if this is good enough reason to believe that the proposition that asserts the identity between Hesperus and Phosphorus is a posteriori, then any identity proposition concerning empirical things is to be counted as such, even propositions apparently true in virtue of form as the one expressed by (3). Soames also argues that the identity proposition expressed by (2) is a priori knowable because the two terms have the same semantic content, their referent – the planet Venus. The thesis that I try to build a case for by extending Soames's argument, but departing from his Millian stance, is that any necessary proposition can (or maybe must) be thought of as a priori once its necessity is established (I also consider the Kantian notion of the synthetic a priori as a possible solution to Kripkean predicaments, but I won't develop that again here, as the second solution is more controversial and original). This would mean, of course, that essential properties and relations become constitutive of the meanings of names and natural kind terms, but not absolutely and not permanently. The possibility of error can still be taken into account. As stated above, I agree with Kripke that the primary and most fundamental use of names and natural kind terms is the direct referential one. However, I don't agree with him in regarding the possibility of error or any kind of epistemic possibility engendered by our lack of absolute precision in our knowledge of the world as a reason to count necessary empirical propositions that attribute essential properties and relations as a posteriori. I see a great similarity between the two routes to the necessary a posteriori identified by Soames, as they both stem from the fact that we can never eliminate the epistemic possibility that we might be wrong in attributing essential properties.

Although I am closer to the essentialist point of view, this paper is not necessarily a defence of it. Faced with the epistemological difficulties I confronted contemporary Kripke-Putnam essentialism to, one can opt for rejecting essentialist philosophy entirely. One should, however, be advised that essentialism is not limited to its Kripke-Putnam hypostasis. My arguments show that we can hold a causal, externalist theory of reference, only not make it too strict, much in the manner of Føllesdal. The example of the quasi-Berkeleyan world shows that reference fixing and rigidity are always subject to doubt and error and that our ideas about the nature of reality greatly influence our philosophy of language and particularly theories of reference. Nevertheless, we can conceive of a quasi-Berkeleyan world, but the thought of living in such a world is almost unbearable, at least to the author of this paper. If one is more at home with a Kripke-Putnam theory of reference and the weight such a theory ascribes to stable, determinate real world objects, then one should be all the more keen to link some properties and relations to the objects they *really* belong to. If these properties and relations are essential, then the link should (or at least may always) be analytic and a priori. What all this shows at the most general level is that reflection on our metaphysical and epistemological assumptions and preferences should always precede and clarify the delineation of our theses concerning language and reference.

Acknowledgements

The author wishes to thank for the financial support provided from the program co-financed by The Sectoral Operational Program for Human Resources Development, Contract POSDRU 6/1.5/S/3 – “Doctoral Studies, A Major Factor in the Development of Socio-Economic and Humanistic Studies”. I would also like to express my gratitude to Prof. Andrei Marga, my Ph. D. supervisor for his valuable support, to Prof. Gunther Wenz, for his generous help during a research trip in Munich where this paper was finished, and to Iovan Drehe, for his initiative to work on what started as a common project, but ended up as a personal work. Finally, I would like to thank the anonymous referees for this paper, whose helpful comments led to a significant improvement of my overall argumentation.

References

- BEALER, G. 1987. The Philosophical Limits of Scientific Essentialism. *Philosophical Perspectives*, 1:289-365. <http://dx.doi.org/10.2307/2214149>
- BERKELEY, G. 2009. *Philosophical Writings*. Cambridge, Cambridge University Press, 386 p.
- FITCH, G.W. 1976. Are There Necessary A Posteriori Truths? *Philosophical Studies*, 30(4):243-247.
- FØLLESDAL, D. 1968. Quine on Modality. *Synthese*, 19(1-2):147-157. <http://dx.doi.org/10.1007/BF00568055>
- FØLLESDAL, D. 1998. Essentialism and Reference. In: L.E. HAHN; P.A. SCHILPP (eds.), *The Philosophy of W.V. Quine*. La Salle, Open Court, p. 97-113. (The Library of Living Philosophers).
- HANNA, R. 1998. A Kantian Critique of Scientific Essentialism. *Philosophy and Phenomenological Research*, 58(3):497-528. <http://dx.doi.org/10.2307/2653754>
- HANNA, R. 2006. *Kant, Science, and Human Nature*. Oxford, Clarendon, 512 p.
- KANT, I. 1997. *Prolegomena to Any Future Metaphysics That Will Be Able to Come Forward as Science, with selections from the Critique of Pure Reason*. Cambridge, Cambridge University Press, 270 p.
- KANT, I. 1998. *Critique of Pure Reason*. Cambridge, Cambridge University Press, 800 p.
- KLIMA, G., 2002. Contemporary ‘Essentialism’ vs. Aristotelian Essentialism. In: J. HALDANE (ed.), *Mind, Metaphysics, and Value in the Thomistic and Analytic Traditions*. Notre Dame, Notre Dame University Press, p. 175-194.
- KRIPKE, S.A. 1971. Identity and Necessity. In: M.K. MUNITZ (ed.), *Identity and Individuation*. New York, New York University Press, p. 135-164.
- KRIPKE, S.A. 1980. *Naming and Necessity*. Cambridge, Harvard University Press, 192 p.
- MARCUS, R. 1967. Essentialism in Quantified Modal Logic. *Nous*, 1:90-96. <http://dx.doi.org/10.2307/2214714>
- MARCUS, R. 1971. Essential Attribution. *Journal of Philosophy*, 68:187-202. <http://dx.doi.org/10.2307/2024901>
- ODERBERG, D.S. 2007. *Real Essentialism*. London, Routledge, 314 p. <http://dx.doi.org/10.4324/9780203356753>
- PARSONS, T., 1967. Grades of Essentialism in Quantified Modal Logic. *Nous*, 1:181-191. <http://dx.doi.org/10.2307/2214584>
- PARSONS, T. 1969. Essentialism and Quantified Modal Logic. *Philosophical Review*, 78(1):35-52. <http://dx.doi.org/10.2307/2183810>
- PUTNAM, H. 1975. The Meaning of ‘Meaning’. In: H. PUTNAM, *Mind, Language, and Reality: Philosophical Papers*, vol. 2. Cambridge, Cambridge University Press, p. 215-71. <http://dx.doi.org/10.1017/CBO9780511625251.014>
- QUINE, W.V.O. 1951. Two Dogmas of Empiricism. *Philosophical Review*, 60(1):28-43.
- QUINE, W.V.O. 1953. Reference and Modality. In: W.V.O. QUINE, *From a Logical Point of View*. Cambridge, Harvard University Press, p. 139-159.
- QUINE, W.V.O. 1966. Three Grades of Modal Involvement. In: W.V.O. QUINE, *Ways of Paradox and Other Essays*. New York, Random House, p. 156-174.

- SALMON, N. 1986. *Frege's Puzzle*. Cambridge, The MIT Press, xiv+196 p.
- SIDELLE, A. 1989. *Necessity, Essence, and Individuation: A Defense of Conventionalism*. Ithaca/London, Cornell University Press, 248 p.
- SOAMES, S. 2002. *Beyond Rigidity: The Unfinished Semantic Agenda of 'Naming and Necessity'*. New York, Oxford University Press, 392 p.
- SOAMES, S. 2006. The Philosophical Significance of the Kripkean Necessary A Posteriori. In: S. SOAMES, *Philosophical Essays: Volume 2: The Philosophical Significance of Language*. Princeton/Oxford, Princeton University Press, p. 165-188.
- SOAMES, S. 2011. Kripke on Epistemic and Metaphysical Possibility: Two Routes to the Necessary A Posteriori. In: A. BERGER (ed.), *Saul Kripke*. Cambridge University Press, p. 78-99. Available at: http://www-bcf.usc.edu/~soames/2011_papers/#Kripke_on_Epistemic. Accessed on: 14/05/2011.
- TICHY, P. 1983. Kripke on Necessity A Posteriori. *Philosophical Studies*, 43(2):225-241.

Submitted on April 25, 2011

Accepted on July 4, 2011