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Correct Conceivability and its Role in the Epistemology of Modality

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The starting point of this paper is an argument to the conclusion that the definition of metaphysical possibility in terms of correct conceivability, conceivability informed by knowledge of relevant essences, found in Rosen (2006) is equivalent to a version of the essentialist definition of metaphysical necessity. This argument appears to show that correct conceivability is a notion of conceivability by name only and is therefore of no interest to epistemologists of modality. In this paper, I present the equivalence argument, explain the idealizing assumptions involved in it and sketch a version of the conceivability approach which weakens these assumptions in order to show that the notion of correct conceivability can still play a specific limited role in the epistemology of modality.

Keywords: epistemology of modality, modal epistemology, conceivability, correct conceivability, essence, metaphysical modality

1 The Conceivability Approach in the Epistemology of Modality

It seems clear *that* we can have knowledge of certain objective, non-epistemic possibilities. The empty sheet of paper on my desk could for example have been filled by notes which

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I could have taken earlier today. Perhaps the same can be said about certain objective, non-epistemic necessities: It seems that we know that same sheet of paper could not have turned out to be an abstract object. We could call at least the first and perhaps also the second of these two modal sentences a *Moorean modal truth*, a modal truth about which it would be absurd to say that we do not know it.¹ It is however much less clear *how* we manage to acquire knowledge of such modal truths. This is the central question of the epistemology of modality.

A traditional approach to the epistemology of modality which one finds both in Descartes and Hume, is the conceivability approach. Hume for example writes that: ‘Tis an established maxim in metaphysics, *That whatever the mind clearly conceives includes the idea of possible existence*, or in other words, *that nothing we imagine is absolutely impossible.*’ (Hume and Beauchamp (2000), p. 26.) Similarly, Descartes asserts that: ‘It must be noted that possible existence is contained in the concept or idea of everything that we clearly and distinctly understand[...].’ (First set of replies, Cottingham et al. (1991), p. 83.)

The conceivability approach remains one of the main approaches to the epistemology of modality.² It can be broken down into two central theses: First, that conceivability entails metaphysical possibility, and second, that if we can conceive of a state of affairs, we can thereby also know that it is metaphysically possible.

This general template is completed in different ways by different variants of the conceivability approach, the most important variable of course being the notion of conceivability. If this notion is left unspecified, we end up with a naive version of the approach which is at odds with the standard view about metaphysical modality, the non-epistemic, objective and mind-independent notion of modality which is the main focus in the epistemology of modality.

According to this view, which has prominently been articulated in Kripke (1980), there are necessary truths which are not a priori knowable. A well-known example is the sentence ‘Water is H₂O.’ This sentence is taken to express a metaphysical necessity, since it expresses a true claim about the chemical micro-structure of water and since natural kinds like water are individuated based on their chemical micro-structure. As a consequence, a substance with a different micro-structure cannot be water, or in other words, it is impossible for water to have any other micro-structure. This gives us a clear constraint on the realm of metaphysical possibilities.

¹The term ‘Moorean’ derives from G. E. Moore’s ‘Proof of an External World.’ See Moore (1993), chapter 9, p. 166. I have first heard Gideon Rosen apply the term to modal truths.

²See Vaidya (2015) for an overview including a detailed bibliography of recent works.

It is this constraint which poses a problem for the naive conceivability approach. According to its first thesis, conceivability entails metaphysical possibility. Without any qualification of what we mean by conceivability, there is no way to exclude the conceivable of metaphysically impossible states of affairs, such as that of water being an element. Given a naive, unqualified notion of conceivability, the conceivability of a state of affairs does not entail its metaphysical possibility. Conceivers are therefore prone to make modal errors, to draw wrong conclusions about the modal status of states of affairs based on their conceivability. Sophisticated versions of the conceivability approach accordingly qualify the notion of conceivability in order to secure the entailment between it and metaphysical possibility and to rule out modal errors.³

In this paper, I will focus on a version of the conceivability approach which has so far not been discussed much in the literature on the epistemology of modality, namely the correct-conceivability approach described, but not endorsed by Rosen in Rosen (2006).⁴ The two main aims of this paper are, first, to show that the correct conceivability-approach faces the objection that correct conceivability is a notion of conceivability in name only and that it is therefore of no interest to epistemologists of modality. The second main aim is to argue that the approach may still serve as the basis for an interesting proposal for an epistemology of modality. To pursue this aim, I will point out the epistemic problems posed by three idealizing assumptions about correct conceivability made by Rosen and sketch a theory which addresses them.

The remainder of the paper will be structured as follows. In section 2, I will introduce the basic idea of the correct conceivability-approach and introduce and respond to an objection which one may raise against epistemologies of modality which rely on knowledge of essence. In section 3, I present an argument which shows that Rosen's correct conceivability-based definition of metaphysical possibility is equivalent to a version of the essentialist definition of metaphysical necessity. In section 4, I discuss the epistemic problems introduced by three idealizing assumptions which are needed to run the equivalence argument. In section 5, I sketch a bifurcated version of the correct conceivability-approach which addresses these problems. Section 6 is a brief conclusion which summarizes the arguments of the paper.

³See e.g. Chalmers (2009) or Yablo (1993).

⁴See also the discussion of the notion of 'strong coherence' in Rosen (2002), the precursor-notion to that of correct conceivability.

2 Correct Conceivability

2.1 The basic idea

The correct conceivability-approach presupposes the Kripkean standard view of metaphysical modality and accordingly has to rule out modal errors, cases in which a state of affairs is conceivable, but not metaphysically possible. How this is done is nicely explained in the following mock-quote of Rosen's 'others':

'If the ancients could conceive a world in which water is an element, this is only because they were ignorant of certain facts about the natures of things. In particular, it is because they did not know what it is to be water. They did not know that to be water just is to be a certain compound of hydrogen and oxygen—that to be a sample of water just is to be a quantity of matter predominantly composed of molecules of H₂O. This is not to say that they did not understand their word for water. But it's one thing to understand a word, another to know the nature of its referent. The ancients could see no contradiction in the supposition that water is an element because they did not know that water is a compound by its very nature. But we know this; and given that we do, we can see that to suppose a world in which water is an element is to suppose a world in which a substance that is by nature a compound is not a compound. And that's absurd.' (Rosen (2006), pp. 22-23.)

The idea is hence that in order to avoid modal error, conceivability needs to be supplemented by knowledge of the natures, or equivalently, essences of relevant entities, in this case the essence of (the property of being) water. Equipped with this knowledge, the conceiver is able to detect that the assumption that water is an element together with essential truths about the relevant entity entails an absurdity.

The correct conceivability-approach hence gives us a simple and elegant explanation of why we are apt to make modal errors and a recipe for ruling them out. We tend to commit modal errors because we can conceive of states of affairs which are ruled out by relevant essences. To avoid these errors, we have to let our ability to conceive be guided by knowledge of the essences of relevant entities.

2.2 An objection to essence-based conceivability approaches and how it can be addressed

There is a rather obvious objection to the correct conceivability-approach which should be mentioned: The approach crucially relies the conceiver having knowledge of essence, but essence itself is a modal notion. Doesn't this mean that the notion of correct conceivability cannot answer the core question of modal epistemology, the question of how we can acquire modal knowledge?

One straightforward way to respond to this objection is to supplement the correct conceivability-approach with a matching epistemology of essence,⁵ but this is not the only response available. There are at least three further reasons for why we cannot conclude that the correct conceivability-approach, or more generally any approach which relies on knowledge of essence fails to address the core question of modal epistemology.

First, a lesson one may draw from Fine (1994)'s influential argument against the definition of essence in terms of metaphysical necessity is that the notions of metaphysical necessity and of essence are distinct. As pointed out in section 7 of Vaidya and Wallner (2019), this metaphysical conclusion leaves open two possibilities: One may either take essence to be a non-modal notion, or to be a broadly modal notion which is distinct from other such notions including metaphysical modality. If essence is instead assumed to be genuinely non-modal, then this suggests that there might also be a substantial epistemological difference between essence and modality. If there is such a difference, the objection loses much of its bite since in that case, the epistemologies of essence and of modality cannot be identified.

Second, even if we grant that essence is a broadly modal notion, the objection presupposes a specific narrow reading of the core question of the epistemology of modality, the question of how we can acquire modal knowledge. According to this reading, the core question is understood as asking how we can acquire modal knowledge, given that we have no prior modal knowledge. There is however a second reading of the core question, one according to which it concerns the ways in which a subject can justifiably pass from one piece of modal knowledge to another. These two readings give us two distinct questions which an epistemology of modality has to answer. Epistemologists of modality usually focus on the first of these two questions, but this does not mean that the second question is insubstantial or uninteresting.⁶ One may therefore argue that while

⁵See for example Lowe (2012), Hale (2013), ch. 11, Tahko (2016), Tahko (2017). For recent critical discussion of Lowe's position, see Horvath (2014) and Sgaravatti (2016).

⁶Vaidya and Wallner (2019) call the first question the *access question* and distinguish it from the *navigation question*, the question of how we can justifiably pass from knowledge of one kind of modality, e.g. logical modality, to knowledge of another kind, e.g. metaphysical modality. Their

the correct conceivability-approach does not answer the first question, it does offer us an answer to the second question.

Third, one may draw on a distinction drawn at the beginning of the paper to respond to the objection, namely the distinction between the assumption *that* we can have knowledge of, in this case, essence, and the question of *how* we can acquire this sort of knowledge. The correct conceivability-approach presupposes *that* we can have knowledge of essential truths. It arguably shares this presupposition with many of the existing standard positions in the epistemology of modality. As Roca-Royes puts it, ‘at some level—some times more explicitly than others—they all rely on a capacity for essentialist knowledge—arguably an exercised one—in their elucidations of possibility knowledge.’⁷ Accordingly, the correct conceivability-approach is not worse off in this respect than the other approaches Roca-Royes alludes to.

Given the availability of epistemologies of essence and based on the these three responses to the objection, I will here assume that there is room to say something of substance and interest about an approach to the epistemology of modality which focuses on the question of how we can have knowledge of modality, given that we have knowledge of essence.⁸ For the sake of exploring this kind of approach, I will hence from now on assume *that* we can have knowledge of essence, but not discuss the question of *how* we can have knowledge of essence. Epistemic questions about *how* we can have knowledge of metaphysical modality, given that we have knowledge of essence will take centre stage in sections 4 and 5 of this paper.

2.3 A preliminary characterization

As a first step towards making the correct conceivability-approach more precise, let me introduce the following preliminary characterization of the notion:

- (CC)** A proposition $\langle p \rangle$ is correctly conceivable if, and only if, we are not able to derive an absurdity from $\langle p \rangle$ together with propositions expressing the relevant essential truths.

I call this a preliminary characterization rather than a definition since CC contains two concepts which need to be further specified, that of absurdity and of a *relevant*

navigation question is hence more narrow than my second question.

⁷Roca-Royes (2017), p. 223. This point is argued for in detail in several of her papers (Roca-Royes (2010), Roca-Royes (2011a), Roca-Royes (2011), Roca-Royes (2012)) and furthermore also in Vaidya and Wallner (2019).

⁸There are of course other approaches of this kind in the epistemology of modality. See e.g. Hale (2013), ch. 11.

essential truth. More will be said about these two concepts later, but for the moment, we can already use CC as a stand in for a definition of correct-conceivability in order to introduce the crucial idea of the correct conceivability-approach:

(CCP) If the state of affairs expressed by a proposition $\langle p \rangle$ is correctly conceivable, $\langle p \rangle$ expresses a metaphysical possibility.

Together, CC and CCP tell us that if we cannot derive an absurdity from a proposition together with the relevant essential truths, then that proposition expresses a metaphysical possibility. These two theses need to be supplemented by a third to the effect that CCP is knowledge conducive, i.e. that if someone can correctly conceive the state of affairs expressed by $\langle p \rangle$, they thereby also know that it is metaphysically possible.

These principles already illustrate an interesting aspect of the correct conceivability-approach: It deviates from a common pattern exhibited by many approaches in the epistemology of modality. These approaches are often asymmetric in the sense that they privilege either the notion of necessity or the notion of possibility as being the predominant modal status present in our most basic modal knowledge. Those which rely on knowledge of essence usually privilege necessity, since it is traditionally assumed to be closely connected to essence. (See Hale (2013), p. 253.) CC and CCP explicitly rely on knowledge of essence, but nonetheless epistemically privilege possibility.

3 Correct Conceivability and Essential Truth

Why should we accept that correct conceivability entails metaphysical possibility (as CCP says it does)? In Rosen (2006), the correct-conceivability approach is introduced as the sufficiency-direction of a definition of metaphysical possibility. This appears to give us an excellent answer to this question: CC and CCP together give us a sufficient condition for metaphysical possibility, because that they do is part of an established definition of the latter notion.

The problem is that it is far from clear-cut whether we can call this definition ‘established’. While it is used in Miller (2009) to argue for a version of metaphysical contingentism, it is not accepted by Rosen himself who introduces it as part of a non-standard conception of metaphysical modality he attributes to his ‘others’. (See Rosen (2006), section 5, p. 24.) It hence seems that we still have some explaining to do to. In particular we have to address the following, more specific variant of our initial question: Do we have a good reason to think that correct conceivability entails genuine metaphysical possibility, rather than some deviant, non-standard possibility?

In this section, I will address this question by arguing that the correct conceivability-based definition of metaphysical possibility is equivalent to a version of the Essentialist definition of the same notion.⁹ The Essentialist theory of metaphysical modality, which has first been proposed by Fine (1994) and then further developed in Correia (2006) and Correia (2012), has by now established itself as a standard theory of metaphysical modality.¹⁰ The main motivation for the theory is Fine (1994)'s argument against the modal definition of essentiality.¹¹ Based on four well-known objections, which I will not discuss here, Fine argues that instead of defining essentiality in terms of necessity, we should take the latter to be a primitive notion and then use it to define the former. The core idea of this Essentialist definition of metaphysical necessity is that for a proposition to express a metaphysical necessity is for it to express an essential truth about some entities or to follow from a proposition which does. The following is a version of this definition:

(E \square) A proposition $\langle p \rangle$ is metaphysically necessary if, and only if, there are $\phi\phi$, such that $\mathfrak{B}(\phi\phi) \vdash \langle p \rangle$.¹²

(E \square) is a generalized variant of the definitions of metaphysical necessity proposed in Correia (2012) which is able to accommodate not only objectual, but also generic essentiality.¹³ In effect, the definition says that a proposition is metaphysically necessary if, and only if, it is logically entailed by the essential truths about some objects or features.

To run the equivalence argument, I will make three further assumptions about the correct conceivability-approach which are either explicit or implicit in Rosen (2006).

⁹ A different version of this argument is presented and used for a different purpose in Michels (2019).

¹⁰ See e.g. Hale (1996), Lowe (2008), Rosen (2010).

¹¹ This argument has been very influential, as e.g. pointed out in Roca-Royes (2011b), but has been criticised recently by a number of authors. See e.g. Correia (2007), Cowling (2013), Denby (2014), Gorman (2005), Livingstone-Banks (2017), Wildman (2013), Wildman (2016), Zalta (2006).

¹² To explain the symbols and formalism used: $\phi\phi$ plurally refers to either objects, features, or objects and features and objects, where 'feature' is used as an ontologically neutral term for whatever ontologically corresponds to predicates (properties or relations, tropes, universals, etc.). For the sake of simplicity, single objects are treated as (limiting cases of) pluralities. Accordingly, a plural quantification of the sort involved in E \square can in principle be satisfied by e.g. the number two, the number two and the number four, the number two and the feature of being a natural number, the plurality of all singleton sets, etc. (For more on plural quantification, see Linnebo (2014) or Oliver and Smiley (2013).) $\mathfrak{B}(\phi\phi)$ is the *basic nature* of $\phi\phi$, which is, following Correia (2012), p. 644 defined as the plurality of propositions α such that for some sub-plurality $\psi\psi$ of $\phi\phi$, α is basically essential to $\psi\psi$. The notion 'basically essential' is a primitive notion used to express essentialist claims such as 'it is basically essential to the xx that'.

¹³ The need for a notion of generic essence is argued for in Correia (2006) and acknowledged in Fine (2015).

First, I will follow Rosen in assuming that the ‘we’ in CC refers to an ideally informed conceiver (or a group of such conceivers; numbers don’t matter in this context). (See Rosen (2006), p. 23.) To be ideally informed in this context of course means to be ideally informed about the relevant essences. The motivation for this first assumption is to preclude modal errors of non-ideally informed conceivers such as that of the ancients who didn’t know that being a molecule is essential to being water.

Second, I will assume a trivial reading of ‘relevant’ in CC according to which all essences are relevant. This second assumption is not explicitly endorsed by Rosen, but it is required if one wants to accept, as Rosen does, that CCP and its converse together define an adequate notion of metaphysical possibility.¹⁴

Third, I will follow Rosen (2006), p. 23, footnote 9 in assuming that the ‘to derive an absurdity’ in CC means ‘to derive a logical contradiction’.

Given the first assumption and the third assumption, we can ‘drop the reference to the ideal conceiver altogether’ (Rosen (2006), p. 23) from CC, making correct conceivability simply a matter of derivability of a contradiction from the relevant proposition together with the relevant essential truths. Given the second and third assumption, if we let Σ be a plural constant referring to all propositions which express essential truths and use \vdash for the notion of logical entailment, \perp for a proposition expressing an arbitrary contradiction, and \cup for the plural equivalent to set-union,¹⁵ we can further specify CC in the following way:

CC* A proposition $\langle p \rangle$ expresses a metaphysical possibility if, and only if, $\Sigma \cup \langle p \rangle \not\vdash \perp$.

I will now argue that CC* is extensionally equivalent to (E \Box) by showing that its right-hand side is equivalent to the right-hand side of the definition of metaphysical possibility which we get from (E \Box) via the standard assumption that possibility is the dual of necessity:

(E \Diamond) A proposition p is metaphysically possible if, and only if, there are no $\phi\phi$, such that $\mathfrak{B}(\phi\phi) \vdash \neg p$.

¹⁴More precisely: According to the informal version of the correct conceivability-based definition, a proposition expresses a metaphysical possibility, if and only if, it is correctly conceivable, where this means that we cannot derive an absurdity from the proposition together with the essences. This definition has to take all essences into account in order to deliver an adequate notion of metaphysical possibility. If it didn’t, a proposition could turn out to be correctly conceivable given a particular amount of knowledge of essence, but to not be correctly conceivable given a larger amount. This would make the notion of metaphysical modality depend on the extent of the conceiver’s knowledge of essence, violating the standard assumption that this kind of modality is objective and independent of what we know.

¹⁵See Oliver and Smiley (2013), section 12.7 for a definition.

Which is equivalent to:

(E \diamond *) A proposition p is metaphysically possible if, and only if, for all $\phi\phi$, $\mathfrak{B}(\phi\phi) \nvdash \neg p$.

By first applying the standard assumption that $\langle p \rangle$ is logically entailed by a set of propositions Δ iff $\langle \neg p \rangle$ is inconsistent with Δ ¹⁶ to E \diamond , then replacing $\langle \neg p \rangle$ by $\langle p \rangle$ and applying the standard definition of relative consistency, according to which $\langle p \rangle$ is consistent with Δ iff $\Delta \cup \langle p \rangle \nvdash \perp$, we get:

(E \diamond **) A proposition p is metaphysically possible if, and only if, for all $\phi\phi$, $\mathfrak{B}(\phi\phi) \cup p \nvdash \perp$.

Since the quantified phrase ‘for all $\phi\phi$, $\mathfrak{B}(\phi\phi)$ ’ gives us exactly the same plurality of essential truths as Σ , E \diamond ** is equivalent to CC*.¹⁷

The argument shows that the sufficiency direction of CC* is supported by an established theory of metaphysical modality, the Essentialist theory developed by Fine and Correia. More specifically, it is equivalent to the sufficiency direction of the Essentialist definition of metaphysical possibility E \diamond . If one accepts this direction of the definition, one can hence answer the question about the correct conceivability-approach asked at the beginning of this section: Correct conceivability is sufficient for metaphysical possibility, because correct conceivability is nothing else than consistency with all essences.¹⁸

4 The Epistemic Costs of Securing the Conceivability-Possibility Link . . .

On the one hand, the equivalence argument answers a pressing question about the correct conceivability-approach, namely why it can rely on the notion of essence in order to establish that correct conceivability entails metaphysical possibility. On the other hand, it also casts doubts on the correct conceivability-approach’s viability as a position in the epistemology of modality.

¹⁶More precisely, by applying the equivalent principle that $\langle \neg p \rangle$ is not logically entailed by Δ iff $\langle \neg \neg p \rangle$ is consistent with Δ .

¹⁷Note that one might think that this equivalence puts the essentialist definition in a bad spot since CC* is based on a broader theory of metaphysical modality which is explicitly labelled as ‘non-standard’ in Rosen (2006). This worry is unfounded, since what makes that theory non-standard is not the correct conceivability-based definition itself, but rather an additional assumption about essential truths which is also part of the theory, namely the assumption that they are anti-Anselmian or Kantian. See Rosen (2006), p. 25 and see Michels (2019), section 3.1 for discussion.

¹⁸Note that the extensional equivalence between the two definitions is implicitly acknowledged in footnote 10, p. 24 of Rosen (2006) where Rosen states that the Non-Standard conception is inspired by Fine (1994) and remarks by Fine.

These doubts manifest themselves as two objections which are directly tied to the three assumptions needed to run the equivalence argument of the previous section. To repeat, these assumptions say that when establishing the correct conceivability of the state of affairs expressed by a proposition $\langle p \rangle$:

Idealization ... the subject who is able to deduce an absurdity from $\langle p \rangle$ together with the proposition expressing the relevant essential truths is an ideally informed conceiver.

Trivial Relevance ... the essences of all entities (i.e. of both objects and features) are relevant.

Absurdity as Contradiction ... ‘absurdity’ means nothing else than ‘logical contradiction’.

The general problem with these assumptions is that they interfere with the second main thesis of the correct conceivability-approach, which says that if one is able to correctly conceive a state of affairs, one also knows that it is metaphysically possible.

The first objection is based on the fact that given the three assumptions, both the notions of a conceiver and of conceivability can be completely eliminated from the correct conceivability-approach: The equivalence argument shows that they can be replaced by the notion of consistency with the essences. In other words, the first objection says that correct conceivability is a notion of conceivability only in name and that the correct conceivability-approach hence does not even qualify as a candidate position in the epistemology of (metaphysical) modality. To address this objection, I will argue that both conceivers and the notion of conceivability have a substantive role to play in the correct conceivability-approach. This will be the task of the first subsection of the next section.

The second objection arises even if one grants both that there is a role to play for conceivers and for the notion of conceivability in the correct conceivability-approach and that we can in principle have knowledge of essence. It says Trivial Relevance makes it impossible for us to have knowledge of what is correctly conceivable, because we can plausibly never know the essences of all entities. The objection hence targets the correct conceivability-approach at its very foundation. I will argue in the second subsection of the next section that this objection can be addressed by adopting a metaphysical assumption about essential truths.

5 ... And How They Might Be Avoided

5.1 A role to play for conceivers and conceivability

The response to the first objection which I will give in this subsection is based on two ideas. The first idea is to grant the point that the idealized notion of correct conceivability is not by itself fit to play the role it should play according to the second main thesis. As we have seen in section 3, given the three assumptions, correct conceivability boils down to consistency with the essences. Given Idealization and of course assuming the correct conceivability-approach, this seems acceptable, assuming that there are no fundamental boundaries to knowledge of essence which are impenetrable even for an ideally informed epistemic agent. This means on the one hand that we keep the second main thesis of the correct conceivability approach intact. On the other hand, however it also means that this thesis appears to be irrelevant to regular, non-ideal conceivers like ourselves.

The second idea is that the entailment from correct conceivability to metaphysical possibility nonetheless has a use for non-ideal conceivers: We are not and cannot become ideally informed conceivers, but we can still be *competent* non-ideally informed conceivers. I will shortly explain what I mean by that, but let me first point out that the correct conceivability-approach is not the only epistemology of modality which involves a condition like Idealization. The possibility-entailing notion of conceivability in Chalmers (2002) for example is also idealized in the sense that the underlying ability is only available to idealized epistemic agents. The response which I will now propose might for this reason also relevant to other conceivability-approaches which rely on idealized epistemic agents.

An ideally informed conceiver is just a regular conceiver stripped of some relevant limitations of regular conceivers regarding the information they may have. Since the relevant information in this case is known information about essences, the relevant limitation is that of having incomplete knowledge of essence. This limitation has two dimensions. First, it might concern what one might call *basic knowledge* of the essences proper of the relevant entities, i.e. their essential properties. The ancients mentioned in Rosen's quote from section 2 were led into modal error since they lacked basic knowledge of the essence of (the property of being) water.

Second, it might also concern *derived knowledge* of essences. It could for example be claimed that we are collectively limited in our knowledge of the essences of integers, since we don't have a proof or disproof of Goldbach's conjecture, and this might be true even if we had all relevant basic knowledge of their essences. The Mathematicians working

on the topic might just not have found the right path through what the axioms which capture these essences entail.¹⁹

An ideally informed conceiver has complete basic and derived knowledge of essence. As the modifier ‘complete’ suggests, knowledge of essence comes in degrees. Even though we ourselves can plausibly not become idealized conceivers, we can, presupposing of course that we can in general have knowledge of essence, have some basic knowledge and some derived knowledge of the relevant essences. In other words, we can have some degree of knowledge of essence and correspondingly some knowledge of what is correctly conceivable.

While I do not want to commit myself here to a particular general epistemology of essence, it might be useful to use one proposal for such an epistemology to illustrate this point. Following Hale we might (for the sake of illustration) assume that there are ‘cases in which knowledge of meaning suffices for knowledge of essence[, cases] in which we are able to give an explicit definition of a word (or an explicit analysis of the corresponding concept).’ (Hale (2013), p. 255.) Accordingly, we might say that we have basic knowledge of the essence of triangularity (or of the property of being triangular), if we know the explicit definition of being triangular, i.e. if we know that to be triangular is to have the shape of a polygon with three edges and three vertices. We might also have some derived knowledge of its essence, e.g. by knowing that the definition entails the isosceles triangle theorem, but we might lack other derived knowledge of its essence, e.g. that the definition entails the Pythagorean theorem. The geometrically non-ideally informed conceiver in this example would be in a position to rule out the metaphysical possibility of there being an isosceles triangle with unequal angles opposite its equal sides, but not in a position to rule out the metaphysical possibility of there being a right triangle which is such that the square of the length of its hypotenuse is unequal to the sum of the squares of the lengths of its two other sides.²⁰

The point of the example is to illustrate that while only an ideally informed conceiver has the basic and derived knowledge of essence needed to be able to correctly conceive all that is available to be correctly conceived, non-ideally informed conceivers can still have the more limited ability to correctly conceive some states of affairs. The more general point of my response to the first objection is hence that while genuine correct conceivability, correct conceivability of the highest degree, is indeed beyond our epistemic

¹⁹The distinction between basic and derived knowledge of essence of course parallels Fine (1995b)’s distinction between *constitutive* and *consequential* essence.

²⁰Note that Hale’s theory also extends to knowledge of essential truths about material objects and that the corresponding part of his theory relies on a different methodology, involving Kripkean principles of how we can gain knowledge of a posteriori necessities.

grasp, there is some overlap between what we can conceive of as non-ideal conceivers and what is ideally conceivable. Accordingly, we can approximate correct conceivability to some degree. The difference between full correct conceivability and this approximation is a difference regarding how much (basic and derived) knowledge about the relevant essences ideal correct conceivers can have compared to us mere non-ideal conceivers.

The amount of knowledge of essence is not the only thing which matters when it comes to approximating (ideal) correct conceivability. To be able to approximate an ideal conceiver regarding the correct conceivability of a state of affairs, a non-ideal conceiver also needs to have knowledge of the right essences in the first place. More precisely, in order to be able to know whether the state of affairs expressed by a proposition $\langle p \rangle$ is correctly conceivable, one needs to know all essential truths relevant to $\langle p \rangle$. To generalize this idea, we can call a non-idealized conceiver C *competent* regarding a set of ideally conceivable states of affairs, if, with respect to the propositions expressing these states of affairs, a) C 's ability to conceive perfectly aligns with that of an ideal conceiver and b) C is able to draw the relevant logical conclusions from what C can (correctly) conceive. Taking the distinction between basic and derived knowledge of essence into account, we can say that those conceivers are competent with respect to a set of propositions Δ who have all the relevant basic and derived knowledge of essence on which an ideal conceiver would rely on in order to check whether an absurdity is derivable given both Δ and the propositions which capture the relevant knowledge of essence.

The general idea underlying this response is to reconstruct the correct conceivability approach as a bifurcated view. First, it involves the idealized notion of correct conceivability which supports its instance of the first main thesis of the conceivability-approach, the thesis that correct conceivability entails metaphysical possibility. Second, it involves the non-idealized, sets-of-propositions-relativized notion of competent conceivability, which partly approximates the idealized notion and which in virtue of this fact is also metaphysical possibility-entailing, as far as it reaches.

Pace Rosen's remark that '[t]he ideally informed conceiver is simply an infallible detector of latent absurdity' (Rosen (2006), p. 23.), regular, non-idealized conceivers, and thereby also the regular notion of conceivability, have an important role to play within the bifurcated version of the correct conceivability-approach. They can acquire competency regarding sets of propositions, e.g. those about certain mathematical entities or structures. This means that the notion of correct conceivability, in its partial form as exercised by competent conceivers, can be used to support the second main thesis of the conceivability approach: We can know whether $\langle p \rangle$ expresses a metaphysical possibility by being competent conceivers regarding the class of propositions relevant to the the

state of affairs expressed by $\langle p \rangle$.

It is important to note that the correct conceivability-approach so conceived does not require competent conceivers to know that they are competent regarding the class of propositions, or so to say, the topic, relevant to their field of competency. Rather it is enough for them to be able to correctly conceive of the corresponding states of affairs. This requirement would be problematic, since if it were part of the correct conceivability-approach, then in order to be a competent conceiver, one would have to know that the truths about a particular topic which one knows are correctly conceivable, leading to an epistemic circularity. In this respect, the correct conceivability-approach resembles externalist approaches in epistemology.²¹

5.2 Trivial Relevance

In the previous subsection, I have suggested a bifurcated version of the correct conceivability-approach in which the notion of conceivability has a substantial role to play. The second objection threatens the approach in general, but also this particular version of it. It says that we are unable to rely on correct conceivability in order to gain knowledge of metaphysical possibilities, because this would require us to have knowledge of all the essences. The underlying thought is that in order to be able to correctly conceive of a state of affairs expressed by a proposition $\langle p \rangle$ that it is correctly conceivable, we have to be able to ascertain that there is no proposition expressing an essential truth about some entity or entities which entails the falsity of $\langle p \rangle$. The only way to exclude the existence of such undermining essential truths is to take absolutely all potential underminers, i.e. absolutely *all* essentially true propositions, into account. The assumption driving this objection is of course Trivial Relevance, the assumption that all essences are relevant to the correct conceivability of any proposition.

Fine's Essentialist framework offers a way to motivate this objection: In it, the canonical way to express claims about essences involves the primitive notion 'true in virtue of the nature of', which is represented by the indexed sentential operator ' \Box_F ' in Fine's formal work on the logic of essence (Fine (1995a), Fine (2000)). Formally, claims about essence take the form ' $\Box_F p$ '. Sentences of this form say that p is true in virtue of the nature of F , where F is a rigid predicate, a predicate which need not be meaningful and merely serves to rigidly pick out a particular plurality of objects. Since Fine places no syntactical restriction on the combination of a rigid predicate and a sentential variable involved in a sentence involving this indexed operator, it de facto allows for essentialist

²¹See e.g. Steup (2017), section 2.3.

claims in which a proposition is said to express an essential truth about an object which is not involved in that proposition. The objector might argue that since Fine's framework in principle allows us to express claims of the form which undermining essential truths would have to take, someone who accepts the correct conceivability-approach and works within the Finean framework has to accept Trivial Relevance to exclude them.

Given the distinction between the idealized and the approximative non-idealized notion of conceivability, we can distinguish two versions of the second objection. The first, which aims at the (idealized) notion of correct conceivability is an obvious non-starter, since we can safely assume that unlike us, ideally informed conceivers are capable of (both basically and derivedly) knowing the essences of all objects whatsoever. The second, more pertinent version aims at the notion of someone's being a competent conceiver regarding a particular topic. The idea is that in order to be a competent conceiver with respect to e.g. certain propositions about a particular artifact, we need not only be able to know the essence of that artifact, but also the essences of all other entities. As a result, competent conceivability is, the objection claims, just as unattainable for us as is full correct conceivability. This version of the objection hence poses a serious threat to the correct conceivability-approach as developed so far in this paper.

In the following I will argue that the objection can be addressed by adopting a metaphysical assumption about which essences are relevant to the essential truth of a proposition. The assumption is the following:

Internality The only essences relevant to the essential truth (or essential falsity) of a proposition are the essences of the entities involved in the proposition.

By entities, I here mean anything which can have an essence. In a broadly Finean framework, these are in particular objects, concepts, and features (i.e. whatever ontologically corresponds to predicates). The entities involved in a proposition are those which the proposition is about, either directly or indirectly. To give an example, the proposition *(Socrates is human)* is directly about Socrates and indirectly about (the property of) being human. I will shortly say a bit more about the notion of involvement.

Why does accepting Internality help addressing the second objection? Because the essences which are relevant to the truth or, more importantly in the context of the correct conceivability-approach, falsity of a proposition are at the same time also the essences which could, combined with the proposition, yield a contradiction. Internality hence ensures that competent conceivers only need to consider, and for that matter also need to only have knowledge of, the essences of the entities involved in the propositions which they test for consistency with the essences.

In light of what I have previously said about the Finean framework, Internality might seem like a very strong and potentially problematic assumption. This is of course a very vague worry, unless one can give concrete examples of cases in which Internality is violated. Here is an attempt at doing just that. Assume that the commonly discussed claim that humans essentially originate from their biological parents is true. Based on this (rather controversial, one has to say²²) claim, one might for example argue that the proposition \langle Phaenarete is a mother \rangle expresses an essential truth about Socrates, since it is essential to him that she is his mother and since the latter proposition entails that she is a mother.²³ At first sight, this appears to give us a counterexample to Internality, since the essence of Socrates is clearly relevant to the truth of the proposition, but Internality tells us that this is not so, since the proposition is not directly or indirectly about Socrates.

This purported counterexample arises only if one presupposes a strict reading of the notion of involvement which reads involvement off the syntactic form of the proposition. According to this reading, the only entities (objects, properties, or relations) involved in a proposition are those represented by its syntactic components. If we assume a Russellian theory of propositions,²⁴ the strict reading just says that only the entities which are contained in the proposition, in whichever way entities are contained in Russellian propositions, are involved in the proposition. But this reading is not mandatory. A proponent of the correct conceivability-approach can adopt a more relaxed reading of the notion which also allows that objects which are relevant to the truth or falsity of the proposition can be said to be involved in it.

One way of fleshing this out is to rely on the truthmakers of propositions and to say that the entities involved in the truthmakers of a propositions can be said to be indirectly involved in that proposition. In case of the proposition \langle Phaenarete is a mother \rangle this plays out as follows: This proposition has the logical form $\exists x(\text{Phaenarete is the mother of } x)$. This means that it is logically entailed by a proposition which directly involves Socrates, namely the proposition \langle Phaenarete is Socrates's mother \rangle . That second proposition has a fact involving Socrates as its truthmaker and by the assumption that any propositions which is logically entailed by another shares that proposition's truthmakers, it follows that \langle Phaenarete is a mother \rangle has a truthmaker which involved Socrates. So Socrates can be said to be indirectly involved in the proposition and ac-

²²See e.g. the discussion in Ballarin (2013), Robertson (1998), Roca-Royes and Cameron (2006), Rohrbaugh and deRosset (2004), Rohrbaugh and deRosset (2006).

²³Note that the proposition would in this case describe what one can, following Fine (1995b), call the consequential essence of Socrates.

²⁴See e.g. King (2017) for an introduction to this theory of propositions.

cordingly, we can say that it does not give us a counterexample to Internality.

The discussion of this purported counterexample illustrates a general strategy for addressing counterexamples to Internality, namely that of adopting a suitable notion of involvement in a proposition. In deploying this strategy, proponents of the correct conceivability-approach of course have to stay clear of at least one pitfall, namely that of adopting a trivial notion of involvement, according to which any object is involved in any proposition. But this seems to be no major hurdle. A trivial notion of this sort has to be avoided for independent reasons anyway, unless one wants to accept an extreme holism concerning what propositions expressing essential truths express essential truths about.

There is a second, more general worry one might have about Internality. The worry is that it seems problematic in general to rely on a metaphysical assumption such as Internality in order to address an objection to an epistemic theory.

In response, I want to first point out that this worry is based on an unrealistic view about what one might call the metaphysical purity of epistemic theories. The widely-discussed safety-condition for knowledge (see e.g. Pritchard (2007)) for example says that a belief cannot qualify as knowledge unless in all close possible worlds in which the subject which has the belief in the actual world continues to form the same belief about the relevant proposition in the same way, the belief continues to be true. (See Pritchard (2007), section 3.) Safety conditions along these lines are clearly not metaphysically pure in the envisaged, exaggerated sense, since they state conditions on the truth of certain propositions throughout certain possible worlds.

Second, it might be argued that this worry only presents a real problem for the correct conceivability-approach if Internality fails to be independently motivated. From a metaphysical point of view, one motivation for Internality is that it helps rule out what one might call cases of extraneous essential truths, cases in which a proposition which involves some entities expresses an essential true about some other entities, even though the former and the latter do not essentially stand in any relations. Fine (1995b), especially in section 4 goes to some lengths in order to rule out cases of this sort,²⁵ so this motivation appears to fit a version of the correct conceivability-approach which relies on Fine's Essentialist framework quite well.

²⁵See Koslicki (2012) for discussion.

6 Conclusion

The starting point of this paper was an argument for the extensional equivalence between the correct-conceivability-based definition of metaphysical possibility and the Essentialist definition of the same notion. This argument on the one hand supports the idea that correct conceivability is indeed sufficient for metaphysical possibility, but on the other appears to undermine the epistemic usefulness of the notion of correct conceivability. This is so because the argument involves three idealizing assumptions which have epistemically problematic implication about the second crucial claim of the correct conceivability-approach, the claim that we can have knowledge of the metaphysical possibility of states of affairs via our ability to correctly conceive of them. In the last two briefly sketched a bifurcated version of the approach in which the idealized notion of correct conceivability is supplemented by a proposition-relativized notion of being a competent conceiver. I cannot claim to have developed a fully worked out version of this view in the paper, but I hope to have at least made it plausible that the notion of correct conceivability may have a role to play in the epistemology of modality.²⁶

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²⁶I would like to thank the members of the Groupe d'Études en Métaphysique who were present at the December 2017 meeting of the group organized by Jean-Baptiste Guillon for their valuable comments and feedback, especially Alexandre Declos, Jean-Baptiste Guillon, Uriah Kriegel, Cyrille Michon, Pierre Saint-Germier, and the others whose names I unfortunately cannot remember. I am furthermore grateful to Sonia-Roca Royes for encouraging and very helpful written comments and to three anonymous referees who reviewed a previous version of this paper for *Synthese*. I have unfortunately not been able to address all the critical comments in this version of the paper, but I hope to be able to come back to some of them in future works.

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