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PHILOSOPHICAL INSIGHTS AND MODAL COGNITION

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Modal rationalists uphold a strong constitutive relationship between a priori cognition and modal cognition. Since both a priori cognition and modal cognition have been taken to be characteristic of philosophical insights, I will critically assess an ambitious modal rationalism and an associated ambitious *methodological* rationalism. I begin by examining Kripkean cases of the necessary a posteriori in order to characterize the ambitious modal rationalism that will be the focus of my criticism. I then argue that there is a principled association between this view in the epistemology of modality and an ambitious methodological rationalist picture of the nature of philosophical insights. On the basis of this discussion, I criticize ambitious modal rationalism and argue that the critique indicates some principled limits of generating philosophical insights by a priori modal cognition. Hence, my central diagnosis is that ambitious methodological rationalists are overly ambitious in the role that they assign a priori modal cognition in philosophical methodology.

1. Introduction

I will investigate the limits of a priori philosophical insights in the context of epistemology of modality. Both a priori cognition and cognition of what is necessary and possible have often been taken to be the bread and butter of philosophy. While it is wide accepted that philosophical insights can be about actual facts, as opposed to modal facts, modal cognition is rightly taken to be central to philosophical methodology. For example, many philosophical thought experiments hinge on premises that assume that certain non-actual scenarios are possible. Likewise, although philosophical insights are often the product of reflection on empirical discoveries, many of the core principles relied on in such reflection are of an a priori nature.

Modal rationalists argue that there is a strong constitutive relationship between modal cognition and a priori cognition. But given that modal cognition and a priori cognition figure prominently in a sort of reflection that may generate philosophical insights, it is worthwhile to critically examine the relationship proposed by modal rationalists. I will do so by examining how Kripkean cases of the necessary a posteriori may shed light on the scope and limits of a priori modal cognition and, thereby, on the sources of an important class of philosophical insights.

I begin by providing a diagnosis Kripke's critique of Kant's association of a priori cognition and modal cognition. Specifically, I argue that Kripke's critique of Kant's *pure* modal rationalism is compatible with an *ambitious* modal rationalism according to which the basis of all modal cognition is a priori. On the basis of a more specific characterization of ambitious modal rationalism, I sketch the picture of philosophical insights that it is

associated with. More specifically, I argue that ambitious modal rationalism provides a key assumption in motivating an ambitious *methodological* rationalist picture of philosophical insights, and a corresponding self-image for philosophers. According to this picture, philosophical insights are not restricted to modal cognition but extend to substantive non-modal theses as well.

I then turn to a critique of ambitious modal rationalism. The lessons I draw from the criticism concern the limits of a priori modal cognition in generating philosophical insights. My central suggestion is that ambitious modal rationalists are overly ambitious in the role that they assign a priori modal cognition in philosophical methodology. Empirical investigations constitute a more substantive source of philosophical insights than it is often supposed. Nevertheless, I argue that the discussion does not motivate a pure modal *empiricism* according to which modal cognition that amounts to philosophical insights is ever a priori. Rather, it indicates the scope and limits of a priori modal cognition in generating philosophical insights.

2. Kripke's critique of Kant's pure modal rationalism.

Traditionally, a theory is said to be a rationalist one if it emphasizes the a priori nature of the warrant for judgments about, and, hence, knowledge of, some subject matter.¹ It is said to be an empiricist theory if it emphasizes the a posteriori nature of such warrant and knowledge.

I will criticize *modal* rationalism and an associated methodological rationalism. Modal rationalism concerns the nature of the epistemic warrant for modal judgments. I use the phrase 'modal judgments' to denote judgments that are about the metaphysically modal status of some proposition. For example, the judgments that Rudolph could have been standing in the doorway, that it is necessary that gold is a metal and that it is contingent that Aristotle was a philosopher are modal judgments. In contrast the judgments that Cicero is Tully, that Socrates is human and that Aristotle was a philosopher are not modal judgments. Although the propositional contents of these judgments have certain modal profiles, the judgments are not about their modal profiles. No metaphysically modal notion occurs within the scope of the judgment. Modal judgments are central to many ways of generating philosophical insights. For example, philosophical thought experiments typically invoke premises to the effect that thus-and-so is possible. So, if modal cognition is, in general, an a priori affair, then a central aspect of nature and source of philosophical insights is within the realm of reason.

The distinction between modal and non-modal judgments is clearly recognized by Kant who writes that "...if a proposition is thought along with its necessity, it is an a priori judgment ..." (Kant 1781/1998 B4/p. 137. See also B99ff/p. 209). The quote also illustrates that Kant is a pure modal rationalist insofar as he upheld the view that our warrant for modal judgments is always a priori. In particular, he claimed that all judgments

¹ I use 'warrant' as a generic term for the epistemically "good" property of belief which is necessary but not sufficient for knowledge. It is a genus which harbors both internalist and externalist species – labeled 'justification' and 'entitlement' respectively (Burge 2003, Gerken 2013b, *forthcoming a*).

about necessity are a priori: “Necessity and strict universality are therefore sure indications of an a priori cognition, and also belong together inseparably” (Kant 1781/1998, B4/p. 137-138).²

The target of Kripke’s critique is Kant’s pure modal rationalism. However, I restrict the discussion to one of Kripke’s lines of argument for the necessary a posteriori.³ In doing so, I will deal directly with the relevant judgments rather than with the sentences which express them (when things go well). The argument for the necessary a posteriori that I will discuss may be presented by way of a general modus ponens schema provided by Kripke (see, e.g., 1971/2011, p. 16-17). Here ‘ p ’ is a schematic placeholder for certain propositions, ‘ \Box ’ stands for metaphysical necessity whereas ‘ \rightarrow ’ is used to represent the vernacular ‘only if’.⁴

General Modus Ponens Schema:

- (I) p
- (II) $p \rightarrow \Box p$
- (C) $\Box p$

As mentioned, ‘ p ’ is a schematic placeholder for certain propositions. The most prominent example that Kripke discusses is that of identity. In contrast, I will set aside the case of identity in order to focus on cases of monadic predication. Moreover, I will only consider cases where the properties predicated of the object are empirical in the sense that a judgment that the object possesses the property is a posteriori. So, a paradigmatic instance of (II) in the General Modus Ponens Schema is this: If Socrates is human, Socrates is necessarily human.

In addition, I shall make a qualification in order to sidestep complications pertaining to the existence of the object or kind which the relevant property is predicated of. I do so simply by making the discussion conditional on the existence of the object or kind under discussion. Given these qualifications, we can formulate the Kripkean modus ponens schema that I will consider.

Qualified Modus Ponens Schema:

- (i) Fa
- (ii) $Fa \rightarrow \Box Fa$ (if a exists)
- (C) $\Box Fa$ (if a exists)

² It has recently been challenged whether this standard interpretation of Kant’s view on the relation between a priority and necessity is accurate (Stang 2011). But since the present purpose is not exegetical, I will consider the “textbook Kantianism” that is the target of Kripke’s critique.

³ Scott Soames has distinguished between various “routes” to the necessary a posteriori (Soames 2005, 2006). The route which I discuss is the one which Soames finds the most promising. I will set aside comparisons (but see Eaker *forthcoming*).

⁴ One notational difference is that Kripke uses capitalization – i.e., ‘ P ’ rather than ‘ p .’ A possibly substantive difference is that Kripke uses the horseshoe, ‘ \supset .’ This might indicate that he thinks of the conditional as a material conditional. But I have been unable to find textual evidence for or against this reading. Hence, I use the arrow, ‘ \rightarrow ’, in the above-mentioned uncommitted manner.

The reason why the Qualified Modus Ponens Schema gives rise to instances of the necessary a posteriori is fairly straightforward: The non-modal judgment that (i) is true is a posteriori. Sense experience must be relied on in order to be warranted in believing (i) where (i) is some necessary proposition such as the proposition that Socrates is human or the proposition that gold is a metal. But since (i) is required for detaching (C) from the conditional, (ii), the modal judgment, (C), is warranted a posteriori as well. This modal conclusion relies, for its warrant, on sense experience in virtue of relying on a premise that relies, for its warrant, on sense experience. Note that if Kripke's point was merely to show that some necessary propositions may not be judged to be true a priori, the argument to the effect that (i) is a posteriori and necessary would have sufficed. So, Kripke's critical conclusion is that the modal judgment, (C), is, and has to be, warranted a posteriori.

Kripke's conclusion suffices to refute pure modal rationalism insofar as it refutes Kant's already mentioned thesis that necessity is among the "... sure indications of a priori cognition." (Kant 1781/1998, B4/p. 137). However, the conclusion does nothing to compromise what I will call 'ambitious modal rationalism.' According to ambitious modal rationalism, the modal judgment, (C), is a posteriori but it is partly derived from a modal premise, (ii), which is a priori and which is not itself derived from non-modal premises.

3. Ambitious modal rationalism

We may characterize ambitious modal rationalism as the view that all true instances of the conditional, (ii), in the Qualified Modus Ponens Schema, are a priori.⁵ A Kantian would, of course accept this thesis as a corollary of pure modal rationalism. It is more surprising, perhaps, that Kripke appears to accept this thesis as well.

"...one knows by a priori philosophical analysis, some conditional of the form "if P, then necessarily P.""(1971/2011, 16).

"One does know a priori, by philosophical analysis, that if such an identity statement is true, it is necessarily true," (Kripke 1972, 109).

In the latter quote, Kripke discusses the case of identity that I have set aside. However, Kripke qualifiedly suggests that the schema generalizes to the cases of (ii) that involve monadic predication of empirical properties – e.g., if gold is a metal, gold is necessarily a metal.

⁵ This characterization is somewhat provisional insofar as it characterizes ambitious modal rationalism in terms of the dispute over the necessary a posteriori. More specifically, it characterizes the position in terms of (ii) of the Qualified Modus Ponens Schema and this may be insufficiently general. But although it may be worthwhile to pursue a more general characterization, the present one captures an important aspect of ambitious modal rationalism and clearly distinguishes this view from pure modal rationalism. So, it may serve us for the present purposes.

“All the cases of the necessary *a posteriori* advocated in the text have the special character attributed to mathematical statements: Philosophical analysis tells us that they cannot be contingently true, so any empirical knowledge of their truth is automatically empirical knowledge that they are necessary. This characterization applies, in particular, to the cases of identity statements and of essence. It *may* give a clue to a general characterization of *a posteriori* knowledge of necessary truths.” (Kripke 1972, 159 – original italics).

Kripke’s emphasis on the qualification that the characterization *may* give a clue to a general characterization of the necessary *a posteriori* leaves room for restrictions on the claim that all true conditionals of the form of (ii) are *a priori*. On the other hand, Kripke claims that the schema governs all the cases of the necessary *a posteriori* advocated in *Naming and Necessity*. In particular, he claims that the schema applies to the cases of essence.⁶

According to the “general characterization” suggested by Kripke’s remarks, modal judgments have a distinctive *a priori* component. While we are warranted *a posteriori* in the judgment that a thing, *a*, has a property, *F*, we may be warranted *a priori* in the judgment that if *a* has *F*, necessarily *a* has *F*. So, it appears that Kripke and Kant are in agreement that the conditional modal judgment, (ii), may be warranted or even known *a priori*.⁷ This apparent agreement is remarkable in part because of the *prima facie* different sources of the verdict. For example, Kripke and Kant may have substantive disagreements about whether the *a priori* warrant for a judgment of the form of (ii) is generated “by philosophical analysis” (Kripke 1972, 109 and 159) or whether it “... has its seat in your faculty of cognition *a priori*.” (Kant 1781/1998, B6/p.138).

The view that instances of (ii) that involve the monadic predication of a necessary empirical property may be warranted *a priori* might appear to be a small admission to modal rationalism. But this appearance is deceptive. In fact, such a view preserves the idea that a very significant area of modal cognition is *a priori*. The proponent of this view – the ambitious modal rationalist – grants that modal judgments that are derived by combining modal and non-modal premises inherit the *a posteriori* of the latter. But she or he maintains that the non-derived modal judgments instantiating (ii) that operate as premises remain *a priori*. So, although the modal reasoning in question involves *a posteriori* components, it is modal reasoning only in virtue of containing non-derived modal premises. And those premises, in virtue of which the reasoning is modal, are *a priori*. So, according to ambitious modal rationalism, the *basis* of modal cognition remains *a priori*.

The modal judgment in question, (ii), may be characterized as more basic insofar as it is not itself derived from other modal judgments. Given this idea, modal cognition may be clearly factorized into a *a posteriori* and a *a priori* components. So, all that is granted is that

⁶ Note, however, that one may distinguish between necessary properties and essential properties (Fine 1994). Relating this point to the present discussion would make for an investigation of its own. As in the case of Kant, there is room for interpretation of Kripke’s exact position. But, as in the case of Kant, my central purpose is not exegetical. So, I will consider the “textbook Kripkean” position according to which all instances of (ii) are *a priori* (Yablo 2000).

⁷ Casullo advocates a similar interpretation (Casullo 2010, p. 357). See also (Casullo 2003).

non-basic – i.e., derived – modal judgments may be a posteriori. What is upheld is the view that all basic modal cognition is a priori. Thus, rationalism about modal judgments, which are basic in the sense of being non-derived, may be preserved. In this way, it can be maintained that, in a very substantive sense, the basis of modal cognition remains a priori.

Hence, the “general characterization” of the necessary a posteriori that Kripke qualifiedly suggests may be characterized as an ambitious, albeit not pure, modal rationalism. It is striking how it aligns with the famous words of Kant:

Experience teaches us, to be sure, that something is constituted thus and so, but not that it could not have been otherwise. First, then, if a proposition is thought along with its necessity, it is an a priori judgment (Kant 1781/1998, B3-4/p.137).

The alignment is imperfect, of course. As mentioned, Kant’s dictum reflects an even stronger view (‘pure modal rationalism’ in my terminology) that Kripke effectively criticizes. Yet Kripke’s criticism is perfectly compatible with an ambitious modal rationalism. In fact, Kripke’s picture seems to be rather congenial to an ambitious modal rationalism according to which the basis of modal cognition remains a priori.

This concludes my diagnostic aim. It has not always been adequately appreciated that Kripke’s critique is compatible with, and congenial to, ambitious modal rationalism. This is unfortunate not merely for exegetical reasons but because ambitious modal rationalism, as characterized here, has not itself received a targeted criticism. Indeed, the view that every true instance of (ii) is a priori may have, contributed to a prominent rationalist picture of the source and nature of philosophical insights.

4. Ambitious modal rationalism and the nature of philosophical insights

Ambitious modal rationalism is associated with a broad picture of the nature of philosophical insights and a correspondingly attractive self-image for philosophers. Roughly, this picture is one according to which philosophical insights frequently consist in a priori cognition about substantive modal as well as non-modal theses. Hence, I label it ‘ambitious *methodological* rationalism.’

I use the phrase that the ambitious methodological rationalist picture of philosophical insights is “associated with” ambitious modal rationalism because it is neither entailed by it nor merely compatible with it. Ambitious modal rationalism, as characterized here, is the view that all true instances of (ii) in the Modus Ponens Schema are a priori. Thus characterized, the view does not, without auxiliary assumptions, entail any views about the nature of philosophical insights.

However, for rationalistically inclined philosophers, it is very natural to assume that there is a tight relationship between a priori cognition and philosophical insights. Although this assumption is logically independent from ambitious modal rationalism, it may nevertheless be regarded as a constituent of an ambitious rationalist approach to philosophical methodology. And given such an underlying assumption, ambitious modal rationalism may provide a key premise in motivating ambitious methodological rationalism: the view that a priori philosophical insights are not restricted to modal cognition but extend to substantive non-modal theses as well.

In order to critically assess the ambitious methodological rationalist picture of philosophical insights sketched above, we need to diagnose more precisely how it is associated with ambitious modal rationalism. One way to do so is to examine how ambitious modal rationalism's characteristic thesis figures in the generation of a *concrete* purported philosophical insight. So, I will consider the structure of a version of a specific argument that is commonly thought to provide an a priori philosophical insight.

A prominent brand of purported philosophical insights consists of counterexamples to a plausible non-modal thesis. Given the assumption that the thesis is either necessarily true or necessarily false, one may be argued that it is false by arguing that it is possibly false. But an assumption that a thesis is possibly false may, according to many modal rationalists, be warranted a priori by a thought experiment. Given a couple of important qualifications, a variation of a Gettier-style argument against a certain brand of the tripartite theory of knowledge appears to be of this structure.⁸

Gettier-style arguments can be construed as targeting a tripartite theory of knowledge that is *minimal* in the sense that it is a non-modal analysis. Let us call such a theory '(MinTri).' According to (MinTri), the set of all warranted true beliefs is simply co-extensional with the set of all beliefs that amount to knowledge. Thus, expressed, the minimal tripartite theory is not a theory of the words 'knowledge', 'warrant', 'belief' etc. Nor is it about the concepts knowledge, warrant, belief etc. (Notation: I use single quotes to mention words and sentences. I use underlining to mention concepts and thoughts.)⁹

(MinTri) is here conceived as a theory about the cognitive relation to a proposition one stands in when one knows it and when one has a warranted true belief in it. Such a theory of knowledge is minimal because it is a non-modal thesis that only claims that those two relations are co-extensional. Of course, the thesis can also be articulated modally, and its modal profile can be discussed. This is typically how things are done.¹⁰ But the present

⁸ I use the phrase 'Gettier-style argument' to avoid assuming that the arguments in Gettier's paper share the argument structure that I am about to discuss (Gettier 1963). I here follow the example I set with the phrase 'Gettier-style case' for cases that do not figure in the original article and which may have an importantly different structure (Gerken 2013a, Chap. I).

⁹ As mentioned in Footnote 1, I diverge from Gettier's terminology in which 'justification' is used roughly as I use 'warrant' – namely, as a general positive non-factive epistemic property. In my terminology, 'justification' is reserved for an internalist species of warrant (Burge 2003, Gerken 2013b *forthcoming a*). More substantially, Gettier's target may be substantially different from (MinTri) which only amounts to a co-extensionality thesis. It is plausible that some of the philosophers that Gettier criticized were concerned with analyzing words or concepts. Their commitment to the modal profile of the tripartite theory is unclear – especially given the widespread skepticism about *de re* modality at the time. Here I sidestep these exegetical matters.

¹⁰ A modal statement of the tripartite is often the starting point of an account of Gettier-style arguments. This is Williamson's approach (Williamson 2007, p. 183. See Jenkins 2008 and Malmgren 2011 for criticism). But Williamson also distinguishes between modal and non-modal versions of the tripartite theory (Williamson 2007, p. 193). The present purpose is to consider the structure of an argument that purports to rebut a non-modal substantive thesis from a modal premise. Hence, the minimal non-modal theory is the appropriate target. The formalization of the

purpose is to consider the structure of the variation of a Gettier-style argument that goes from a modal premise against a non-modal thesis. For the sake of illustration, then, let us imagine that (MinTri) is set forth by someone who is *agnostic* about its modal status. I let ‘ Ksp ’ and ‘ $WBsp$ ’ respectively formalize ‘S knows that p ’ and ‘S is warranted in believing that p ’ (where p is a true proposition).¹¹

$$(MinTri) \quad \forall s \forall p (WBsp \leftrightarrow Ksp)$$

A Gettier-style thought experiment purports to give us a plausible candidate of an a priori premise according to which a subject, s , does not know some proposition, p , although her belief that p is both warranted and true. The thought experiment is not standardly taken to provide evidence that there in fact are such cases. Rather, it is taken to provide evidence that such cases are possible. This is one reason that many philosophers have been willing to grant that the Gettier-style thought experiment may warrant its central judgment a priori. So, according to a fairly standard conception of Gettier-style thought experiments, they may provide a priori warrant for the following *modal* judgment:

$$(G1) \quad \diamond \exists s \exists p (WBsp \ \& \ \neg Ksp) \quad \text{Ass. Thought experiment.}$$

The modal judgment expressed by (G1) may be regarded as the central judgment that is warranted by a Gettier-style thought experiment. What I label “the central judgment” is often labeled “the Gettier intuition” in the methodology literature. I think that this terminology may be misleading. While the judgment expressed by (G1) may rest on intuitive judgments, it rests on at least two separate intuitive judgments each of which is corresponding to a conjunct of (G1). A further judgment that the conjunction holds is also required. The latter is not trivial in this context given Harman’s point that the rules of logic do not determine which inferences to draw (Harman 1973). It is not a trivial matter (epistemically or doxastically) to generate a belief in the conjunction, (G1), on the basis of two separate judgments that each conjunct is true. It only makes matters worse that the “Gettier-intuition” terminology fails to distinguish the judgment that (G1) is true from the judgment that (MinTri) is false. The latter is the *conclusion* of a line of reasoning *from* (G1). So, even if (G1) may be said to amount to an intuitive judgment, it is not clear that this is a psychologically accurate characterization of the conclusion that (MinTri) is false. So, if the structure of the argument that I am in the process of presenting reflects the psychology of individuals who assess a Gettier-style case, it may be misleading to speak of “the Gettier intuition” (see Gerken 2012b for some distinctions between kinds of judgments which may inform the present debate).

The central point for the present purpose, however, is that (G1) is not, by itself, a counterexample to (MinTri) since the former is a modal judgment and, by stipulation, the

Gettier-style argument is simpler than Williamson’s formalization. But it is sufficient to bring out the relevant structural point – i.e., that an instance of (ii) is presupposed in the Gettier-style argument.

¹¹ So, the quantifier ‘ $\forall p$ ’ should be read ‘for all true propositions.’

latter is not. We may, by quantifier permutations, state the central judgment of the Gettier-style thought experiment as follows:

$$(G2) \quad \neg \Box \forall s \forall p (WB_{sp} \rightarrow K_{sp}) \quad (G1) \text{ Quantifier permutations.}$$

By itself, (G2) is not a counterexample to (MinTri) for the same reason as above. Moreover, it does not permit us to deduce any premise that is, by itself, a counterexample to (MinTri). The argument from the premise warranted by the Gettier-style thought experiment to the rejection of (MinTri) is enthymematic. This is not to say that it is flawed but only that it presupposes an additional premise in order to warrant a rejection of (MinTri). What is interesting, at least for the present purpose, is that the required premise appears to be an instance of (ii), namely:

$$(G3) \quad \forall s \forall p (K_{sp} \leftrightarrow WB_{sp}) \rightarrow \Box \forall s \forall p (K_{sp} \leftrightarrow WB_{sp}) \text{ Ass. Necessity of (MinTri).}$$

Given the addition of (G3), we are now in a position to deduce the negation of (MinTri):

$$(G4) \quad \neg \forall s \forall p (K_{sp} \leftrightarrow WB_{sp}) \quad (G2), (G3) \text{ Modus tollens}$$

So, from a Gettier-style thought experiment, there is a line of reasoning to the negation of (MinTri) – i.e., to the negation of the non-modal co-extensionality thesis. So, the Gettier-style argument exemplifies a case of the kind of our interest. It appears to exemplify a case in which a priori cognition provides reason to reject not *merely* a modal judgment about the necessary relationship between knowledge and warranted true belief but also its minimal non-modal counterpart: (MinTri).

Of course, empiricists might argue that (G1) is not a priori although it is the product of a thought experiment. Such a modal empiricism may derive from an underlying general skepticism about thought experiments as a source or warrant. But it may also derive from an underlying view according to which thought experiments provide a posteriori warrant whenever they provide warrant at all. Here I will set aside the complicated issue that pertains to the epistemic nature and status of thought experiments and grant, for the sake of this discussion, that (G1) is a priori.¹² The central point is that even if thought experiments produce a priori judgments, many arguments that purport to rebut a non-modal thesis by a thought experiment are enthymematic insofar as they often presuppose a further premise of the form of (ii).¹³ So, ambitious modal rationalism, according to which

¹² The fact that I set the issue aside may generate the implicature that I reject that thought experiments can provide a priori warrant. So, let me hereby cancel this implicature. While I do not think that the judgments formed on the basis of thought experiments are *invariably* a priori, I do think that thought experiments often provide a priori warrant. That is why I characterized the relationship between thought experiments and a priority as complicated.

¹³ Of course, if a thought experiment can by itself provide evidence that it is necessary that not-p, then it will provide evidence against a non-modal thesis that p. So, not all such arguments

true instances of (ii) are a priori, is required to ensure the broader *methodological* rationalist conclusion that the non-modal conclusion is a priori.

The target thesis, (MinTri), has a modal profile even though this profile does not figure in its formulation or in the doxastic commitments of its proponents. So, there may be independent arguments for assuming that the connection between the cognitive relationships of knowledge and warranted true belief that (MinTri) articulates is a necessary connection. Hence, the presupposition of (G3) may be independently plausible. Moreover, it may be dialectically legitimate to invoke (G3) as a premise insofar as the proponent of (MinTri) is agnostic about the modal profile of her thesis. Finally, the relevant premise, (G3), is a reasonable candidate for being a priori. If so, the present Gettier-style argument contra (MinTri) is a reasonable candidate for an a priori argument contra a non-modal substantive thesis.

An intriguing exercise, due to Williamson, can provide resources for a reinforcement of this conception of the Gettier-style argument. Williamson's exercise consists in providing an *actual* counterexample to the tripartite theory of knowledge rather than a thought experiment. Interestingly, doing so appears to be little more effective than going through a Gettier-style thought experiment (Williamson 2007, 192). Williamson's exercise may be taken to illustrate that an actual counterexample to the tripartite theory of knowledge does not provide *significantly stronger epistemic grounds for rejecting the thesis* than going through a Gettier-style argument driven by a thought experiment (Williamson 207, 193).

Williamson would eschew an articulation of the methodological lesson in terms of a priority (Williamson 2007, 165-169). However, ambitious methodological rationalists may argue that Williamson's exercise vindicates the view: Since the argument from an actual counterexample adds little or no epistemic force to the argument from a thought experiment, the latter argument may be taken to provide a priori warrant for its non-modal conclusion.¹⁴ Thus, the conclusion exemplifies the picture of philosophical insights that is associated with ambitious modal rationalism – namely, that a priori cognition may produce both modal and non-modal philosophical insights.

For the present purpose, I will not quarrel with such an account of the Gettier-style argument. I am sympathetic to the view that there is an a priori case against the original (modal) tripartite theory of knowledge as well as against (MinTri). However, I will argue that the ambitious methodological rationalist picture of philosophical insights, which the Gettier-style argument sketched here appears to instantiate, does not generalize.

To argue for this point, the structure of the argument type must be examined more closely. As emphasized, arguments of this structure are enthymematic unless they contain a premise that is constituted by an instance of (ii). But given this structural fact, we must remember Kripke's point that an argument provides a priori warrant for its conclusion only

presuppose a premise. For a characterization of the doxastic and epistemic properties of such inferential presuppositions, see (Gerken 2012a and 2013a).

¹⁴ I say 'little or no epistemic force' because whatever epistemic strength the actual counterexample may possess over the thought experiment-generated counterexample may lie in the epistemic uncertainty concerning (G3) which is required by the thought experiment-based Gettier-style argument but not by the argument by actual counterexample.

if all its premises are a priori. So, given the view that Gettier-style arguments provide a priori warrant against (MinTri), and given that (G3) is required in such arguments, the picture *requires* that (G3) is a priori. But since (G3) is an instance of (ii), ambitious modal rationalism delivers the thesis that it is a priori.

This point illustrates why the association between ambitious modal rationalism and the sketched ambitious methodological rationalist picture of philosophical insights is a *principled* association. Arguments which are taken to provide a priori warrant against a non-modal thesis, exemplified by the Gettier-style argument against (MinTri), presuppose an instance of (ii). But ambitious modal rationalism is in the present context characterized as the view that all true instances of (ii) are a priori. So, the ambitious modal rationalist is committed to the view that all sound philosophical arguments of this structure are a priori insofar as they are based on an a priori thought experiment. On the other hand, ambitious methodological rationalism seems to require ambitious modal rationalism according to which the relevant instance of (ii) is always a priori.

According to ambitious methodological rationalism, then, the lesson from the Gettier-style argument *generalizes* since an ingenious thought experimenter can launch a priori philosophical insights against a wide array of non-modal theses. Of course, the ambitious modal rationalist is not committed to the view that the sketched mode of a priori argumentation generalizes *ad infinitum*. For example, it is perfectly consistent with the sketched picture to assume that there is no way for a thought experimenter to provide an a priori warrant-providing argument against many other co-extensionality theses. For example, one cannot argue a priori against the thesis that the set of all Danish citizens with a heart is co-extensional with the set of all Danish citizens with kidneys. To assume that this thesis could be refuted a priori would amount to a sort of rationalistic hubris. The reason why such rationalistic hubris is not a commitment of ambitious modal rationalism is that the view only assumes that all *true* instances of (ii) are a priori. And the relevant instance of (ii) would not be true. It is not plausible that the co-extensionality thesis in question is true only if it is necessarily true. Hence, it would be both substantially and dialectically problematic to appeal to this instance of (ii). But without this instance of (ii), there is no sound argument from a thought experiment delivering the judgment that it is possible that there be a Danish citizen with a heart lacks kidneys to the negation of the co-extensionality thesis. So, it appears that ambitious modal rationalism can preserve an ambitious methodological rationalism without a commitment to blatant rationalist hubris.

In consequence, the ambitious methodological rationalist picture of philosophical insights is attractive (to many philosophers). Its attraction lies in part in its suggestion that purely a priori theorizing has a very wide scope of application. According to the picture sketched above, a priori cognition does not merely serve as the basis of all warranted modal judgments. It may moreover provide warrant against substantive non-modal judgments via instances of (ii). So, this general picture of philosophical insights suggests that although philosophical insights are a priori, they are very widely applicable.¹⁵

¹⁵ A couple of prominent examples: Kripke's argument against type-type identity theory is another argument which involves an instance of (ii) (Kripke 1980, Lecture III). But this instance of (ii) – namely, Necessity of Identity – is among the strongest candidates for being a priori. Another

The sketched ambitious *methodological* rationalist picture of philosophical insights rests on two distinctive *modal* rationalist theses: One is the thesis that thought experiments may provide a priori warrant for many modal judgments, akin to (G1) in the Gettier-style argument. The other thesis is that all true instances of (ii), akin to (G3) in the Gettier-style argument, are a priori. This latter thesis is characteristic of ambitious modal rationalism. Together these theses yield the ambitious methodological rationalist picture according to which there is a clear a priori component to philosophical insights even when they bear on substantive non-modal matters.

While this is an attractive picture, I believe that it is insufficiently sensitive to the complexity of the interaction between a posteriori and a priori sources of philosophical insights. As I have sought to argue, this ambitious methodological rationalism rests on ambitious modal rationalism. In consequence, it may be criticized by criticizing ambitious modal rationalism. So, in the next section, I will argue that ambitious modal rationalism is overly ambitious.

5. A challenge to ambitious modal rationalism

In this section, I provide a challenge to the view that all instances of (ii) are a priori. I do not purport that the challenge settles the matter although I think that it calls for a response. As mentioned, I will only consider the case for the a posteriority of some instances of conditionals of the form *if Fa, then necessarily Fa (if a exists)*. Those instances involve monadic predication where the predicated property is empirical. To see the basic idea, consider the following instance of the Qualified Modus Ponens Schema:

thought experiment-based argument which is relevant in this context is a Twin Earth argument for anti-individualism (a brand of externalism about mental states, cf. Burge 1979, 1982). Such an argument may be construed as involving an instance of (ii) (Gerken 2013a, Chap. III). I call this instance of (ii) for ‘Necessity of Attitude Individuation (for individualism)’ and articulate it as follows: *If an attitude-type is individualistically individuated, then it is necessarily that it is individualistically individuated* (Gerken 2012a, p. 141).

Given this instance of (ii), a thought experiment based modal judgment that it is possible that an attitude is not individualistically individuated may be used to argue that an attitude type is not in fact individualistically individuated. This construal of the Twin Earth argument raises a number of vexed questions. For example, the argument appears to be effective even though the Twin Earth scenario in question is impossible. For example, in Putnam’s scenario, it is assumed that Oscar and twin-Oscar are physiologically identical although there is no water (H₂O) on Twin Earth and Oscar’s physiology involves water. However, this is widely regarded as little but a “bug” with Putnam’s scenario that does not compromise the force of the argument. However, this assessment, which I share, raises questions about the status of the role of the relevant instance of (ii) in the Twin Earth argument (see, Gerken 2013a Chap. III.iii.b for further discussion.) Perhaps the more pertinent issue for the present purpose is the status of the instance of (ii) that is at stake in the Twin Earth argument. It is certainly a candidate for being a priori. But its a priori status is a good deal more controversial than cases in which the relevant instance of (ii) is an instance of Necessity of Identity.

- Socrates 1: Socrates is human (if Socrates exists).
 Socrates 2: If Socrates is human, it is necessary that Socrates is human (if Socrates exists).
 Socrates 3: It is necessary that Socrates is human (if Socrates exists).

While the example may not earn me points for originality, it provides a plausible case of the necessary a posteriori in which the instance of (ii), namely Socrates 2, is a posteriori.

What I will consider is whether the warrant for the modal judgment that Socrates 2 is true depends on the warrant for a more general judgment about the modal status of the property of being human. More specifically, it should be investigated whether a warranted judgment about the modal status of the property of being human requires warrant concerning the non-modal features of this property. It appears that just as it requires an empirical investigation of Socrates to warrant the judgment that he is human, it requires an empirical investigation of humanness to warrant the judgment that this property cannot be possessed contingently. The basic idea is that without any warrant concerning what it is to be human, one cannot have any warranted beliefs about whether being human is a property that someone, and a fortiori Socrates, can possess contingently. For all we know a priori, the property of being human could have been a mere stage in Socrates' existence. For all we know a priori, Socrates could have found himself in a circumstance similar to that of the fictitious Gregor Samsa, who one morning awoke from uneasy dreams and "...found himself in his bed changed to a monstrous vermin." (Kafka 1915, my translation).

The basic idea, then, is that a judgment that a given property can be possessed only necessarily is warranted only given warrant pertaining to the nature of the property where the latter is, in many cases, a posteriori. Clearly, there are many cases in which a judgment concerning the modal status of some empirically observed property is a posteriori. Consider, for example, a warranted judgment that if Socrates is married to Xantippe, he is so contingently. This judgment requires warranted background assumptions about the property of being married. According to the present line of critique, there is little difference between the case of Socrates' marital status and the case of a warranted judgment that if Socrates is human, he is so necessarily. Just as warrant for the relevant background assumptions about the property of being married is a posteriori, so is the warrant for the relevant background assumptions about the property of being human. Once we set aside identity statements, this challenge calls for a response.

It is not a good response, on behalf of the ambitious modal rationalist, to point out that it is obvious that the relevant premise, Socrates 2, is true. The obviousness may be due to the fact that the relevant empirical investigation (I use this locution loosely here) has already been carried out.¹⁶ We may already have relied on sense-experience in acquiring whatever background warrant is required for our judgment that Socrates 2 is true. For example, background assumptions about what a species is, about the properties of DNA or about being human more generally may figure in the epistemic basis for the judgment that Socrates 2 is true (compare Kant 1781 B2/p. 136-137).

Consider, for illustration, a "toy" line of reasoning which involves the assumptions that to be human is to be of a species and that while species may evolve, they may, for *principled*

¹⁶ Here I think that we should include cases of *outsourced cognition* (Gerken 2014).

reasons, only do so across generations. Such assumptions do not seem to be mere enabling conditions for the judgment in question. Rather, these assumptions may figure as premises in an abductive argument for Socrates 2. But in the absence of rationalist arguments to the contrary, such assumptions are a posteriori. Note that even if this, dramatically oversimplified, line of reasoning includes discernible a priori elements, its overall status is a posteriori due to the presence of a posteriori assumptions in it. Recall that Kripke argues that due to the required a posteriori element, (i), the conclusion (C) is a posteriori despite a discernible priori element, namely (ii). Similarly, even though the warrant for (ii) may have discernible priori elements, it is a posteriori if it requires any a posteriori elements.

The basic idea outlined above extends from empirical properties of individuals to empirical properties of kinds. To wit:

- Gold 1: Gold is a metal (if gold exists).
- Gold 2: If gold is a metal, it is necessary that gold is a metal (if gold exists).
- Gold 3: Gold is necessarily a metal (if gold exists).

Gold has many contingent properties. For example, it is a contingent property of gold that it is precious. A warranted judgment that the property of being metal has a different modal profile than the property of being precious requires certain warranted assumptions or presuppositions about what it is to be a metal. And it would seem that such background assumptions can be warranted only a posteriori. For example, a relevant warranted background assumption would be that a substance is a metal only if it readily forms positive ions (cations) due to its relatively free valence electrons (or something like that). The parenthetical qualification reflects that I am not certain about what exactly it is to be a metal despite having consulted various resources on the matter. It is illustrative, however, that my uncertainty is hardly due to the fact that I have not reflected sufficiently on the property of being a metal or on the concept metal or on the word 'metal.' Rather, it is due to the fact that I lack relevant a posteriori warranted judgments about what it is to be a metal. I have (I think) sufficiently warranted background beliefs about what it is to be a metal to be fairly well-warranted in my judgment that Gold 2 is true. But the epistemic weakness of my background beliefs about what it is to be a metal is reflected in the degree of warrant for my judgment that Gold 2 is true.

However, if the instances of (ii) in question are a posteriori, the role of a priori modal cognition in generating philosophical insights appears to be more limited than it has been assumed to be. If the relevant conditionals must be warranted a posteriori, a wide variety of thought experiments and similar sources for generating philosophical insights rely on substantive empirical investigation. So, if the present critique of ambitious modal rationalism is on the right track, it is overly ambitious in its conception of the sources of philosophical insights.

Here I have merely raised the challenge (see Gerken *forthcoming b* for more elaborate arguments as well as responses to some rationalist objections to it). I will now adopt the suggestion that ambitious modal rationalism is overly ambitious as a *working-hypothesis* in order to explore its consequences for the nature of philosophical insights.

6. Consequences for the ambitious methodological rationalist picture of philosophical insights

As I argued in Section 4, ambitious modal rationalism is associated with an ambitious *methodological* rationalist picture of philosophical insights. According to this picture, a priori cognition is not merely the basis of all modal cognition. It is moreover widely applicable in warranting non-modal judgments. My challenge to ambitious modal rationalism suggested that this thesis in the epistemology of modality is too strong. If this is correct, a priori modal cognition plays a more limited role in generating philosophical insights than ambitious modal rationalists have it.

More specifically, my critique above suggests that the ambitious rationalist picture of philosophical insights is mistaken because it rests on an overgeneralization of the characteristic thesis of ambitious modal rationalism. This is the thesis that all true instances of (ii) are a priori. If a wide range of true instances of (ii) are, in fact, a posteriori, the picture of philosophical insights, which is associated with ambitious modal rationalism, is too optimistic. Thus, my arguments above suggest that the view according to which one may bring a priori insights to bear against an extremely wide range of non-modal truths is not tenable. If so, the corresponding high-flying self-image for philosophy is, if a metaphor can be tolerated, no more durable than the wings of Icarus.

In order to provide a more accurate (and less metaphorical) diagnosis of the methodological consequences of the arguments against the general a priority of (ii), it is important to bear in mind that I have *not* argued that true instances of (ii) are never a priori. What I have argued is that the ambitious modal rationalist view according to which true instances of (ii) are always a priori is an overgeneralization. I have not argued that the view is entirely misguided. Overgeneralizations are generalizations from true instances.¹⁷

Thus, the diagnosis that I am inclined towards has it that, in some cases, an argument by an a priori thought experiment may go via an a priori instance of (ii) to produce an a priori philosophical insight that a non-modal thesis is false. The trouble is that such arguments are often enthymematic insofar as the required instances of (ii) are *presupposed*. But if the relevant instance of (ii) is presupposed, its epistemic status is typically unclear (see Gerken 2012a and Chapter II of Gerken 2013 for a general discussion of inferential presuppositions and their epistemic properties.) However, it can be very natural to take the epistemic status of a presupposed premise to be a priori, and this is especially so if the premise is *obvious*. But, as discussed above, the fact that a premise is obvious does not entail that it is a priori. Obvious truths may rest on background empirical warrant. And, obviously, a priori truths may be anything but obvious. The upshot is that an argument from an a priori thought experiment against a non-modal thesis cannot be presupposed to provide an a priori philosophical insight. In each case, the presupposed instance of (ii) should be articulated, and its epistemic status should be clarified.

Consequently, the picture of philosophical insights that is associated with ambitious modal rationalism appears to be mistaken because it is an overgeneralization of an

¹⁷ If I generalize from the assumption that I am immortal to the assumption that all humans are immortal, I am not *overgeneralizing*. I am making a generalization which might be reasonable *given* the instance that I generalize from.

attractive picture that is accurate in a substantial but limited set of cases. Hence, my tentative methodological diagnosis is that while the ambitious modal rationalists' picture of philosophical insights is mistaken, it is not entirely *misguided*. To see this, let us briefly consider a radical empiricists diagnosis.

The considerations above indicate that it is difficult to isolate purely a priori components in the warrant for modal judgment. Radical empiricists will want to argue from this assumption to the conclusion that there is no distinctive a priori aspect of modal cognition. This conclusion, in turn, may fuel arguments for a pure *methodological* empiricism. According to such a view, philosophical insights are never a priori. Pure methodological empiricism has followers among naturalized philosophers as well as among philosophy-hating philosophers. However, my critique of ambitious methodological rationalism does not motivate any such radical methodological view. The empiricist argument sketched above jumps to its conclusion in several ways. I will briefly mention a few.

First, the fact that it is difficult to isolate a purely a priori component of warrant for modal judgments is not significant evidence that it is impossible. Modal cognition is a poorly understood aspect of cognition. So, in the absence of a clear and plausible empiricist alternative, a theoretical difficulty is not significant evidence of impossibility. Moreover, there are interesting strategies for factorizing the relevant instances of (ii) into a priori and a posteriori parts.¹⁸ If such a strategy can be carried out, a *modest* modal rationalism, and thereby a modest methodological rationalism, may be preserved.

Second, I have only argued that some instances of (ii) are a posteriori. The a priority of many instances of (ii) is uncompromised. For example, I have said nothing against the a priority of the instances which appeal to the necessity of identity. So, nothing in what I have said tells against arguments in which the instance of (ii) is an identity thesis, although such arguments will, of course, face other challenges.¹⁹ Likewise, the a priority of (G3) in the Gettier-style argument considered in Section 4 also appears to be uncompromised. This leaves room for a modest modal rationalism according to which some instances of (ii) are a priori and some a posteriori. So, even if ambitious modal rationalism is false in its full generality, a number of important instances of (ii) may be a priori. But if this is so, there may be *some* important cases in which thought experiments can provide a priori warrant contra non-modal theses and a modest methodological rationalism may be upheld.

An important challenge for such a modest methodological rationalist approach consists in providing a principled account of which instances of (ii) are a priori and which are not. One way to do so may be to reflect on candidate cases for a priori instances of (ii) and consider principled commonalities between them. For example, it is not clear what the identity cases and theses such as (G3) in the Gettier-style argument have in common. A

¹⁸ Elsewhere I discuss one factorization strategy – namely, Chalmers' frontloading strategy (Chalmers 2012, Gerken *forthcoming*. See also Schroeter *forthcoming*).

¹⁹ Consider, for example, Kripke's influential arguments contra type-identity theories. These arguments feature the modal judgments that "...*A* can exist without *B*, that *B* can exist without *A*..." where '*A*' names a "particular pain sensation" and '*B*' names "the corresponding brain state" (Kripke 1972, p. 148 and 146, respectively). As mentioned, the instance of (ii) in Kripke's argument is an instance of the principle *Necessity of Identity*.

further analysis of their epistemic commonalities and differences between various instances of (ii) would be illuminative.

Thus, the preceding critique of ambitious modal rationalism does not provide grist for the mill of pure modal empiricists according to whom all cognition, and hence all modal cognition, is a posteriori. According to a rather pessimistic version of such an empiricist view, there are no genuinely philosophical insights based on modal cognition since only insights which are a priori are genuinely philosophical. According to a more optimistic version of such an empiricist view, the idea that there are distinctive philosophical insights may be preserved but only by dissociating philosophical insights from a priori cognition. The outlined challenge to ambitious modal rationalism does not support either brand of pure modal empiricism. On the other hand, if the arguments above are sound, they show that ambitious modal rationalism, and its associated ambitious methodological rationalist picture of philosophical insights, must be rejected. While this conclusion marks an important delimitation of rationalist ambitions, it need not drive us to the conclusion that there are no distinctive philosophical insights. Indeed, the arguments above are fully compatible with pursuing a *modest modal* rationalism and a corresponding *modest methodological* rationalism. In the next section, I will consider an alternative way to approach such a view.

7. An alternative path for modest rationalists

I will sketch another line of argument that a modest modal rationalist may deploy against the radical empiricisms. Rather than only pursuing isolated a priori components in a given warrant, it may be fruitful to articulate aspects of warrant that necessarily invoke a priori cognitive *competences*. As a first approximation, we may take an a priori cognitive competence to be one that has the capacity to contribute to a priori warrant – given a non-empirical subject matter. However, even if the subject matter is such that all isolatable components of the warrant for a judgment about it are a posteriori, such warrant may nevertheless require the exercise of a priori competencies. The fact that a competence has the capacity to contribute to a priori warrant does not entail that it cannot contribute to a thoroughly a posteriori warrant – given an empirical subject matter.

A candidate example is warrant by deductive reasoning from a set of empirical premises to some unobservable conclusion. Given that the reasoning manifests an a priori cognitive competence, the conclusion-belief could not have been warranted without the exercise of an a priori cognitive competence. So, it appears that a thoroughly a posteriori belief – namely, the conclusion-belief – may be warranted only given the exercise of an a priori competence. Although the reasoning *contributes* to the warrant for the conclusion-belief, it is not quite an isolatable *component* of this warrant. After all, reasoning is often thought to simply transmit warrant from premise-beliefs to conclusion-beliefs.²⁰

My idea, then, is that a modest modal rationalist should not only seek isolated purely a priori components of the warrant for modal judgments but also seek to identify necessary a priori contributions to such warrant. A priori contributions require the exercise of an a priori cognitive competence. The analogy with reasoning's a priori contribution may be

²⁰ For further discussion of reasoning's contribution as warrant-transmitting and some qualifications to the idea that reasoning transmits warrant, see (Gerken 2013a, Chap. II)

imperfect because reasoning's a priori contribution to the warrant for the conclusion-belief is, in some sense, isolatable. However, it may be that some modal judgments necessarily require the exercise of an a priori competence although the competence in question does not invariably constitute an isolatable a priori contribution. But even if this is the case, the a priori cognitive competence may be necessarily required for warranting the relevant modal judgment. This alone does a great deal to set the relevant warrant apart from purely empirical warrants.

Simple perceptual warrants (i.e., entitlements) do not require the exercise of any a priori cognitive competence. Creatures incapable of a priori cognition may generate warranted (entitled) perceptual beliefs. In contrast, such creatures cannot generate warrant for certain modal judgments. This assumption does not hinge on the assumption that the creatures in question lack the relevant non-modal concepts. Even if we assume that a chimp has the concepts chimp and animal, it cannot warrant the belief necessarily chimps are animals. It is an important question whether the chimp can have the modal concept or some precursor to it. I will leave this question open. My conjecture is that if a chimp (or an evolutionary descendant) had barely acquired the concept necessity, it would not *ipso facto* be able to warrant the belief necessarily chimps are animals via a Kripkean modus ponens reasoning. The chimp(-descendant) might still lack some of the required a priori cognitive competences. A sufficiently sophisticated reasoning competence might be one such a priori competence. But the central point of interest for the present discussion is whether further a priori cognitive competences that pertain specifically to modality are required.

An interesting candidate for a distinctively modal a priori cognitive competence is the capacity to *understand* modal concepts as opposed to merely possess them. The exercise of the capacity for understanding modalities may be required in warranting even a posteriori modal judgments. Similarly, but more specifically, the ability to understand basic counterfactual properties of a given entity or kind may be required to warrant modal judgments about it. Given that understanding is an a priori cognitive competence that may also be applied to empirical subject matters, even modal judgments that are warranted a posteriori would require the exercise of an a priori cognitive competence. If so, an a priori contribution would distinguish the relevant modal cognition even if it did not constitute an isolated purely a priori component of it.

I have sketched this approach as an avenue of potential progress that I find more promising than the alternatives offered by ambitious modal rationalism and ambitious modal empiricism. But given that it remains to be developed, it would be premature to draw substantive conclusions about the consequences for an account of the nature of philosophical insights. However, a couple of remarks are in order as a manner of conclusion.

If some a posteriori modal cognition requires the exercise of an a priori cognitive competence, many philosophical insights involve a priori cognitive competences. So, if the consequent can be detached, the most radical empiricisms are ruled out. What is potentially more interesting for a positive account is whether something principled may be said about the *nature* of the a priori competences that are required for various philosophical insights. The first thing to notice, however, is that the range of a priori competences is rather varied. It involves at least various sorts of reasoning (deductive, inductive, abductive),

understanding (conceptual, substantial, linguistic) and self-knowledge (of content, of structure of phenomenal states as well as self-awareness). So, one thing that reflection on the various a priori competences indicates is that even a priori philosophical insights come in many forms and shapes. The phrase ‘philosophical insight’ is not referring to a cognitive achievement that may be uniquely characterized by reference to the cognitive competence involved in its generation. However, the present approach raises the question as to whether given cognitive achievement is a philosophical insight only if it requires the exercise of an a priori competence.

I am tentatively inclined to answer the question in the affirmative. But an affirmative answer does not provide a very distinctive characterization of philosophical insights insofar as many brands of cognition, including overtly empirical ones, require the exercise of an a priori competence. But since philosophical insights can hardly be characterized by domain, further reflection on competences may be fruitful. For example, a more controversial, but also potentially more illuminating question, is whether an *acquired* a priori competence is required for a cognitive achievement to amount to a philosophical insight. If the notion of acquisition is constrained to exclude innate competences, the constraint on philosophical insights would be more distinctive. The resulting constraint would amount to the following: *A cognitive achievement amounts to a philosophical insight only if it requires the exercise of an acquired a priori cognitive competence.*

This constraint is more restrictive insofar as it excludes certain basic kinds of basic self-knowledge as well as the conclusions of many lines of basic reasoning. Whether it is too restrictive or whether it should be specified even further strikes me as worth exploring.

Thus, both the preceding negative considerations and the sketch of a positive “competence-oriented” approach help develop an account of philosophical insights that is neither ambitiously rationalist nor ambitiously empiricist. Such an account emphasizes the ways in which philosophical reflection is constituted by a complex interaction of a priori and a posteriori cognitive competences that are applied both empirical and non-empirical subject matter.

8. Concluding remarks

As I have emphasized throughout, the present *critique* does not amount to a refutation of rationalism in the epistemology of modality. Nor does it amount to a refutation of a modestly rationalist picture of the nature of philosophical insights. I have not argued for, and I am not inclined to agree with, a pure or ambitious modal empiricism according to which there is no principled difference between the warrant for modal and non-modal judgments. Nor have I argued that all philosophical insights have an a priori component. However, I have considered an alternative way to specify how modal judgments may, at some level, be associated with a priori cognition. If this idea is tenable, both modal cognition and a priori cognition may continue to be regarded as important sources of distinctively philosophical insights.

But according to the present line of critique, the association between modality and a priori is not as close as ambitious modal rationalists claim. Hence, the ambitious methodological rationalist picture of the nature of philosophical insights, and the corresponding self-image for philosophers, is not plausible. Even philosophical insights

that are based on modal cognition are often more intertwined with a posteriori warrant than it might appear natural to assume.

Thus, I take the critical examination of ambitious modal rationalism to contribute to a better understanding of the complex nature of philosophical insights and their sources. However, the contribution primarily provides a critique of a compelling but overly ambitious rationalist approach, rather than a full alternative picture. A continued exploration is important because our prospects for generating philosophical insights will be improved if our pursuit of such insights is based on a realistic view of their nature and their sources.²¹

References

- Bonjour, L. 1998: *In Defense of Pure Reason*. Cambridge: Cambridge University Press.
- Burge, T. 1979/2007: Individualism and the mental. *Midwest Studies in Philosophy*, 4: 73-121. Reprinted in (Burge 2007): 100-150.
- Burge, T. 1982/2007: Other Bodies. In A. Woodfield (ed.), *Thought and Object*. Oxford: Oxford University Press. Reprinted in (Burge 2007): 82-99.
- Burge, T. 2003: Perceptual entitlement. *Philosophy & Phenomenological Research*, 67: 503-548.
- Burge, T. 2007: *Foundations of Mind*. Oxford: Oxford University Press.
- Byrne, R. 2005: *The Rational Imagination*. Cambridge, MA: MIT Press.
- Casullo, A. 2003: A priori justification. New York: Oxford University Press.
- Casullo, A. 2010: Knowledge and Modality. *Synthese*, 172: 341-359.
- Chalmers, D. 2012: *Constructing the World*. Oxford: Oxford University Press.
- Eaker, E. (forthcoming) Kripke's sole route to the necessary a posteriori. *Canadian Journal of Philosophy*.
- Fine, K. 1994: Essence and modality. *Philosophical Perspectives*, 8: 1-16.

²¹ The first ancestor of this paper was drafted in 2004 and informally presented at UCLA in early 2005 (for Tyler Burge, Ben Caplan, Matthew Lockard and Nikolaj Jang Pedersen). In 2006, I presented a successor at the Berkeley-Stanford-Davis Graduate Student Conference at Stanford University and benefitted from Chad Carmichael's comments. The paper lay dormant until the spring of 2011 when I followed Saul Kripke's seminar at CUNY. A brief exchange with Kripke and simultaneous discussions with Margot Strohminger (who had independently come upon similar ideas) encouraged me to redraft the paper. Most of the methodological material was in connection with the June 2012 conference on Philosophical Insights in London (and the paper divided itself into this one and a sister-paper (Gerken *M₃*)). I thank audiences at (Aarhus University 2012), the Danish Philosophical Association (Roskilde University 2012), the Modality and Modalities conference (University of Copenhagen 2012), the Philosophical Insights conference (Senate House, London 2012), the PSSA (Salt Rock Hotel, South Africa 2013), University of Edinburgh (2013), CUNY (Saul Kripke Center, 2013). I am grateful to John Collins and Eugen Fischer for organizing the conference and for helpful editorial comments. In addition to the above-mentioned people, I am grateful to Anders Schoubye, Asbjørn Steglich-Pedersen, Jens Christian Bjerring, Nikolaj Nottelmann, Asger Steffensen, Sara Kier Praëm and Jacob Busch and Julie Brummer. I apologize to those that I've forgotten over the years.

- Gerken, M. 2012a: Univocal Reasoning and Inferential Presuppositions. *Erkenntnis*, 76: 373-394.
- Gerken, M. 2012b: On the cognitive bases of knowledge ascriptions. In J. Brown and M. Gerken (eds.), *Knowledge Ascriptions* (pp. 140-170). Oxford: Oxford University Press.
- Gerken, M. 2013a: *Epistemic Reasoning and the Mental*. Palgrave Macmillan, Innovations in Philosophy.
- Gerken, M. 2013b: Internalism and Externalism in the Epistemology of Testimony. *Philosophy and Phenomenological Research*, 87: 532-557.
- Gerken, M. 2014: Outsourced Cognition. *Philosophical Issues (Noûs supplement)*, 24: 127-158.
- Gerken, M. (forthcoming a). Epistemic entitlement – Its scope and limits. In Graham, P. and Pedersen, N.J.L.L (eds.), *Epistemic Entitlement*.
- Gerken, M. (Ms). The necessary a posteriori and modal cognition.
- Jenkins, C. 2008: Modal knowledge, counterfactual knowledge and the role of experience. *Philosophical Quarterly*, 58: 693–701.
- Kafka, F. 1912/1994: Die Verwandlung. In Drucke zu Lebzeiten, (eds. Kittler, Koch and Neumann Frankfurt a. M.: Fischer: 113-200.
- Kant, I. 1998/1781: *Critique of Pure Reason*. (transl. Guyer and Wood). Cambridge: Cambridge University Press.
- Kripke, S. 1971/2011: Identity and necessity. Reprinted in *Philosophical Troubles* (pp. 1-26). Oxford: Oxford University Press.
- Kripke, S. 1972: *Naming and Necessity*. Cambridge, MA: Harvard University Press.
- Malmgren, A-S. 2011: Rationalism and the content of intuitive judgements. *Mind*, 120: 263–327.
- Soames, S. 2005: *Reference and Description*. Princeton, NJ: Princeton University Press.
- Soames, S. 2006: The philosophical significance of the Kripkean necessary a posteriori. *Philosophical Issues*, 16: 288–309.
- Schroeter, L. (forthcoming). Scrutability and epistemic updating. *Analysis Reviews*.
- Stang, N. 2011: Did Kant conflate the necessary and the a priori? *Noûs*, 45:443-471.
- Stephen Y. 2000: Textbook kripkeanism and the open texture of concepts. *Pacific Philosophical Quarterly*, 81: 98–122.
- Williamson, T. 2007: *The Philosophy of Philosophy*. Oxford: Blackwell.