

Conceivability and the Epistemology of Modality

By

Asger Bo Skjerning Steffensen

Dissertation

Submitted to Graduate School Arts and

Section for Philosophy and the History of Ideas,

Department of Culture and Society, Aarhus University

2015

Supervisors:

Asbjørn Steglich-Petersen, Aarhus University (Main supervisor)

Jens Christian Krarup Bjerring, Aarhus University (Co-supervisor)

Defense Committee:

Lars Bo Gundersen, Aarhus University (Chair)

Sònia Roca-Royes, University of Stirling

Nikolaj Nottelmann, University of Southern Denmark

Acknowledgements

I started out my PhD fellowship with the (naively) expressed goal of establishing a conceivability-based epistemology of possibility with two parts in my dissertation. In the first part, I would establish the theoretical framework for proposing conceivability as entailing metaphysical possibility, centered on an ideal subject. In the second part, I would expand the theoretical framework to incorporate non-ideal subjects. My aim was to incorporate proposed conceivability-based epistemologies in which we locally conceive ideally. This way, *globally*, conceivability would be a fallible epistemic guide to possibility while, *locally*, an infallible guide. As it happens, as I understand it, rarely does a dissertation take exactly the shape as envisioned in the beginning of a PhD fellowship. At least, mine did not. I have been continuously interrupted by things like reason and fact (not to mention matters of praxis in doing a PhD), and I think I am just about ready to start my PhD fellowship only now that it is ending. Now I have an idea of what I am supposed to do; and I think I can do it. Unfortunately, the question at this point is *did* I do it – have I produced a dissertation in trying to figure out what I was supposed to do as a PhD fellow. I hope to persuade the critical reader that I did – that this is a PhD dissertation (assuming failed dissertations are not dissertations), even if the goal reached is different from the one prospected.

I understand that this somewhat paradoxical feeling of being adequately knowledgeable only at the end of a PhD fellowship in order to do a PhD and write a dissertation is very normal. Perhaps it is, but it is still unsatisfying. On the other hand, I have heard it said that one doesn't finish a work in philosophy as much as one gets frustrated enough with it to put it aside or, perhaps, release it because of a deadline. Both seem true enough in my case. I am just about done, in more ways than one. No longer do I fear the deadline; I long for freedom. (This might be a naïve prospect once again).

I thank my two supervisors, Profs. Asbjørn Steglich-Petersen and Jens Christian Krarup Bjerring. Your advice and help form the foundation on which the dissertation stands. I thank the participants in the *Modal Epistemology Six Investigations* project for including me as a research fellow and for the discussions we have had in the project workshops. I also thank the great number of people that I have met and corresponded with about philosophy in the course of my PhD fellowship. At certain points, finding partners in crime and

seeing excellent philosophy in the making is what kept me interested in the subject. I thank Søren Emil Staugaard Bøye and Jeppe Allen Pedersen for reading and commenting on sections of the dissertation. Finally, I cannot say how much the love and support from Signe Brandt and Erik Brandt Steffensen means to me and have meant to me in the completion of this project. You give me reason to write (among the less important things) and I cannot thank you enough.

Table of Contents

PRESENTATION	1
<hr/>	
I. CONCEIVABILITY THESES AND OBJECTIONS	5
1. CONCEIVABILITY THESES	7
2. DISTINCTIONS AND OVERVIEW	17
3. OBJECTIONS TO CONCEIVABILITY THESES	33
4. CONCLUSIONS	61
II. DISCUSSION OF TWO CASES	65
5. THE STANDARD DILEMMA	65
6. DESCARTES VS. ARNAULD	68
PAPERS	101
<hr/>	
PRETENSE AND CONCEIVABILITY: A REPLY TO ROCA-ROYES	103
0. INTRODUCTION	103
1. TERMINOLOGY AND BACKGROUND	105
2. ROCA-ROYES' NON-STANDARD DILEMMA	109
3. THE STRUCTURAL PROBLEM FOR CONCEIVABILITY	120
4. CIRCULARITY AND CONCEIVABILITY _{BP}	127
5. A LESSON AND SOMETHING INCONCEIVABLE	135
6. A DILEMMA FOR ROCA-ROYES	139
7. CONCLUSIONS	147
CONCEIVABILITY EXTERNALIZED	153
0. INTRODUCTION	153
1. THE CONCEIVABILITY THESIS	155

2. STALNAKER ON INTENTIONALITY	159
3. STALNAKER ON EPISTEMIC ACCESS	163
4. OBJECTIONS AND REPLIES	168
5. CONCLUSIONS	194
INCONCEIVABILITY AS A GUIDE TO IMPOSSIBILITY	197
0. INTRODUCTION	197
1. (IN)CONCEIVABILITY AND (IM)POSSIBILITY	198
2. THE <i>PRIMA FACIE</i> CASE AGAINST INCON/INCON-E	200
3. THREE MODELS OF THE EVIDENTIAL ROLE OF INCONCEIVABILITY	205
4. CONCLUSIONS	213
REFERENCES	217

Presentation

You are reading the dissertation of Asger Bo Skjerning Steffensen submitted in May 2015 to Graduate School, Arts and Section for Philosophy and the History of Ideas, Department of Culture and Society, Aarhus University, in partial fulfilment of the requirements for the degree of Doctor of Philosophy at Aarhus University. The research in the dissertation is philosophical in nature and is conducted in accordance with the methods in analytical philosophy with a focus on conceptual and logical analysis. The dissertation is in the format of a collection of several academic texts, composed of a two-part presentation and three papers on the topic of conceivability and the epistemology of modality. The presentation is composed of, first, a general introduction to conceivability theses and objections and, second, a discussion of two cases – also objections – in the terminology of what has been introduced in the first part of the presentation. Following the presentation, I provide three papers. The three papers are written to stand independently of the presentation (since intended for publication in academic journals in shorter versions), wherefore they contain elements considered in the presentation of the dissertation. This is a consequence of the format of the dissertation – this is not a monograph. The third paper marks the end of the dissertation. References from the different parts of the dissertation are collected in a single list of references located after the third paper.

In more detail, I present in the first part of the presentation, *I. Conceivability Theses and Objections*, first, basic thoughts behind conceivability theses and offer what I take to be the motivation for considering conceivability in the epistemology of modality. I establish the difference between a conceivability thesis and an inconceivability thesis, that focus is (mostly) on the conceivability thesis, and I consider the notion of conceivability. Second, I offer demarcation principles with which we gain an overview of the different conceivability theses. I consider three demarcation principles: Universalizability, Reliability, and Accessibility. The first two demarcation principles concern the relation between conceiving and possibility: whether it holds in any circumstances or only in limited circumstances and whether the relation is one of entailment or is one evidential. The third demarcation principle concerns our epistemic access to conceivability facts: whether we have epistemic access to whether something is conceived of or not. I provide an overview of conceivability theses and categorize several conceivability theses on the branches the

demarcation principles outline, given that I have been able to find a proponent of a conceivability thesis on the branch and given that the branch is supportive of a conceivability thesis. Third, I list the objections levelled at the conceivability theses. Broadly, objections are the Benacerraf Objection, the Evolutionary-Reliabilism Objection, the Standard Objection, and the Uselessness Objection. The broad objections, especially the Standard and the Uselessness Objections, are umbrella terms that catch a number of similar objections. Also, these two broad objections are objections that target the conceivability-based epistemology of possibility specifically, whereas the first two are problems that concern epistemologies of modality more generally. As we shall see, sometimes an objection does not work against certain versions of the conceivability thesis and, surprisingly, what is known as the Standard Objection is no objection at all as it is originally stated. Fourth, I offer the conclusions of the first part of the presentation.

In the second part of the presentation, *II. Discussion of Two Cases*, I discuss two cases using the framework presented in part I. First, I discuss what is called the “Standard Dilemma” for conceivability theses, arguing it is unclear what the dilemma is and which conceivability thesis is supposed to be the target of the dilemma. Through the considerations of the first part of the presentation, we shall see that only a single branch of conceivability theses is really targeted, viz., theses that accept Universalizability, Reliability, and Accessibility, and the problem is really of a kind with the Uselessness Objection by Depth Charge, which is an objection I consider in the first part of the presentation. Second, I discuss the objection offered by Arnauld to Descartes which, as we see in part I, can be interpreted in a number of different ways. It appears to be interpretable in pretty much every way of the Standard and Uselessness Objections. I propose Arnauld is offering a Uselessness Objection by Confusion and argue that Descartes fails to reply to the objection satisfactorily. I argue the point through close consideration of the exchange between Arnauld and Descartes in the *Meditations*.

The first paper, *Pretense and Conceivability: A reply to Roca-Royes*, presents a problem and a dilemma for Roca-Royes’ Non-Standard Dilemma for conceivability-based epistemologies of *de re* modality in which she concludes that conceivability cannot be the whole story of our *de re* modal knowledge. First, the structural problem that Roca-Royes finds in the conceivability method in failing to establish *de re* principles is generalized to show that the conceivability method fails to establish any principle unless presupposing it.

The generalized result suggests a detachment of Roca-Royes' notion of conceivability from conceivability proper. Second, a dilemma is presented based on the fact that we find the nonidentity inconceivable under pretense of identity between something named twice. On the one horn, conceivability proper is shown sufficient to be the whole story of our knowledge of one *de re* principle, at least, primitively or by brute fact; on the second horn, conceivability improper is shown sufficient to be the whole story of our explicit knowledge of one *de re* principle, at least, by rendering explicit what we implicitly know. It is concluded that conceivability – proper or improper – is able to be the whole story of our explicit *de re* modal knowledge of one *de re* principle, at least, namely *Necessity of Identity*. Finally, it is concluded that Roca-Royes does not show conceivability proper evidentially unreliable as a guide to possibility, even if conceivability improper is.

In the second paper, *Conceivability Externalized*, an externalist conceivability-based epistemology of possibility is presented. Inspired by Stalnaker's theory of intentionality and his thoroughgoing externalist framework, the conceivability thesis is quite unlike others in the literature: according to the thesis, conceivability entails metaphysical possibility in any circumstances, while the conceiving subject does not have epistemic access to whether what the subject claims to conceive of is in fact conceived of. The subject may even absurdly misdescribe his conceptions. This may seem like a problematic, perhaps even self-contradictory, conceivability thesis. However, in light of a number of objections to conceivability-based epistemologies of possibility, it is argued that the externalist conceivability thesis is superior to its contenders.

While debate is live on the conceivability-based epistemology of possibility, there is hardly any debate on the inconceivability-based epistemology of impossibility. In the third paper, *Inconceivability as a Guide to Impossibility*, it is argued that the difference is not well-motivated – there is room for debate in either case. The third paper considers inconceivability as an epistemic guide to impossibility, aiming to explore and add support to the underexplored thesis that one can justify beliefs about the impossibility of *P* on the basis of the inconceivability of *P*. Often the inconceivability thesis is deemed implausible from the get-go. For instance, it is argued that cognitive limitations may be a better reason for a subject to find *P* inconceivable than the impossibility of *P*. It will be argued that many reasons for denying an inconceivability thesis lies in aligning

the thesis with a conceivability thesis but that there are reasons to consider the epistemological methodology in different terms, suggesting that current lines of objections to the inconceivability thesis do not support its offhand rejection. Three models are offered according to which we may justify beliefs in impossibility on the basis of inconceivability.

I. Conceivability Theses and Objections

In the literature on epistemology of modality there is a thesis stating that our imaginative capacities enables us to know of absolute or metaphysical modality – the conceivability thesis. From times less recent to the current debate, the thesis has undergone transformations and different versions have been offered. In the philosophical opinion at large the thesis has gone from being considered “an establish’d maxim in metaphysics”, as Hume writes in the *Treatise* [1738] (2007, 26), to being considered something of an anachronism to be avoided in serious epistemological thought. At least, it seems that criticizing the thesis is more fashionable in the current debate than defending conceivability as anything but one psychological heuristic device among others with which we form beliefs about modality.

In this presentation, I offer a way of demarcating various conceivability theses in a way that offers a concise overview, and I try to provide an overview also of the different objections that have been and are levelled at the conceivability theses. A number of the objections are problems for an epistemology of modality generally. I focus on the objections that are peculiar to the conceivability theses: the Standard Objection and the Uselessness Objection.

Consider the argument for possibility based on conceivability an argument to a conclusion based on two premises:

- (1) that something, e.g., a blue swan, is conceived of;
 - (2) that what is conceivable is possible;
-
- (3) that something, e.g., a blue swan, is possible.

The Standard Objection targets the second premise in the argument for possibility from conceivability – typically, by offering counterexamples to the relation between conceivability and possibility in the form of conceivable impossibilities. The Uselessness Objection targets the first premise in the argument for possibility from conceivability – typically, by arguing that the conceiving subject cannot establish that she has non-confusedly conceived of what is claimed as being conceived of, whereby justification for the

conceivability claim is lost (such that the second premise, the metaphysical thesis about the relation between conceivability and modality, is *useless* as an epistemological guide to modality, even if true).

Often, the second premise is simply understood as the conceivability thesis, but it need not be considered in terms of entailment (more below – for ease of exposition at this early point, I shall speak of the conceivability thesis as one that accepts entailment). Further, by focusing on the metaphysical part of the conceivability thesis, the epistemic part – the first premise – tends to be lost in sight. Hopefully, the presentation clarifies conceivability theses and objections both to those that level criticism against conceivability theses and to those that defend a conceivability thesis. Also, the presentation might offer some guidance on the debate to those that set upon themselves either task, so as to not simply regenerate arguments in new publication.

In more detail, in the first part of the presentation, I present, first, basic thoughts behind conceivability theses and offer what I take to be the motivation for considering conceivability in the epistemology of modality. I establish the difference between a conceivability thesis and an inconceivability thesis, that focus is (mostly) on the conceivability thesis, and I consider the notion of conceivability.

Second, I offer demarcation principles with which we gain an overview of the different conceivability theses. I consider three demarcation principles: Universalizability, Reliability, and Accessibility. The first two demarcation principles concern the relation between conceiving and possibility: whether it holds in any circumstances or only in limited circumstances and whether the relation is one of entailment or is one evidential. The third demarcation principle concerns our epistemic access to conceivability facts: whether we have access to whether something is conceived of or not. I provide an overview of conceivability theses and categorize several conceivability theses on the branches the demarcation principles outline, given that I have been able to find a proponent of a conceivability thesis on the branch and given that the branch is supportive of a conceivability thesis.

Third, I list the objections levelled at the conceivability theses. Broadly, objections are the Benacerraf Objection, the Evolutionary-Reliabilism Objection, the Standard Objection, and the Uselessness Objection. The broad objections, especially the Standard and the Uselessness Objections, are umbrella terms that catch a number of similar objections. Also, these two broad objections are objections that target the conceivability-

based epistemology of possibility specifically, whereas the first two are problems that concern epistemologies of modality more generally. As we shall see, sometimes an objection does not work against certain versions of the conceivability thesis and, surprisingly, what is known as the Standard Objection is no objection at all as it is originally stated.

Fourth, I offer the conclusions of the first part of the presentation.

1. Conceivability Theses

1.1. Basics of the conceivability thesis

The thoughts behind conceivability-based epistemologies of possibility are a tripartite thesis where none of the parts are obviously true and may be put under rigorous, critical research:

- (i) Conceiving of a scenario is a psychological heuristic device for forming beliefs about possibility,
- (ii) Conceivability is a reliable belief forming method for beliefs about possibility (or conceivability warrants or justifies beliefs about possibility), and
- (iii) Conceivability stands in relation to metaphysical possibility – either an entailment relation or an evidential relation.

A conceivability thesis might state that if a subject conceives of some scenario, it appears to the subject that the scenario is possible and that the proposition describing the scenario is possibly true.¹ If the subject were to deliberate on the matter, she would believe the scenario possible, informed merely by her ability to so conceive. And she would be justified in her belief since conceivability is related somehow to modality. This is couched in theoretical terms that the subject conceiving need not be aware of. In simpler terms, if Thomas in the comfort of his own thoughts conceives of his rather sinister sister dunking a swan in a can of blue

¹ If you wish, replace ‘scenario’ with ‘situation’, ‘centered world’, or ‘state of affairs’. I take them as being synonyms (in the context) and use them interchangeably, though I shall predominantly use ‘scenario’. The exception is in the paper proposing a Stalnaker-inspired conceivability thesis. Here I use ‘situation’ in accordance with Stalnaker’s terminology.

paint, he is moved – upon deliberation – to believe blue swans possible. If Thomas were then asked why he believes it possible, he would point to his ability to conceive of the scenario (and perhaps the appearance of possibility provided by the conception). Thomas would then have a justified – or whatever the notion used in (ii) – true belief about the metaphysical possibility of blue swans based on his ability to conceive of a blue swan.

Already questions come to mind. For instance, Thomas' conclusion might seem unwarranted based on the conceived scenario. But let me set all save one question aside and consider: why do we even consider conceivability in the epistemology of modality?

1.2. Motivation for conceivability

First, there is an easy answer as to why we consider conceivability within the epistemology of modality: for historical reasons. It so happens that some figures in the history of philosophy considered conceivability a good or even infallible epistemic guide to absolute (what we take to be metaphysical) modality, historical figures we continue to consider relevant today, e.g., Descartes [1641] (1984) and Hume [1738] (2007), but also much more recent figures such as, e.g., Wittgenstein (1922) – though he seems to be considering logical modality.

Second, there is what I consider the real (or most important) motivation: the motivation for considering conceivability – also, I conjecture, the motivation behind (some of) the historical figures' conceivability theses – is that our best practice of revealing facts about the world, our senses and ultimately natural science, disappoints us in our endeavors of revealing facts about modality. We learn all about what is actually the case from empirical science: there is an apple, it is green, it is acidic, it contains sugar, etc.; and, so, we learn that all this is possible (cf. Hale 2003). We learn this formally by the *Axiom of Possibility* ($P \vdash \Diamond P$) in a modal logic at least as strong as T (a modal logic that accepts reflexivity), informally by common sense. This knowledge of modality derived from actuality is standardly called “non-interesting” while the knowledge it is derived from is standardly called “non-modal” (cf. Hale 2003, Jenkins 2010a), though this seems to me somewhat a misnomer – the possibility of a “non-modal,” empirical fact is contained in the information of the fact since strictly weaker (cf. Bueno, Shalkowski 2015). However, from what science teaches us of the

apple, we learn neither whether the apple possibly is not green, possibly is not acidic, or possibly does not contain sugar nor whether the apple necessarily is green, acidic, and contains sugar; in turn, called “interesting” modal knowledge. This is stuff we want to know about, this is stuff we think we know something about, and it disappoints us that our most successful epistemological method will not deliver – perhaps is incapable of delivering – the means of our supposed knowledge of interesting modal facts. So, in order to come to know how we know some of these propositions true (or know them false), we turn away from empirical inquiry onto the deviance of our imagination.²

Note that, ultimately, conceivability is neutral between empirical and rational inquiry – conceivability (and the imagination generally) is a tool available on any epistemological account. What is input to a conceivability thesis need not be only content that somehow does not depend on empirical inquiry (other than enabling experiences) – scenarios conceived of may be more or less reality-oriented (cf. Williamson 2005, 2007b, 2007a, and forthcoming).

I call the imagination deviant since it enables us to consider things that we do not meet in the actual world, centaurs, say. Of course, it is a matter of some contention whether the imagination is absurdly deviant, e.g., whether we can conceive of both centaurs and no centaurs in a scenario. That is, whether we can conceive of impossibility, e.g., contradictions to the law of noncontradiction. This is a question that shall concern us later (specifically, in 3.3.1. *Conceivable Impossibilities*). For now, let me set it aside and offer more basic information on the conceivability thesis and another thesis it should not be conflated with, the inconceivability thesis.

1.3. *The conceivability thesis and the inconceivability thesis*

In introducing the conceivability thesis, I said that the conceivability thesis deals in forming beliefs about modality. Let me restate that. The conceivability thesis properly construed deals only in possibility.

² Whether the description of our senses and natural science as failing to provide us with interesting modal knowledge is correct, I will not consider. Clearly, some disagree. See Legg (2012) and Legg and Franklin (forthcoming) on perceiving necessity and Bueno and Shalkowski (2015) and Fischer (2011) on deriving interesting possibility from science, though probably not “extraordinary” interesting modal knowledge (cf. van Inwagen 1998).

Unfortunately – even while the distinction has been emphasized before (e.g., in Casullo 1979) – the conceivability thesis is sometimes conflated with an inconceivability thesis or is thought to entail one such. According to the inconceivability thesis, there is a link between inconceivability and impossibility. It must be stressed that a conceivability thesis does not entail an inconceivability thesis or vice versa and, so, that one can accept one thesis while denying the other. Consider a formalization of the theses (which I do not consider authoritative³; it merely serves the purpose of illustrating their disconnectedness. ‘CON’ is short for the conceivability thesis, ‘INCON’ for the inconceivability thesis):

- (CON – “if P is conceivable, P is possible”): $CP \rightarrow \Diamond P$
- (INCON – “if P is inconceivable, P is impossible”): $\sim CP \rightarrow \sim \Diamond P$

Clearly, they are not aligned and neither are their contrapositives:

- (Contrapositive of CON – “if P is not possible, P is inconceivable”): $\sim \Diamond P \rightarrow \sim CP$
- (Contrapositive of INCON – “if P is possible, P is conceivable”): $\Diamond P \rightarrow CP$

Rather, the inconceivability thesis is the inverse of the conceivability thesis.

While the conceivability thesis is perhaps thought of as an anachronism in the current debate, the inconceivability thesis is considered simply false – and rather obviously so at that – if it is considered at all. For instance, Eynine (2008, 669) declares that the inconceivability thesis is a lot less plausible than the conceivability thesis: “Why should we think that conceivability gets all the way to the bottom of possibility? Why should there not be things that are possible that we cannot conceive [of]? And if so, how can we conclude from the fact that something is inconceivable that it is necessarily not the case?” Eynine is here

³ See for instance Jenkins’ (2010b) first remark in her response to Sturgeon (2010) on why the material conditional (or biconditional) is inapt to capture an epistemological significant connection between the *a priori* and modality. Sturgeon is criticizing an infallible epistemological connection between the *a priori* and metaphysical modality, calling such a connection magic with extra magic on top (pending the version of the infallible connection), a critique that comes close to the objections that I consider in 3.1. *The Benacerraf Objection* and in 3.3.2. *Formal Distinction*.

targeting the contrapositive of the inconceivability thesis. But the inconceivability thesis itself can also be targeted. For why believe that my inability to conceive of P entails that P is impossible? Very likely, it merely shows the ineptitude of my imaginative capacities. Consider the Fanatic Barcelona Fan who cannot conceive of Barcelona losing a football match. Clearly, it is possible for Barcelona to lose a football match. Let me just note that I do not consider the inconceivability thesis refuted. For instance, an inconceivability thesis centered on an evidential relation between inconceivability and impossibility seems unharmed by the counterexamples. The evidential thesis might even be compatible with a great number of counterexamples, as long as there are not so many counterexamples so as to render the thesis evidentially unreliable. However, I have yet to see the inconceivability thesis convincingly defended, perhaps because many conceivabilists favor the contradiction principle to be introduced shortly.⁴

It should be made clear that the conceivability and inconceivability theses are distinct theses and that a charge against one need not be a charge against the other. That must be demonstrated in each case. Why the theses are sometimes conflated have two reasons, I think. First, some conceivabilists, i.e., philosophers that accept a conceivability thesis, also accept the inconceivability thesis while appearing to accept them for the same reasons (e.g., Yablo 1993).⁵ In turn, this suggests that they can be levelled with the same objections. Second, there is a metaphysical principle that reduces the distance between the theses while, importantly, it still leaves a gap, a principle that many conceivabilists would or do agree to: the contradiction principle. This principle states that whatever is contradictory is metaphysically impossible.^{6,7} By the contrapositive of the

⁴ I explore and add support to the inconceivability thesis in the third paper of the dissertation, *Inconceivability as a Guide to Impossibility*. In the paper, focus is not on the principle of contradiction.

⁵ The term ‘conceivabilists’ is adopted from (Roca-Royes 2011), but here limited to only proponents of the conceivability thesis. Roca-Royes includes inconceivabilists, proponents of the inconceivability thesis, as conceivabilists. I think that is a mistake, though quite an intentional one at that by Roca-Royes. See the third paper of the dissertation, *Pretense and Conceivability: A reply to Roca-Royes*.

⁶ This is a rendition of the Contradiction Principle as described in Lightner (1997). See also discussion of the principle in Nathan, Valberg (1982).

⁷ Of course, this can be read as having a simple counterexample: there are databases that contain inconsistent, contradictory content (cf. the example of the unfortunate student that cannot get a graduation certificate because of a database inconsistency offered by Bueno, Shalkowski 2009, 311f). According to the principle of contradiction this is metaphysically impossible but since actual, by the *Axiom of Possibility*, the contradiction is metaphysically possible. We arrive at a contradiction and the principle must be denied. I think the reader will be able to interpret the principle more charitably. Claims about the world may be contradictory without the world itself being contradictory. The principle of contradiction concerns the possible states of the world not possible claims about the world. See Sibajiban

conceivability thesis, anything impossible is inconceivable. Thus, the conceivabilist has reasons for accepting a thesis that might be conflated with the inconceivability thesis: if something can be shown to be contradictory, it is impossible. The conflation in this case might be due to mistaking the terms ‘contradictory’ and ‘inconceivable’ as synonyms or by inquiry of contradiction in *P* starting out by finding *P* inconceivable.

In the dissertation, I focus mostly on the conceivability thesis. At least, this is true of this presentation. I do not deny, however, that many issues raised for and against the conceivability thesis have an equal expression for and against the inconceivability thesis. For instance, the demarcation principles I offer later, and by which we shall consider the conceptual space of conceivability-based epistemologies of possibility, quite likely could be used as carving tools (edited to fit) with which to consider conceptual space of inconceivability-based epistemologies of impossibility. This will be a project for another occasion.

1.4. The notion of conceivability

I consider ‘conceivability’ an umbrella term for two forms of conceiving: imagining and, for lack of a better term, conceiving in the narrow sense. This is perhaps the standard definition now thanks to Gendler’s and Hawthorne’s (2002) introduction to their anthology *Conceivability and Possibility*. The distinction between the two forms of conceiving goes on the *content* of a conceived scenario. All sensory or phenomenal content in a conceived scenario can be said to be imagined while any other content can be said to be conceived in the narrow sense.⁸ The ‘other content’ is meant to capture conceptual or non-phenomenal content. For instance, in an example offered by Kung (2010), imagining Bunny and Nixon as friends involves some sensory content: the fluffy white bunny and the figure of Nixon; as well as some conceptual content: that Bunny and Nixon are friends and that the human figure is Nixon. The former is imagined, the latter conceived in the

(1964) for an interesting paper that centers on issues concerning contradiction and inconceivability (interpreted as a matter of thinking) that resonates with the current considerations.

⁸ Perhaps among the phenomenal content we should posit *emotive* (or affective) content, though it seems to me that conceiving of a scenario is more so the *cause* of emotive responses than one directly conceives of emotive content in a scenario. Emotions might play a larger role such that what is conceivable for a subject depends, in part, on the emotional state of the subject (cf. Gendler 2000). For views on the relation between imagination and emotion see many of the papers in (Nichols 2006). See also (Morton 2013).

narrow sense. The example should not suggest a two-part procedure of conceiving, one of mental imagery and one of conceptual embellishment or vice versa. Rather, a scenario is constructed in the imagination that has both contents or, perhaps, only one.

Restated slightly, imagining is a form of mental representation of *P* that involves only mental imagery (sensorily or emotively “perceiving *P* in the mind’s eye”), or, minimally, is a form of mental representation of *P* where the justification of *P* in the conceived scenario does not depend on conceptual content.⁹ Consider a cat on a mat. This is easily imaginable. I imagine a black and white cat on a brown mat in the sun, purring. Obviously, the imagined content is describable in words – I just did so – but this does not mean that the content of the imagined scenario itself consists of words or concepts. Conceiving in its narrow sense is a form of mental representation that involves only words or concepts, or, minimally, is a form of mental representation where the justification of *P* in the conceived scenario does not depend on imagistic or emotive content. Consider the financial market crashing. In this case, even if you construct mental imagery in the conceived scenario, of brokers throwing papers into the air in frustration, say, the work of making it the case that the financial market is crashing in the scenario seems to be done solely by conceptual content.

It has been remarked a number of times that there are certain scenarios that cannot be imagined for one reason or another while it can be conceived in the narrow sense. For instance, Descartes in the *Meditations* [1641] (Descartes 1984) says that our imaginative capacities are such that we cannot imagine a chiliagon, a 1000 sided polygon, in a way that allows us to distinguish it from some other many sided polygon held in imagination. In both cases, it is but confused imagined representations. We are, nevertheless, able to consider the chiliagon in our “pure intellect”, as Descartes has it. Whether Descartes’ holding something in “pure intellect” is exactly similar to conceiving in the narrow sense is too broad a question to settle here in any

⁹ According to entries in the *Stanford Encyclopedia of Philosophy* to *imagine* something is to “form a particular sort of mental representation of that thing. [...] Imagining *S* does not require (that the subject consider) *S* to be or have been the case, [...] and] imagining *S* requires some sort of quasi-sensory or positive representation of *S*” (Gendler 2011). In turn, *mental imagery* is “*quasi-perceptual experience* [which] resembles perceptual experience, but occurs in the absence of the appropriate external stimuli. It is also generally understood to bear *intentionality* (i.e., mental images are always images of something or other), and thereby to function as a form of mental representation. [...] Very often, imagery experiences are understood by their subjects as echoes, copies, or reconstructions of actual perceptual experiences from their past; at other times they may seem to anticipate possible, often desired or feared, future experiences” (Thomas 1997b).

acceptable way.¹⁰ But I submit that they are distinct notions. For, further, while Descartes has it that we can consider certain properties respectively, uniquely in “the pure intellect”, I conjecture that we can neither imagine *nor conceive in the narrow sense* of a scenario involving only that respective property. Consider the chiliagon once more. If we were to conceive of a scenario involving a chiliagon, it seems it must involve more than the property *chiliagon* held in “pure intellect”. Namely, there must be *something* which along with the chiliagon shape has other properties or, at least, there must be some bundle of properties of which the chiliagon shape is but one and, e.g., color and extension are others. As such, while we may in the “pure intellect” consider a single property, we cannot imagine it and, I propose, neither can we conceive of it in the narrow sense, suggesting that the two notions are distinct. Of course, I may be wrong about conceiving of *P* in the narrow sense and considering *P* in “pure intellect” being distinct notions. If indeed the notions are equivalent, I propose that it is the fact that we are conceiving of *scenarios* in which *P* is the case that we cannot conceive in the narrow sense of a single property – the conceiving of a scenario requires more than simply a single property (more below, in 3.3.1. *Conceivable Impossibilities* and in 6. *Descartes vs. Arnauld*).

Relatedly to considerations about conceiving of a single property, it appears that there are properties that are symmetrically co-instantiated, asymmetrically co-instantiated, and symmetrically co-instantiation-excluding in a scenario which also influence what we can conceive of. Of the first type of properties, consider triangular and trilateral. If something is triangular it is trilateral, and we cannot conceive of a triangular object in a scenario without it also being trilateral. Of the second type, consider chiliagon and figure. If something is a chiliagon, it is a figure. At the same time, something can be a figure, say, a circle, without it being a chiliagon. So, we cannot conceive of a chiliagon in a scenario that is not a figure while we can conceive of a figure in a scenario which is not a chiliagon. Finally, of the third type, consider chiliagon and circle. If something is a chiliagon it cannot be a circle, and we cannot conceive of a circular chiliagon (a square circle is a more familiar case). The relations here described seem to be conceptual in nature. That is,

¹⁰ More shall be said in part II of the presentation, in 6. *Descartes vs. Arnauld*, where I discuss Arnauld’s objection to Descartes.

they are due to our concepts: our concepts of circle and chiliagon are such that ascribing both to an object is contradictory, rendering the scenario inconceivable.¹¹

In many cases it is conceivability in the broad sense that figure in conceivability theses (e.g., in Yablo 1993, Chalmers 2002, and Gregory 2004). I will not distinguish theses with respect to their notions of conceivability, i.e., the epistemic state being referred to by ‘conceivability’. Rather, I will hold the notion of conceivability fixed to the broad sense of conceiving and differences in this dimension will be considered as differences regarding which subject matter of conceived scenarios the conceivability thesis is applicable to. Some proponents of conceivability theses regard the respective conceivability thesis applicable to all conceived scenarios or subject matters. Others regard the thesis only applicable to certain conceivable scenarios or subject matters, say, those that only feature imagined content (e.g., Kung 2010).

Finally, let me note two (I believe) important features of the notion of conceivability. The first goes directly on the psychology of conceivability; the second picks up on the character of the content one conceives of. First, as described by Yablo (1993) and hinted at in *1.1. Basics of the conceivability thesis*, the notion of conceivability moves the conceiving subject to believe *P* possible based merely on the subject taking *P* to be conceived of (that *P* appears to the subject to be case in a conceived scenario), given that the subject deliberates on the matter. Yablo states (op.cit., 4-5), “to conceive or imagine that *p* is *ipso facto* to have it seem or appear to you that possibly, *p*.” The quote from Yablo should not be read so as to suggest that conceiving *P* entails that the conceiving subject believes *P* possible. I take it that he is merely submitting that conceivability (usually) “*involves the appearance of possibility*” whereby a subject upon deliberation on the conceivability and the appearance believes *P* possible (ibid.).^{12,13}

¹¹ Let me briefly note that an essentialist, a defender of essences in substances or kinds, be they conceivabilists or not, should relate or distinguish the conceptual relations between properties just mentioned with essentialist relations that are supposed also to render certain properties symmetrically co-instantiated or co-instantiation-excluding. Of the former variety consider the properties of being human and of having an origin essentially.

¹² Yablo then uses this feature of conceivability to distinguish it from other epistemic states that are supposed to make use of our imaginative capacities (and are sometimes mistaken for conceivability): they do not move the subject “conceiving” to believe *P* possible.

¹³ The reason I am hesitant to say that conceivability entails a belief in possibility is due to two considerations: first, if the relation between conceivability and possibility be formalized via material conditional, it would seem that the belief in possibly *P* is necessary for the conceivability and the appearance of possibility of *P*. Also, if no one conceives of and has an appearance of possibly *P*, the conditional is true. Second, in some cases a subject may not form a belief in

Second and relatedly, the content of what is conceived of is *objectual* in character (Yablo op.cit., 27f, Chalmers 2002). I believe what is meant here is that the content, *P*, in conceiving of *P* has a *non-propositional* character, even if the conception of *P* is composed only of narrowly conceived (conceptual) content. Above, I wrote that a conceivability thesis might state that if a subject conceives of some scenario, it appears to the subject that the scenario is possible and that a proposition describing the scenario is possibly true. This suggests, correctly I think, that the scenario conceived of is non-propositional in character while the proposition describing the scenario is, obviously, propositional in character. While the conceived scenario may be described by a subject by a proposition – just as a perceptual experience (here supposed to be non-propositional in nature)¹⁴ is also describable by a proposition – this does not render the conceived scenario propositional in character. I have no doubt that it will be controversial that I consider also conceiving in the narrow sense objectual in character, but let me then hedge this view, again, in the fact that we are conceiving of *scenarios*. When you are conceiving of Egypt adopting a democracy, like in the case of the financial market crashing considered before, making it the case that the scenario is one in which *Egypt is a democracy* is done by conceptual content rather than imagined content. Again, you may imagine Egyptians pressing thumbs on pieces of paper in order to vote in closed booths all done in an orderly manner, but this is, I conjecture, *not* what makes it the case that the scenario is one in which Egypt is adopting a democracy. That is due to conceptual, narrowly conceived content. However, neither is a scenario when conceived in the narrow sense simply a short or long list of words put together in the mind – as if scribbled on a mental piece of paper – it is objectual in nature; it is the conceiving of a scenario. I will say we conceive of scenarios which we describe as representing propositions. A subject taking herself to conceive of *P* is thus shorthand for the subject taking herself to conceive of a scenario *S*, representing the proposition *P*, which she describes by a sentence *D*: that *P* is conceived of. Let us move on to the demarcation principles and the overview of the conceivability theses where I elaborate.

possibly *P*, even while being able to conceive of *P*, e.g., due to some fallibilities of the subject or beliefs that undermine the appearance of possibility (more on this later, in 3.4.2. *Uselessness by Depth Charge*).

¹⁴ See Crane (2009).

2. Distinctions and Overview

In this section, I provide demarcation principles with which we can carve conceivability theses at *some* joints and I will be putting conceivability theses proposed by various philosophers into boxes exposed by the carving. I do not pretend that the carving is at *the* joints of nature, as it were, of conceptual space; nor do I pretend that the cutting or the putting into boxes is final. But the overview of the different theses situated in conceptual space allows us to consider in a more enlightened way both the merits of individual theses and the respective differences between them. For each classification, I provide a brief explanation of why I put a proposed conceivability thesis into a respective box. I do not presume that the brief explanations lay out the respective philosopher's conceivability theses in any satisfactory manner. In the interest of brevity, much will be excluded and simplified; often I leave out equations in presenting a conceivability thesis that would require unfolding large theoretical frameworks. In each case, I refer to the original works so the critical reader can satiate their interest in precision.

I consider three demarcation principles: Universalizability, Reliability, and Accessibility. The first two demarcation principles concern the relation between conceiving and possibility: whether it holds in any circumstances or only in limited circumstances and whether the relation is one of entailment or is one evidential. The third demarcation principle concerns our epistemic access to conceivability facts: whether we have epistemic access to whether something is conceived of or not.

2.1. Demarcation principles

Conceivability theses go from strong to weaker versions. According to Berglund (2005, 53ff), the strongest version of the conceivability thesis accepts two principles, *Universalizability* and *Reliability*, the weakest denies them both. I present the principles in a moment. In addition to the two demarcation principles offered by Berglund, I introduce a third, *Accessibility*, a “virtue” of conceivability-based epistemologies of possibility as suggested by Roca-Royes (2011, 26),¹⁵ though I will be interpreting the principle slightly differently than does Roca-Royes with regards to the virtue. Thus, we shall see eight different branches of

¹⁵ Roca-Royes refers to Worley (2003 – see p. 19).

conceivability theses in the overview along with suggested proponents on each branch, if I am aware of any and if the branch is supportive of a conceivability thesis.¹⁶

According to Berglund the strongest version of a conceivability thesis accepts both the following principles:

(Universalizability) The conceivability thesis is a *global* truth

(Reliability) Conceivability is *sufficient* or *infallible* evidence for possibility

‘Universalizability’ concerns the *subject matter* of the conceived scenarios allowed in a conceivability thesis. Accepting Universalizability means that, according to the proponent, scenarios on any subject matter can be input to the respective conceivability thesis, outputting possibility of the scenarios. On this interpretation, the conceivability thesis is true *globally* or in all circumstances. Deny Universalizability and you deny not the truth of the conceivability thesis. Rather, you hold that the thesis is merely a *local* truth such that only a proper subset of the set of all conceivable scenarios can figure as input to the conceivability thesis, the scenarios with the right subject matter. In a conceivability thesis denying Universalizability, the conceivability thesis holds only in special circumstances, e.g., when conceiving of scenarios dealing with the distribution of real world objects in a room.¹⁷

¹⁶ I shall not be demarcating conceivability theses along their subject-relativity contra subject-idealizations, a demarcation principle we could otherwise call Epistemic (subject-relativized conceivability theses accept Epistemic; subject-idealized conceivability theses deny Epistemic – cf. Worley op.cit. and Roca-Royes op.cit.). I offer reasons why in two places: indirectly in 3.3.1. *Conceivable Impossibilities* and more thoroughly in part II of the presentation, 5. *The Standard Dilemma*. Let it simply be a conjecture at this point that conceivability theses that speak of idealized subjects or ideal forms of conceiving (deny Epistemic) are theses on only one branch of the eight branches of conceivability theses that we already shall have available via the three demarcation principles suggested, viz., the branch on which the conceivability theses accept the three demarcation principles of Universalizability, Reliability, and Accessibility. Thus, the Epistemic demarcation principle is simply a less interesting demarcation principle.

¹⁷ Berglund (op.cit., 168) takes accepting or denying Universalizability to be a matter of accepting all or only a limited subset of statements as input to the conceivability thesis. I have changed it here to all or a limited subset of conceivable scenarios. Berglund speak of ‘statements’ sometimes as ‘meaningful sentences’, sometimes as ‘propositions’, and sometimes both at once (op.cit., 9). It is not entirely clear to me what the difference is, but it seems the import is that two statements can denote the same proposition, while being different meaningful sentences (and statements) since justifiable by different means, say, one meaningful sentence being *a priori* justifiable, while the other is not (as in ‘*a = a*’ and ‘*a = b*’). Supposedly, a meaningful sentence expresses a statement which, in turn, expresses a proposition. It

‘Reliability’ is more straightforward. A conceivabilist accepting Reliability thinks that conceivability of *P* entails (or provides infallible evidence for the) metaphysical possibility of *P*, while a conceivabilist denying Reliability thinks conceivability of *P* merely provides fallible evidence for the metaphysical possibility of *P*. Importantly, a denier of Reliability can hold that we can conceive of impossible scenarios while arguing that, nevertheless, conceivability of *P* provides *prima facie* evidence for the possibility of *P*. Any interpretation of the conceivability thesis that denies Universalizability or Reliability is weaker than the strong interpretation that accepts both. Nonetheless, adherents of weaker interpretations are conceivabilists. That is, they accept an interpretation of the conceivability thesis weaker or stronger and erect an epistemology of metaphysical possibility upon it.¹⁸

In addition, we can demarcate the conceivability theses according to their acceptance of the following principle:

(Accessibility) Conceivability facts are *epistemically accessible*

‘Accessibility’ claims that conceivability facts, i.e., whether a *P* is conceived of (is the case in the scenario) opposed to merely apparently so, are epistemically accessible to the conceiving subject. More carefully, ‘Accessibility’ claims that a subject has access to whether a conceived scenario *S* represents *P* or not. In an argument, the conceivability claim is that *P* is conceived of. So, the conceivability claim is a description *D* of the proposition *P* being represented by a conceived scenario *S*. Accessibility is thus a matter of having epistemic access to whether the description *D* is true of *S* – whether *S* represents *P* or not (more on how to

would seem to me that we have more entities in hand than we need, but whether or not our differences are more than notational, I shall not consider.

¹⁸ Obviously, some may deny the demarcation principles without thereby being a proponent of a weaker conceivability thesis. I am here talking of principles with which to demarcate different conceivability theses, not ways to deny conceivability-based epistemologies of possibility.

interpret Accessibility shortly).¹⁹ How the subject has epistemic access to conceivability facts have different reasons for different proponents of Accessibility, as we shall see.

Roca-Royes understands the “accessibility virtue” differently than I do the Accessibility principle. Roca-Royes considers the accessibility virtue defined along a non-ideal dimension. That is, even if an ideal subject has epistemic access to conceivability facts this would not satisfy the accessibility virtue, as she understands it, since that requires *non-ideal epistemic access* to conceivability facts and ideal epistemic access does not entail non-ideal epistemic access. I consider Accessibility satisfied on an account, if the subject conceiving – be it an ideal or non-ideal subject – has epistemic access to conceivability facts, period.²⁰

We can entertain the thought behind Accessibility by supposing that a conceived scenario S be fully²¹ captured by only one set of describing propositions. Let us call the set of describing propositions “Proposition”.²² That is, when a subject conceives of a scenario S, a “Proposition” will be true of S. A proponent of Accessibility can under the supposition be construed as arguing that a subject has epistemic access to whether the truth of the description D used to describe S as representing the proposition *P* is true of S. That is, epistemic access to whether *P* is included in – is a subset of – “Proposition”, even if the subject does not grasp “Proposition” in its entirety (much as I know I am part of the World, even if I do not know every part of the World).

Note that a denier of Reliability believes we can conceive impossible scenarios (the cases which render the conceivability thesis fallible). In such a case, there will not be a “Proposition” which has *P* as a subset, given we consider a proposition to be the set of possible worlds in which it is true (à la Stalnaker 1976) and “Proposition” to be a (consistent) set of propositions. The proposition in question will be nonsensical by not expressing a proposition or will perhaps express the necessarily false proposition, the one true in no possible

¹⁹ I also take epistemic access to conceivability facts to be access to the fact that a scenario is *conceived* of rather than merely *supposed* or some other epistemic states.

²⁰ Further differences between my interpretation of the Accessibility principles and Roca-Royes’ accessibility virtue shall be considered in part II of the presentation, in 5. *The Standard Dilemma*.

²¹ “Fully” is not required, if this is understood as determining a specific possible world, as Yablo (1990, 26ff) has it. Many things may be unspecified in the conceived scenario such that they can be “filled out” with different determinables in distinct, specific possible worlds.

²² Perhaps we can understand “Proposition” as a conjunction of true claims about S.

world. A proponent of conceivability of counterpossibles, impossible worlds arguably used in reasoning from impossible conditions, can argue that P is not a proposition but a statement, and that “Proposition” (perhaps poorly named in this case) is not nonsensical in such cases – is not a set of propositions – but is a set of statements. Rather, “Proposition” simply contains impossible elements, e.g., the statement ‘ $A \ \& \ \sim A$ ’, in addition to its other elements such that a subject may still be able to find his statement P included in “Proposition” – may still justify his conceivability claim, the description D of the conceived scenario S as representing P , and not in a trivial way by explosion. We may entertain this in the following way: where D is a conceiving subject’s description of a conceived scenario S as of representing P (whether or not P is a proposition) and U is the set of statements which fully²³ captures S (whether or not U denotes a consistent set of propositions), D is true of S only if P is a subset of U .

Universalizability and Reliability distinguish conceivability theses on the relation between conceiving and possibility: whether any conceivable scenario is related to possibility or not and whether the relation is one of entailment or fallible evidence. Accessibility distinguishes conceivability theses on our epistemic access to conceivability facts: whether we have epistemic access to whether a conceivability claim, a description D used to describe a conceived scenario S as representing P , is true of S , instead of merely having epistemic access to appearances as of D being true of S (appearances of S representing P). Let us turn to the overview.

2.2. An overview of conceivability theses

As stated earlier, the three demarcation principles, Universalizability, Reliability, and Accessibility, provides eight branches of conceivability theses, listed in the schema below. I consider proponents on each branch of conceivability theses, given I can find any proponents and given the branch is supportive of a conceivability thesis, starting with the position marked U , R , A and working my way right, ending with $\sim U$, $\sim R$, $\sim A$. I apologize to proponents of conceivability theses that I have not included. Also, I must apologize for not offering explanations for every classification. In the interest of space, I have cut some corners, hoping the pillars are left intact.

²³ See note 21. Note that it need not be a possible world in this case.

U, R, A Descartes Chalmers (ideal)	U, R, ~A Stalnaker	U, ~R, A (none)	U, ~R, ~A Yablo Jenkins
~U, R, A Kripke Berglund	~U, R, ~A (none)	~U, ~R, A Peacocke Kung Hanrahan Gregory	~U, ~R, ~A (none)

2.2.1. U, R, A

A conceivabilist might accept Universalizability, Reliability, and Accessibility. Such a conceivabilist believes that conceivability of a scenario *S* entails the metaphysical possibility of what is true of *S* for any scenario conceived of (regardless of subject matter), while the subject conceiving have epistemic access to conceivability facts – to whether his description *D* of a scenario *S* as representing the proposition *P* is true of *S*. Philosophers on this branch include Descartes (1984) and Chalmers (1996, 2002, 2010).

Descartes. On this branch, we have what is taken to be the conceivability thesis Descartes uses in his (in)famous argument for the distinction between mind and body, namely, that Clear and Distinct conceivability of *P* entails that P is Possible (CDPP).²⁴ Descartes argues that whatever he can clearly and distinctly conceive of, God could create so as to correspond to his conception. Thus, God ensures the relation between conceiving and possibility – Reliability. Further, God is the provider of our cognitive capacities to clearly and distinctly conceive of *P* such that we cannot but believe *P* possible when we clearly and distinctly conceive of *P*. If it could be the case that we clearly and distinctly conceive of *P* while *P* is impossible, we could not but consider *P* possible and thereby be deceived about the modal status of *P*. God would thus be a deceiver since the creator of our cognitive capacities, per impossible. In this manner, the conceiving subject cannot be in error believing *P* possible, if he clearly and distinctly conceives of *P*. That

²⁴ For instance, Wilson (1976), Van Cleve (1983) and Yablo (1990) use this conceivability thesis in their description of Descartes' argument. Their descriptions of the argument differ from each other in other respects. Vaidya (2007) uses a thesis labeled (CDP) – if *x* clearly and distinctly perceives that *P*, then P is tru^e – in laying out Descartes' argument. That is, in laying out the argument, Vaidya uses (CDP) where *P* is itself a modal statement, 'possibly, *P*' which entails 'possibly, *P*' is true in the consequent. See Almog (2002, ch. 1) for an alternative interpretation of Descartes' argument. I consider the two interpretations (CDP) and (CDPP) in part II of the presentation, in 6. *Descartes vs. Arnauld*.

would render God a deceiver, per impossible. Nonetheless, Descartes notes that humans are sometimes in error. But this happens because God has given us the freedom to assent to scenarios which we do not clearly and distinctly conceive of. Descartes submits we can avoid error simply by withholding judgment in cases where we have not clearly and distinctly conceived of *P*. I claim that this is palatable only if we have epistemic access to scenarios conceived of such that we can ascertain whether *P* is conceived of clearly and distinctly or not. Thus, Accessibility must be accepted by Descartes.²⁵ Whatever can be clearly and distinctly conceived of is possible on Descartes' conceivability thesis – there is no limitation to the subject matter that can feature as input to the thesis – Universalizability holds. Descartes' conceivability thesis (CDPP) accepts Universalizability, Reliability, and Accessibility. I shall have more to say on Descartes and his conceivability thesis in part II of the presentation, 6. *Descartes vs. Arnauld*.

Chalmers. Chalmers might be seen as having a great number of conceivability theses: at least two for idealized subjects and at least one for non-ideal subjects. I consider two conceivability theses by Chalmers on this branch, dealing with the *primary* and *secondary ideal* subjects, and shall not consider others.²⁶ Regarding the theses placed on this branch, ignoring a whole lot of theoretical complexity, there are two versions of an ideal subject: the Primary Ideal Conceiver (PIC) has idealized conceptual resources and capacities; the Secondary Ideal Conceiver (SIC), in addition to the idealized capacities of the PIC, has idealized knowledge of all empirical facts of a kind that is only non-interestingly modal (or non-modal – cf. 1.2. *Motivation for conceivability*). That is, modal only in the sense that the possibility can be inferred from the facts. Given the ideal powers of the PIC- and SIC-subjects it is intended that something *P* is conceivable for the PIC or the SIC, respectively, iff *P* is metaphysically possible in a primary or secondary way. Since

²⁵ Descartes does not state acceptance of an Accessibility principle in the *Meditations*. However, I believe it is required, not least for a successful response to the objection by Arnauld in the *Fourth Set of Objections*. I think Descartes in the *Fourth Set of Replies* delivers a clarification of his response to an objection offered by Caterus, an objection we consider later (in 3.3.2. *Formal Distinction*). I note that Wilson (op.cit., 12) argues that it is not Descartes that is misunderstanding Arnauld's objection. Instead, it is Arnauld that misunderstands Descartes' answer to Caterus.

²⁶ Chalmers might have a thesis on the U, R, ~A branch, arguing that non-ideal subjects are *prima facie* justified in believing *P* possible based on conceivability. Only *prima facie* since *P* might not be represented by S – the conceivability claim, the description of S as representing *P*, might be a misdescription of what is the case in S. As I read Chalmers, it is conceivability *judgments* that can go wrong, it is not entailment that goes wrong, suggesting that Reliability is still accepted in this conceivability thesis, even if the subject does not have epistemic access to what is the case in S. If Chalmers holds non-ideal subject can conceive of impossibility, the thesis for non-ideal subjects is on the U, ~R, ~A branch.

the PIC is using primary intensions of our words, i.e., meanings of words that are descriptive or not rigidified by actuality, primary possibility is entailed by primary conceivability. These are metaphysical possibilities that fit the purely descriptive vocabulary of the PIC. Since the SIC is using secondary intensions of words, i.e., meanings of words that are referential, rigidified by actuality, secondary possibility is entailed by secondary conceivability. These are metaphysical possibilities that fit the rigidified vocabulary of the SIC. I conjecture that the ideal subjects have epistemic access to conceivability facts: according to Chalmers, ideal forms of conceiving are ideal forms of reasoning, and the ideal subjects are the ideal ones to ideally reason (pardon the pun). There are no restrictions on the subject matter that the conceivability theses are applicable to and conceivability entails metaphysical possibility. Chalmers' conceivability theses 1 and 2 accept Universalizability, Reliability, and Accessibility.

2.2.2. U, R, ~A

A conceivabilist might accept Universalizability and Reliability but deny Accessibility. Such a conceivabilist believes that conceivability of a scenario S entails the metaphysical possibility of what is true of S for any scenario conceived of (regardless of subject matter), while the subject conceiving does not have epistemic access to conceivability facts. A conceivability thesis on this branch might be Stalnaker-inspired conceivability thesis (inspired by, e.g., Stalnaker 1976, 1984, 2004, 2008).

Stalnaker. Stalnaker may not have put forward a paper called conceivability and the epistemology of modality, but he has said something on the matter and I think we can assemble a substantial account.²⁷ As mentioned in introducing the Accessibility principle, if you take a proposition to be the set of metaphysically possible worlds in which it is true, as Stalnaker does, while believing that conceivability is a propositional attitude, it quickly seems like conceiving of S entails metaphysically possibly S. Now, I realize I started out by saying that any notion of conceivability should consider conceivability objectual rather than propositional in character but let us simply say that while objectual, a conceived scenario S is fully describable by a set of

²⁷ I propose an externalist conceivability thesis in the second paper of the dissertation which draws on Stalnaker's comprehensive externalist theory of intentionality.

propositions in Stalnaker's sense (a "Proposition"). In this way, conceivability entails metaphysical possibility – Stalnaker's conceivability thesis accepts Reliability. Further, the thesis accepts Universalizability since the only scenarios in town available for conception are the metaphysically possible ones. Finally, Stalnaker's conceivability thesis rejects Accessibility. For, while the subject can only conceive of metaphysically possible scenarios, the subject may misdescribe the set of propositions represented by the conceived scenario: the subject may describe a scenario as one that involves, e.g., 'Hesperus not being Phosphorus'. This is merely a metasemantic error on the part of the subject, a confused misdescription of the conceived scenario (which is possible). If a theorist were to ascribe a belief (or conception) to the conceiving subject who claims to conceive of something impossible, the ascribed belief is not one that includes impossibility. Rather, the attributor reinterprets the conceivability claim. The theorist constructs a context in which he can represent the conceiving subject's description of the conceived scenario as a perspective of a way the world might be, one in which the subject uses words to mean something different than what they actually mean – what Stalnaker calls the diagonal proposition. That we could use words to mean something different from their normal usage is entirely possible, e.g., that 'Hesperus' could refer to Mars.²⁸

2.2.3. U, ~R, A

A conceivabilist might accept Universalizability, deny Reliability, and accept Accessibility. Such a conceivabilist believes that the conceivability of a scenario S confers evidence as to the metaphysical possibility of what is true of S for any scenario conceived of (regardless of subject matter), while the subject conceiving have epistemic access to conceivability facts. I have not been able to find a proponent of this version of the conceivability thesis. This is probably as it should be: a thesis on this branch holds that the subject has epistemic access to whether D is true of S regardless of the subject matter conceived of, all the while conceivability affords evidence of possibility. In other words, the subject can conceive of impossibility and have epistemic access to and, thus, is able to describe correctly the scenario as impossible, all the while, supposedly, any conceived scenario affords evidence of possibility. This seems rather a bad thesis to hold. If

²⁸ I support a version of this thesis in the second paper of the dissertation, in *Conceivability Externalized*.

you recognize something as impossible, it sounds infelicitous that you would consider it possible. For whatever it is worth, the thesis is compatible with it being rare that we conceive of impossibility. But, ultimately, the U, ~R, ~A branch seems not supportive of a conceivability thesis.

2.2.4. U, ~R, ~A

A conceivabilist might accept Universalizability, but deny Reliability and Accessibility. Such a conceivabilist believes that the conceivability of a scenario S confers evidence as to the metaphysical possibility of what is true of S for any scenario conceived of (regardless of subject matter), even while the subject conceiving does not have epistemic access to conceivability facts. In this camp we find Yablo (1993) and Jenkins (2010a).

Yablo. In the vocabulary used in this presentation, Yablo holds that a subject taking a conceived scenario as representing *P* provides evidence for the metaphysical possibility of *P*. Further, according to Yablo, the ancients were able to conceive of Hesperus not being Phosphorus. We see that Yablo denies Reliability as well as Accessibility if less obviously. *Taking P* to be true of S is enough to be justified, if fallibly, in a conceivability claim: the claim that *P* is conceived of. I understand Yablo as denying epistemic access to conceivability facts, but accepting epistemic access to conceivability appearance. The conceiving subject may misdescribe what is conceived of in a scenario. So, Accessibility is denied.²⁹ The justification conferred to the belief in possibly *P* by taking oneself to conceive of *P* is defeated by learning that there is a defeater to *P*, where a defeater is some fact that render *P* impossible. For instance, a defeater to the justification conferred to the belief in the possibility of ‘Hesperus is not Phosphorus’ by the subject taking himself to conceive of scenario S of which the subject claims it true of would be that ‘Hesperus’ and ‘Phosphorus’ both refer to Venus. Let us call the fact *Q*. Upon learning this *Q* (the defeater), the subject *should* not be able to conceive of a scenario which he would describe by a statement supposedly denoting the proposition ‘Hesperus is not Phosphorus’. The subject can only do so by failing to realize (or perhaps deny) that *Q* is true

²⁹ As we shall see later, in part II of the presentation, in 5. *The Standard Dilemma*, Roca-Royes argues that Yablo’s conceivability thesis satisfies the accessibility virtue. I shall argue that it does not.

or that it renders *P* impossible. A suggested *hypothetical* defeater to *P* is not enough to defeat the conceivability claim or the afforded evidence of possibility. For instance, even if we suppose that swan DNA is not compatible with the color blue, this does not defeat the evidence of possibility afforded by taking oneself to of a scenario containing a blue swan. The defeater must have a reasonable chance of being true – where there are independent reasons for considering the conceivability claim out of touch with the facts (ibid., 34-35). Yablo accepts Universalizability since there are no restrictions on what one can take oneself to conceive of (pending awareness of defeating facts) nor is conceivability only supposed to confer evidence in special circumstances. Yablo’s account might be seen as a minimally justification internalist conceivability thesis.³⁰

Jenkins. Jenkins proposes a conceivability thesis according to which what we judge possible based on conceivability is based upon our *concepts* and the relations between them. Thus, what is possible is ultimately *conceptual* possibility. But, further, Jenkins proposes that our concepts are sensitive to the external world such that our thoughts about possibility are ultimately grounded in the external objects themselves, reestablishing the possibilities as metaphysical. Unfortunately, while we have some epistemic access to the concepts such that we can apprehend their relations in a conceived scenario and judge the scenario possible or impossible, we do not have epistemic access to whether the concepts we possess are misleading as to the external world, resulting in unfit or inaccurate concepts. Neither do we have epistemic access to whether a concept based on an external input might be formed incorrectly, resulting in an unjustified concept. And neither do we have epistemic access to whether our judgments as to the possibility or impossibility based on a conceived scenario is mistaken as to how our concepts relate to each other (mistake the possibility). As such, Jenkins denies Reliability and Accessibility – we might conceive of and judge possible impossible scenarios because of a number of fallibilities, and we do not have epistemic access as to whether we are not being misled by our fallibilities in a particular possibility judgment based on conceivability. Nevertheless, Jenkins submits that unfit concepts are rare, that we do not need exactly fit

³⁰ Though Yablo seems to think much of what is going on in conceiving of a scenario involves “peeking”. That is, checking *in an empirical manner* with the mind’s eye whether a conceived mailbox is, say, yellow. He considers peeking empirical in nature even if done in the comfort of an armchair (cf. Yablo 2002, 457ff).

concepts in order to get the possibility of scenarios correct, and that we need not have epistemic access to our concept forming capacities in order to generally get the right of things in possibility judgments based on conceivability. The conceivability of a scenario S provides evidence for the possibility of what is held to be true of S. She accepts Universalizability, but denies Reliability and Accessibility.

2.2.5. ~U, R, A

A conceivabilist might deny Universalizability but accept Reliability and Accessibility. Such a conceivabilist believes that the conceivability of a scenario S entails the metaphysical possibility of what is true of S but only for certain scenarios conceived of (related to subject matter), while the subject conceiving have epistemic access to conceivability facts. On this branch we find Kripke (1980) and Berglund (2005).

Kripke. Kripke is arguably behind a resurgence of conceivability-based accounts in the epistemology of modality. Yet there seems to be many ways to read Kripke, and it is not obvious nor, I think, agreed where his positions would be in the conceptual space outlined by the demarcation principles. Here we shall consider but one interpretation (inspired from but not exactly similar to Berglund (op.cit., 79ff), an interpretation that may not correctly attributed to Kripke but may be in line with a “textbook Kripkeanism” interpretation (Yablo 2000). On this interpretation, conceivability of scenarios with a certain subject matter entails their metaphysical possibility. Further, the subject conceiving cannot be wrong about whether the description is included in the scenario. So, Kripke can be seen as forwarding a conceivability thesis that denies Universalizability but accepts Reliability and Accessibility. On this interpretation of Kripke, we cannot (universally) trust our judgments about what we find possible based on what we find conceivable. Famously, this is due to the *a posteriori* necessities that Kripke introduces, i.e., necessities that are not discovered *a priori*. Because of these, what we find conceivable and thereby judge possible, if not properly informed by *a posteriori* investigation, will generate erroneous judgments. That is, we will judge possible scenarios that are impossible based on the conceivability of the scenarios. *Globally*, therefore, conceivability is not a reliable guide to possibility. Further, on this interpretation, we sometimes mistake the conceived scenario such that we misdescribe the scenario, describing some impossible scenario as conceivable and judging it possible. This is particularly prone to happen if there is a qualitatively close scenario S* to that of S such that S* is

possible whereas S is impossible even while there is no qualitative difference between the scenarios, as is the case with (certain) scenarios that include *a posteriori* necessities. As such, on this interpretation of Kripke, Accessibility is denied, and it is claimed that we often find scenarios (or misdescribe scenarios as) conceivable when *a posteriori* necessities are abound. However, *locally*, we are much more reliable. For if we keep our descriptions of conceived scenarios qualitative in character – focus only on the epistemic perspective of the conceived scenarios whether S or S* – it seems this qualitative part of a scenario *is* metaphysically possible. The possibility in question is of an epistemically equivalent scenario, perhaps on in which we use words to refer to different objects than we do actually. As the interpretation goes, there is always *something* metaphysically possible in broadly conceived scenarios. Namely, the qualitative description Q of a conceived scenario is metaphysically possible – something close to the merely imagined part of the broadly conceived scenario. This is so even if a subject would otherwise misdescribe the scenario as representing something impossible. On this interpretation, Universalizability is denied while Reliability and Accessibility are accepted. Accessibility is accepted since the subject has epistemic access to the phenomenal, qualitative character of the conceived scenario such that he can see that Q is true of S. Importantly, this means that the subject cannot fail to correctly describe qualitative content in any description of a scenario, say, a scenario in which someone has a particular type of phenomenal experience but, supposedly, does not have a brain-state of some particular type, suggesting that there is no identity between the experience and the brain-state.³¹

Berglund. Berglund takes us to have knowledge of certain possibilities, and argues that this is through conceivability. He is, in a sense, building from a Moorean shift he finds in van Inwagen (1998) who also believes we have modal knowledge of certain kinds, though he does not know how we know.³² Common to their approach is that we have knowledge of subject matters that are “non-extraordinary”. According to

³¹ Another interpretation of Kripke has him denying even an evidential role to conceivability. On this interpretation, conceivability plays merely an enabling role – that of constructing scenarios before the mind – which can be considered intuitively. In turn, it is the intuitions that provide any justification of possibility or impossibility (this interpretation might be found in Papineau 2007). I call this an Enabler Objection to conceivability-based epistemologies of possibility. The objection is considered in 3.3.5. *The Enabler Objection*. As can be seen, the interpretations of Kripke vary widely.

³² Berglund suggests, mistakenly I believe, that van Inwagen is also a conceivabilist.

Berglund, these are subject matters where we possess the concepts used in the conception in some secure manner – perhaps due to them being of our own making. For instance, I could not be said to possess the concept of a ‘table’, if I could not conceive of a table being two feet to the left. Thus, conceivability is a matter of assessing the contents of imagination and is a matter of assessing conceptual relations. We have access to the contents of imagination, and we have access to the conceptual relations of some concepts, at least. In these *local* cases, conceivability entails possibility. Berglund’s is a conceivability thesis that denies Universalizability but accepts Reliability and Accessibility.

2.2.6. $\sim U, R, \sim A$

A conceivabilist might deny Universalizability, accept Reliability, and deny Accessibility. Such a conceivabilist believes that the conceivability of a scenario S entails the metaphysical possibility of what is true of S but only for certain scenarios conceived of (related to subject matter), while the subject conceiving does not have epistemic access to conceivability facts.

I have been unable to find a proponent of a conceivability thesis on this branch. A version might be a *local* version of Jenkins’ account (one that denies Universalizability). This version could claim, say, that mathematical concepts entail possibility and we unfailingly possess the correct mathematical concepts through our interaction with the world. That is, even if my concept of my desk is unfit, the unfit desk concept enables me form correct mathematical concepts. It remains the case, however, that we are fallible in certain ways such that we do not have infallible insight into the possibility judgments we make concerning the concepts. In other words, sometimes we misdescribe ‘ $2+2=5$ ’ as possible, given how fallible we are, not given possessors of unfit or inaccurate mathematical concepts; there are no such. A conceived scenario S based on mathematical concepts (on the subject matter of mathematics) reliably entails possibility. Nonetheless, we are fallible and may misjudge what is possible by the scenario and misdescribe it – even absurdly so. Here Universalizability is denied, Reliability is accepted, and Accessibility is denied. The proponent of the local version of Jenkin’s account could deny or accept Jenkin’s *globally* evidential conceivability thesis considered before.

2.2.7. ~U, ~R, A

A conceivabilist might deny Universalizability and Reliability, but accept Accessibility. Such a conceivabilist believes that the conceivability of a scenario *S* confers evidence as to the metaphysical possibility of what is true of *S* but only for certain scenarios conceived of (related to subject matter), while the subject conceiving have epistemic access to conceivability facts. On this branch we find Peacocke (1985), Kung (2010), Gregory (2010), and Hanrahan (2007). I consider only Kung and Hanrahan.³³

Kung. Kung argues that we easily and quite often conceive of impossible scenarios. Importantly, though, Kung argues that we have insight into the contents of the conceived scenario such that we can tell what content is of an imagined character and what is of a conceptual character. Remember Kung's example considered earlier of bunny and Nixon as friends. According to Kung, we can partition the conceived scenario into the imagined content (the white, fluffy bunny and the figure of Nixon) and the conceptual content (that bunny and Nixon are friends and that the figure is Nixon). Behind Kung's conceivability thesis, called "Modal Evidence from Imagination", is the thought that conceptual content makes so easy conceiving impossible scenarios. The positive is that by excluding such conceptual content from the conceived scenario, or by only accepting conceptual content in a scenario that can be iteratively reduced to imagined content by a specified procedure, the conceived scenario confers evidence for the possibility of the scenario. As such, Kung denies Universalizability. Only the imagined content of scenarios confers evidence of the possibility of the scenario. He denies Reliability since he believes the evidence fallible. Yet, he accepts Accessibility since the subject has epistemic access to the conceived scenario and can check whether his description *D* of the conceived scenario *S* as representing the proposition *P* is true of *S*.

Hanrahan. Hanrahan offers an epistemology of possibility that is somewhat similar to that of Kung. She considers how the imagination might justify beliefs about certain possibilities and notices how the

³³ Let me note that on this branch, I am taking conceivabilists that consider only imagining a guide to possibility as conceivabilist that deny Universalizability. This might be taking something of a liberty on my part – they might consider their respective "imagination theses" applicable in all circumstances. However, we started out by saying that certain things could be conceived in the narrow sense (and thereby broad sense) that could not be imagined. If this is right, then it seems that there are certain scenarios that are conceivable but not imaginable. As such, the imagination thesis could be considered a thesis that only takes as input a limited set of conceivable scenarios, as denying Universalizability.

imagination contains imagined as well as conceptual content – the latter is to Hanrahan the *narrated* part of the imagined scenario. Hanrahan suggests that she can imagine a bear in her backyard and that she can narrate a twin-Hanrahan that also perceive (in the mind) a bear in the backyard, yet who do not willfully construct the imagined scenario of the bear as does Hanrahan. Since twin-Hanrahan is Hanrahan’s epistemic twin (“to an overwhelming extent”), twin-Hanrahan is justified in taking her unwilled perception of the bear in the backyard as a veridical perception, as Hanrahan would be so justified were she to perceive a bear in her backyard. The best explanation for twin-Hanrahan’s perception is that she veridically perceives a bear in her backyard, twin-Hanrahan not being prone to hallucinating and knowing of the habits of bears and that bears are part of the local fauna. Twin-Hanrahan is narrated as a reliable witness by possessing the knowledge of Hanrahan about bears. As such, Hanrahan is justified in basing her beliefs upon twin-Hanrahan’s beliefs, just as she would be justified in believing the testimony of some actual person with such beliefs and knowledge as Hanrahan / twin-Hanrahan. Thus, Hanrahan is justified in believing that twin-Hanrahan veridically perceives a bear in her backyard. In other words, Hanrahan is justified in believing a proposition to be true in a possible world – that ‘a bear is in her backyard’ is possibly true. Hanrahan submits that her account is founded on Inference to the Best Explanation and that sometimes the explanation fails to be true even if judged best. Further, she conjectures that the account only works with conceived scenarios that are very similar to the actual world, e.g., to certain “variations in the immediate surroundings”. I take her to be denying Universalizability and Reliability. As I interpret Hanrahan, the subject has insight into the conceived scenario *S* such that her description *D* of *S* as representing the proposition *P* cannot be a misdescription of the scenario. By the narration, it seems the scenario and description becomes intertwined. The subject has epistemic access to the truth of the description because the content of the scenario is epistemically accessible to the subject via the narrative. It might just happen that the conceived scenario / description is not possible – “might hide an unsolvable problem” – but this shows the conceived scenario / description an unreliable tracker of possibility, denying Reliability, not that Accessibility is denied; Accessibility is accepted.

2.2.8. $\sim U$, $\sim R$, $\sim A$

A conceivabilist might deny Universalizability, Reliability, and Accessibility. Such a conceivabilist believes that the conceivability of a scenario S confers evidence as to the metaphysical possibility of S but only for certain scenarios conceived of (related to subject matter), even while the subject conceiving does not have epistemic access to conceivability facts.

I have been unable to find a proponent of a conceivability thesis on this branch. But consider a skeptic of Kung's conceivability thesis, a skeptic that agrees with Kung that only scenarios imagined confer evidence of possibility but who denies that we have insight into the conceived scenario, i.e., denies that we have epistemic access to conceivability facts. Perhaps we are merely reliable to a certain degree in inferring conceivability facts via epistemic access to conceivability appearances. It certainly seems like we make mistakes – misdescribe certain scenarios as conceived of even if they have not been so conceived. What matters is whether we are sufficiently reliable in making judgments of that kind. So, a conceivability thesis on this branch could be a justification externalist rendition of Kung's thesis.

All right, we have an idea of the conceptual space of conceivability theses, and we have an idea of what theses on the different branches might look like. As we have seen, not all branches seem supportive of a conceivability thesis, the U , $\sim R$, A branch, and certain branches do not have a proponent (to my knowledge at least), the U , $\sim R$, A branch, the $\sim U$, R , $\sim A$ branch, and the $\sim U$, $\sim R$, $\sim A$ branch. Of course, that there is no proponent of the U , $\sim R$, A branch is as it should be, given it seems not to support a conceivability thesis.

With the conceptual space in mind, I turn to the objections. As we shall see, an objection may only target conceivability theses on certain branches, leaving others unchallenged.

3. Objections to Conceivability Theses

Just as we can distinguish between conceivability theses, we can distinguish between objections to conceivability theses. There are a number of objections that go against any epistemology of modality, including the conceivability-based account. Among these, I shall briefly touch upon the Benacerraf

Objection and the Evolutionary-Reliabilism Objection. Mostly though, I refer to discussion elsewhere. Among the objections that are peculiar to conceivability theses, I shall be more careful.

I divide the objections into those that target the relation between conceivability and possibility and objections that target conceivability claims. Remember that the relation between conceivability and possibility is the second premise in an argument for possibility based on conceivability. The first premise is that something is conceived of, a blue swan, say. The conclusion being that something is possible, e.g., that a blue swan is possible. Objections of the first type are versions of the Standard Objection; objections of the second type are versions of the Uselessness Objection. In the literature on conceivability-based epistemologies of possibility, it is often Standard Objections that are considered (as the name suggests). I consider the objections in turn.

3.1. The Benacerraf Objection

Benacerraf (1973) poses a dilemma for an explanation of mathematical truths. If you explain mathematical truths by some sort of Platonist realism about numbers, the semantics offered are on par with the semantics for (most of) the rest of language in being referential.³⁴ Each expression in the sentence ' $1 + 1 = 2$ ' refers to a Platonic object which has a necessary relation somehow. However, the epistemology of the Platonist realm is rendered mysterious in the sense that there is no causal interaction with the objects in the Platonist realm as there is casual interaction with much of what we otherwise refer to in language, say, dogs, plants, and the neighbor. Should you offer an anti-realist explanation of mathematical truths, a satisfactory epistemology might be more readily available. However, it is questionable that the semantics will mesh with the semantics for the rest of language and the resulting semantics might not satisfactorily express the mathematical truths we want to express.

³⁴ 'Most of' since there remains the problem case of fiction. When we speak of Sherlock Holmes, saying he lives at 221B Baker Street, we do not consider this statement referential in the same way as when we say 'Thomas seemed scared of his sister'. In the latter case, 'Thomas' refers to some existing entity. In the former, 'Sherlock Holmes' does not refer to an entity that exists (in the same way at least).

Peacocke (1999) describes the dilemma as the “Integration Challenge”, as the challenge of reconciling an acceptable metaphysics with an acceptable epistemology for some specific subject matter. Benacerraf’s dilemma is simply the Integration Challenge on the subject matter of mathematical truth, the challenge of reconciling mathematical ontology with mathematic epistemology.

The dilemma of interest here is not about mathematical truth but an analogous dilemma for modal truth. A modal realist can offer a semantics that is on par with the semantics for the rest of language but does so by paying epistemological coin, by offering modal truth-makers with which we cannot causally interact: concrete possible worlds. An anti-realist can offer entities we can interact with but pays in semantic coin by offering a semantics that is not on par with that of the rest of language and one that might analyze modal claims in some unsatisfactory way.

The Benacerraf Objection / Integration Challenge offer a challenge to epistemology of modality generally, not particularly to conceivabilists and their methodology of arriving at knowledge of possibility. Of course, conceivabilists whatever their stance on realism / anti-realism about modal truth-makers needs to answer the challenge.

I shall not consider conceivabilist responses to the dilemma save note two things: (i) obviously, conceivability figures in the epistemology of possibility for conceivabilists and (ii) the fact that conceivability figures in the epistemology of possibility for conceivabilists does not influence what conceivabilists consider an acceptable metaphysics.³⁵

3.2. The Evolutionary-Reliabilism Objection

In Vaidya (2007), Nozick (2001) is credited as forwarding the Evolutionary-Reliabilism Objection to epistemology of modality which states that whatever account given of the epistemology of modality, the epistemological methodology better be explainable as part of the adaptively advantageous cognitive

³⁵ The interested reader can see McLeod (2005) and Vaidya (2007) which both offer overviews of and references to positions on the realism / anti-realism divide in epistemology of modality more broadly if not particularly on conceivability theses. A recent exchange that revolves around this debate for conceivability is Sturgeon (2010) and Jenkins (2010b). See also Bueno and Shalkowski (2004, 2009, 2013, 2015) for a modalist semantics that is supposedly neutral between modal realist and anti-realist interpretations.

capacities that have developed through natural selection or, at least, be a byproduct of such capacities. Further, the subject matter that we are supposed to know about should give an adaptive advantage to the knowers over non-knowers.

I see this as an additional Integration Challenge: the objection demands that while answering the Integration Challenge of the previous objection, the epistemology forwarded must also be reconciled with evolutionary biology.

If the epistemology cannot be explained as part of the cognitive capacities developed by natural selection or if knowing of the subject matter does not offer an adaptive advantage, there is simply no reason as to why we should have developed the capacity – the belief forming mechanism – to believe or know something about the subject matter. If there is no such belief forming mechanism, we are not justified in our beliefs about modality. Nozick considers metaphysical modality (mostly necessity) such an unimportant subject matter since there is no adaptive advantage in knowing about it. It would be much more relevant to know stuff about the actual world than stuff about other or all possible worlds. As such, it is likely that we do not have the capacities in question and possess no justified beliefs or knowledge about modality.

As with the last Integration Challenge, the Evolutionary-Reliabilism Objection is more broadly a problem to epistemology of modality, not only so for conceivabilist positions. If the objection as presented by Nozick is supposed to only address our supposed knowledge of necessity, as Vaidya suggests, it might not even be relevant for the conceivabilist epistemology of possibility. However, I understand the objection as more of a general Integration Challenge than specifically targeting knowledge of necessity. As such, also the conceivabilist is required to reconcile his epistemology of possibility with evolutionary biology.

See Vaidya (*ibid.*) for references to discussion of the objection. See Williamson (e.g., forthcoming) for a conceivabilist reply, arguing we need conceivability in order to evaluate conditionals which may be

important for survival. Also, conceivability not reality-oriented might be important for social cohesion – provide the means for a group narrative.³⁶

3.3. *The Standard Objection*

The Standard Objection is a kind of objection I consider coined by Brueckner (2001) where he summarizes the objection as follows (p. 187): “conceiving of the truth of φ is not sufficient to establish the Possibility of φ ”. The Standard Objection is strictly an objection against conceivability theses. Its target is the second premise in an argument for possibility based on conceivability, that what is conceived of entails or affords evidence of possibility, the first premise being that something is conceived of. Note that Brueckner levels the objection to conceivability theses like Chalmers’. This makes sense since Chalmers, as we saw in the overview, accepts Reliability. Chalmers claims that conceiving *is* sufficient to establish possibility. As such, the Standard Objection as defined by Brueckner is merely a denial of Reliability and not much of an objection in and of itself and neither does it look like an objection to conceivability theses that deny Reliability. However, the reasons for the denial are what matters. And the reasons for denying Reliability put a strain on both kinds of conceivability theses – whether they accept or deny Reliability.

The main reason behind the Standard Objection is that we can conceive of scenarios that are independently judged to be metaphysically impossible. That is, that there are straightforward counterexamples to the conceivability theses. In close relation, another version of the Standard Objection argues that conceivability merely tracks some weaker (relative) modality than metaphysical (absolute) modality, epistemological or conceptual modality, say. In this way, only a weaker possibility is entailed by or afforded evidence of via conceivability. A third version of the Standard Objection, Shallow Charge, charges that conceivability is merely a matter of understanding, entertaining, or supposing P where in all cases P might be impossible. A fourth version of the Standard Objection, the Circularity Objection, argues that in order to conceive of P , a subject needs information tantamount to the information that P is possible.

³⁶ I might be overstepping some boundaries by calling Williamson’s a conceivabilist reply. His thesis is a counterfactual-based epistemology of modality, but imagining has an important part in the account. See also Kroedel (2012) for a similar reply.

Thus, conceivability is not a fundamental epistemological guide to possibility since it requires knowledge of possibility prior to conceiving. Finally, a fifth version of the Standard Objections, the Enabler Objection, argues that conceiving merely enables X where it is really X that justifies the belief in possibly P , not conceiving of a scenario in which P . Different Enabler Objections fills the blanks with different notions: modal intuitions, a principle a recombination, our best science, or simply “reasoning” of some kind.

In the following, I consider each version of the Standard Objection and offer considerations of the charges, on behalf of the conceivabilist.

3.3.1. Conceivable Impossibilities

If we can conceive the impossible, the relation between conceiving and possibility seems not to be one of entailment and may neither be one evidential. For the counterexamples suggest conceivability detached from possibility. If we *often* believe possible impossible scenarios based on conceivability, why even consider conceivability as affording evidential support to the belief in possibility? We can divide the Standard Objection by Conceivable Impossibilities into the sorts of impossibilities that are considered conceivable:

- i) We can conceive of *a priori* impossibilities. That is, we can conceive of contradictions to necessities that do not depend on empirical content for their knowability – broadly logical (logical and conceptual) impossibilities. For instance, we can conceive of a right-angled triangle in Euclidian geometry that does not possess the Pythagorean property.
- ii) We can conceive of *a posteriori* impossibilities. That is, we can conceive of contradictions to necessities that depend on empirical content for their knowability. For instance, we can conceive of a scenario contradicting an identity discovered empirically, say, that Hesperus is Phosphorus.
- iii) We can conceive of *essential* impossibilities. That is, we can conceive of contradictions to essentialist principles, say, *Essentiality of Origin*. For instance, we can conceive of Queen Elizabeth with non-actual parents.

The example given of type i) conceivable impossibility is offered by Arnauld as an objection to Descartes (Descartes 1984). At least, Arnauld is often suggested as offering the Standard Objection.³⁷ Most examples of both type ii) and type iii) conceivable impossibilities are introduced and considered in Kripke (1980).³⁸ We can note that type ii) conceivable impossibilities are not only a problem for certain conceivability-based epistemologies of possibility. They are a problem for any epistemology that considers knowledge of modality arrived at through *a priori* means. Someone might argue that type iii) conceivable impossibilities are simply of type ii), others might argue they are conceivable impossibilities of type i). Whichever is the case, conceivability of contradictions to essences (or even *de re* principles) has been forwarded as a special problem to conceivability-based epistemologies of possibility besides the problems offered by the other conceivable impossibilities (cf. Vaidya 2010, Roca-Royes 2011).

Answers given by conceivabilists to the conceivable impossibilities depend on the strength of the favored conceivability thesis. Deniers of Reliability allow that we conceive of impossibilities, while those that accept Reliability must reject supposed counterexamples – deny that they are conceived of – pending their acceptance or denial of Universalizability. In most cases, a Misdescription Model of Modal Error (MMME) plays an important part of the answer given, where a Misdescription Model of Modal Error claims that a proposed counterexample, say, a type i) conceivable impossibility, is not really a case in which the subject conceives of impossibility. Instead, the subject is confused somehow, misdescribing what is conceived of, if anything, as conceiving of something impossible (we shall return to the confusion in a moment). The conceivabilists that accept Reliability and Universalizability extends MMMEs to every instance of supposed counterexamples. A conceivabilist that denies Universalizability or Reliability can accept supposed counterexamples – even applaud them – as long as the accepted counterexamples do not interfere with the local or evidential conceivability thesis the conceivabilist in questions favors. For instance, a denier of

³⁷ Cf. Wilson (1976), Yablo (1990), and Vaidya (2007). Noting that Arnauld claims that he cannot see any possible reply to his case “except that the person in this example does not clearly and distinctly perceive that the triangle is right-angled” (Descartes 1984, 142), I do not think Arnauld is offering a Standard Objection to Descartes. More on this in part II of the presentation, in 6. *Descartes vs. Arnauld*.

³⁸ But see also Yablo (1993), Chalmers (2002, 2010), Berglund (2005) and Evnine (2008) for answers or overviews of answers to the Standard Objection by Conceivable Impossibilities.

Reliability might adopt an MMME for certain counterexamples, e.g., to those of type i), and accept conceivability of impossibility in others.

Conceivabilists that deny Universalizability but accept Reliability and Accessibility must deny that there are any counterexamples to their respective locally reliable conceivability thesis. Conceivabilists that accept Universalizability, Reliability, and Accessibility stand in a peculiar situation when it comes to Misdescription Models of Modal Error. They claim that conceivability facts are epistemically accessible to the subject conceiving. In the overview, we found different reasons as to how the subject has epistemic access to conceivability facts: by a non-deceiving God, by idealization, or by insight into the contents of the conceived scenario. Now, if the conceivabilist in question were to answer supposed counterexamples with MMMEs, it requires that the epistemic access in question be foiled in the case of the counterexamples (otherwise it is difficult to consider the case a misdescription) and it might be difficult to square such foils with the acceptance of Universalizability, Reliability, and Accessibility. After all, epistemic access to conceivability facts while conceivability globally entails possibility and while the description offered by a subject of a conceived scenario is not only false but absurd seems poorly compatible with the reasons offered for the epistemic access to conceivability facts. There is some tension here. As we shall see, the tension reemerges in the Uselessness Objection, and for good reason. For the confusion that is supposed to explain the objectors' conceivable impossibilities by MMMEs can be used by the objector, in turn, to ask whether the conceivabilist is also confused and, perhaps, generally so.

Focusing on the confusion that explains how someone might erroneously claim something impossible conceivable, Stoljar (2006, 74-77) finds in the literature two ways of being confused that are relevant here: proposition confusion and mode confusion. I propose definitions here of two technical terms that help get a hold of the kinds of confusion: *misdescription* and *misconception*.

- A subject *misdescribes* P as conceived of iff the subject describes P as represented by a conceived scenario S while the described proposition is not a subset of the set of statements U that fully capture S .³⁹
- A subject *misconceives* of P iff the subject fails to conceive of a scenario S representing P (fails to conceive of a scenario S of which the described proposition is a subset of the set of statements U that fully capture S).

As an example of misdescription, consider a subject that describes himself as conceiving of a scenario S of which ‘Thomas wears a yellow hat’ is true while, in the scenario conceived of, Thomas wears a brown hat. In this case, the proposition P claimed to be conceived of is not a subset of the set of statements U that fully capture S (we suppose that Thomas did not do both in the scenario conceived of), wherefore the subject is misdescribing S . As an example of misconception, consider a subject that attempts to conceive of a scenario of which ‘Thomas is wearing a yellow hat’ is true but instead *supposes* that ‘Thomas is wearing a brown hat’ is true (whatever that means). This is quite the failure – the subject has misconceived of P by not conceiving at all. Less spectacular failures abound, e.g., if the subject succeeds in conceiving of a scenario S but one in which Thomas is wearing a brown hat (and does not do both).

Now, according to Stoljar, *mode confusion* occurs when one conflates the mode in which one considers P , erroneously judging P possible on that basis. Perhaps a subject has merely entertained P or does not find $\sim P$ impossible and conflates this with conceiving of P , erroneously judging P possible on this basis. We can note that mode confusion is sufficient for misdescription while the opposite is not the case: when a subject confuses the mode in which she considers P and claims P conceived of on that basis, the subject is misdescribing P as conceived of since there is no conceived scenario S (thus no set of statements U that fully capture S of which the described proposition P is a subset) – also a rather spectacular failure. However, a

³⁹ I shall relax my terminology a bit here and simply speak of P as a proposition, though P might not be able to be represented in a scenario (given P is impossible), according to Stalnaker. Earlier I spoke of ‘statements’ instead of ‘propositions’ in cases where a proponent of counterpossibles believes we can conceive of scenarios containing impossible elements.

subject may misdescribe P as conceived of via a scenario S even if S is conceived of since the described proposition may simply not be a subset of the set of statements U that fully capture S . In such a case, there is misdescription while no mode confusion. It may be the case that misconception is a cause of mode confusion: if a subject has attempted to conceive of P but fails for some reason, yet stands in (or succeeds in standing in) some other epistemic relation to P , the subject may confuse the epistemic state for conceiving of P . Mode confusion can be used against conceivable impossibilities since, if an objector claims, say, a type i) impossibility conceivable, the conceivabilist may undermine the objection by charging that the objector is merely supposing or entertaining the impossibility in question; the objector is under the spell of mode confusion.

According to Stoljar, *proposition confusion* occurs when one conflates one proposition P with another Q , erroneously judging P conceivable based on the conceivability of Q . Translated into the vocabulary of the presentation, proposition confusion can be seen as a matter of misdescription without mode confusion. I noted that a subject may misdescribe P as conceived of via a scenario S even if S is conceived of since the described proposition may simply not be a subset of the set of statements U that fully capture S . Take the case considered earlier in which a subject describes himself as conceiving of a scenario S of which ‘Thomas wears a yellow hat’ is true while, in the scenario conceived of, Thomas wears a brown hat. The subject is confusing which proposition (describing proposition) is true of the scenario, misdescribing the scenario with the former proposition. If you do not like the example, exchange the colors with two shades of the same color, white and splashed white, say, which may be more easily confused.⁴⁰ What is important is simply that the subject is confused about what is conceived of in a scenario S , misdescribing S . Misconception may also be a cause of proposition confusion: if a subject has attempted to conceive of P but fails for some reason, yet succeeds in conceiving a scenario of which $\sim P$ is true, the subject may confuse the propositions true of S and mistakenly describe the scenario as conceiving of P . Proposition confusion can be used against conceivable impossibilities since, if an objector claims, e.g., a type i) impossibility conceivable, the conceivabilist may undermine the objection by charging that the objector is conceiving of a possible scenario S , while

⁴⁰ See the two colors in the Wikipedia article “List of colors: A–F” (shortened URL: <https://tinyurl.com/k57trbb>).

misdescribing the scenario with a description D (as conceiving of *P*) that is absurd; the objector is under the spell of proposition confusion.

It seems to me that every conceivabilist must allow for misdescription of conceived scenarios and that we simply do not have epistemic access to conceivability facts – at least not of an infallible kind. Berglund (2005, 128f) considers a case which (with a little elaboration) offers a convincing reason why. Consider a subject who claims that he can conceive of a Penrose staircase, an impossible object depicted in the Escher lithograph *Ascending and Descending*. However, from the descriptions offered by the conceiving subject it is clear that he is conceiving of a *depiction* of a Penrose staircase, not the staircase itself as an object. For instance, the subject can only see the staircase in his mind from a single perspective, the perspective of the lithograph. I think everyone should regard this case as a case of misdescription: the subject does not conceive of what he claims to conceive of.⁴¹ Sorensen (1992, 40) offers another example. A college student claims to conceive of a contradiction to the law of noncontradiction. Sorensen states that such cases are routinely dismissed by logic instructors, a strategy he calls “conceptual paternalism” (perhaps a synonym for MMMEs if a less appreciative term).⁴²

Note that in several cases the MMME is presented in a slightly different manner than what I have done here. For instance writes Kung (forthcoming, 2), expounding what he calls Kripke’s “Error Theory” (which seems to be an MMME that extends to *a posteriori* necessity): “When we seem to and take ourselves to imagine a situation S that falsifies some *a posteriori* necessity N, [...] we *do not* in fact imagine S. [...] We imagine a situation S’ that we confuse for S. [...] Situation S’ is possible and consistent with N”. The way I have presented MMMEs, there is no need to introduce *two* scenarios: if we describe a conceived scenario S as contradicting a necessity (regardless of kind), the confusion (if there is one such – remember deniers of Reliability or Universalizability may not extend the MMMEs to certain conceivable impossibilities) need not

⁴¹ If you can provide a genuine depiction of something impossible, there might be a \$100 prize waiting for you. See Sorensen (2002).

⁴² To read more on Misdescription Models of Modal Error see Sorensen (op.cit., 39ff), Kripke (1980), Yablo (1993, 2000, 2006), Berglund (2005), and Kung (forthcoming) – of course, also Stoljar (2006, §4.5.).

be a matter of confusing a scenario S with another scenario S', but simply be a matter of confusion what is true of S.

Leaving confusion and returning to the Standard Objection by Conceivable Impossibilities, I said earlier that the objection may also be an objection to conceivability theses that hold the relation between conceivability and possibility to be evidential such that they allow conceivable impossibilities. Through consideration of the MMMEs we can see that the question is whether the Standard Objection by Conceivable Impossibilities is an objection to conceivability theses that deny Reliability and may offer MMMEs to certain counterexamples. Yablo (1993, 19) states that for the Standard Objection by Conceivable Impossibilities to get traction against the evidential account (one that denies Reliability) it must be shown not only that we conceive of impossibilities but that we *often* conceive of impossibilities to such a degree that conceivability is rendered evidentially unreliable as a guide to possibility. That is, in order to get traction, the objector must offer a statistical hypothesis based on confirming instances of conceivable impossibilities against the evidential, conceivability-based epistemology of possibility. Yablo (*ibid.*, 19) challenges the opponent to put forward the many impossibilities we are supposed to conceive of. The challenge still stands.

3.3.2. Formal Distinction

In the *First Set of Objections* to Descartes' *Meditations*, Johannes Caterus presents a distinction by Duns Scotus: "for one object to be distinctly conceived apart from another, there need only be what [Scotus] calls a *formal and objective* distinction between them" (Descartes 1984, 72 – see for reference to Scotus). This distinction is supposed to be something between conceptual and real. That is, a real (metaphysical) possibility cannot be inferred from conceivability, only a formal possibility. We can consider this kind of possibility as epistemological or conceptual. What is important is that the kind of possibility that conceivability entails or affords evidence of is not metaphysical possibility. Vaidya (2007) suggests that Arnauld's objection to Descartes in the *Fourth Set of Objection* can also be interpreted as a Formal Distinction objection (what he calls the *irrelevant* interpretation of Arnauld's objection). Since we can conceive of a right-angled triangle in Euclidian geometry without the Pythagorean property, conceivability is shown not to track real possibility but merely formal possibility. One way to make the distinction is to

consider metaphysical possibility as absolute possibility, relative to nothing, whereas epistemological possibility is possibility relative to what a subject knows and conceptual possibility is possibility relative to the meaning of words (cf. Hale 2003).

A recent proponent of this kind of objection may be found in Sturgeon (2010) in which he argues that the best epistemic notion of *a priori* conception is merely an infallible guide to conceptual possibility and that to suppose that conceptual and metaphysical modalities are aligned would be to suppose magic is at play, if metaphysical modality is supposed to be mind-independent. The first part can be seen as charging conceivability of an *a priori* variant with a Formal Distinction objection; the second part offers a charge more on par with the Benacerraf Objection (cf. the second section of Jenkins 2010b).

The Formal Distinction objection shares with the previous version of the Standard Objection that it is (often) made by forwarding conceivable impossibilities. Indeed, Formal Distinction may be seen as the objectors “mercy” upon the wrongheaded conceivabilist: “listen, buddy, you really did track *some kind* of possibility via conceivability, just not metaphysical possibility.” Once again, the conceivabilist in defending against the objection use MMMEs. Thus, a conceivabilist may argue that if an objector claims an *a priori* impossibility conceivable and that conceivability is thereby merely tracking epistemic possibility, say, the objector is either confusing the proposition he is conceiving of or is confusing the mode of his relation to the statement in question – perhaps he is merely supposing something impossible. Since there is no counterexample, there is no reason to suggest conceivability merely tracks formal possibility.

3.3.3. Shallow Charge

What I call Shallow Charge is another old objection to conceivability theses. Reid, in his *Essays on the Intellectual Powers of Man* [1785] (Reid 2002), offers four objections. I will only consider the first, but I think both the second and fourth objections depend on an ambiguity made by Reid in the first (see Casullo 1979, Powell 2013 for discussion of Reid's objections). In his first objection, Reid says: “Whatever is said to be possible or impossible is expressed by a proposition. Now, What is it to conceive a proposition? I think it is no more than to distinctly understand its meaning.” (op.cit., 330). He then states that we can understand both possible and impossible propositions. Consider Arnauld’s triangle case once more: you, the reader, most

likely understood the description of the case. If Reid is right, this meant you conceived of the case – you conceived something impossible. If that is right, Reliability must be denied. Conceivability does not entail or afford evidence of possibility, obviously so, and perhaps since we can understand all sorts of impossibilities conceivability is even evidentially unreliable as a guide to possibility. We learn something important by the rejection of Reid’s objection. We learn that conceivability proper must deny Shallow Charge. That is, conceivability proper must be a richer epistemic state than understanding, as Reid understands it. Of course, Reid is not alone in forwarding a Shallow Charge against conceivability theses. As such, Shallow Charge is the charge that conceivability is merely *X* and since we can stand in relation via *X* to impossibility (perhaps often do so) conceivability of *P* does not entail (nor afford evidence of) possibly *P*. McGinn (2004) and Fiocco (2007) are other examples that offer different input than Reid’s ‘understanding’. Fiocco considers conceiving simply a matter of *stipulating* something to be the case. On that basis he denies any evidential role to conceivability in the epistemology of modality. McGinn considers *cognitive imagining* as equivalent to *entertaining a thought* and notes we can entertain thoughts about impossibilities.⁴³

Casullo (1979, 213f) criticizes Reid’s argument for depending on an ambiguity in the phrase ‘to conceive a proposition’. He states that the phrase can mean either “(1) to understand the sentence which expresses the proposition in question; or (2) to conceive of the state of affairs described by the proposition.” He continues (ibid., 14) “The relationship between understanding a sentence and conceiving the state of affairs which it describes is very much like the relationship between understanding a recipe and actually carrying out the directions. One can understand what one has to do without trying to do it or being able to do it.” The point is this: conceivability proper is not merely a matter of understanding a sentence; it is a matter of conceiving the scenario described by the sentence. One can do the first – understand a sentence – without being able to do the second – conceiving of the scenario described.

Common to notions input into *X* (supposedly identical to conceivability) is that they are less restricted than the proper notion of conceivability. So, for instance, one may also stipulate *P* without being able to

⁴³ McGinn might not really be objecting to conceivability theses, he is merely setting out his own theory which can be considered orthogonal to conceivability proper. If that is so, cognitive imagining and the narrow sense of conceiving should not be confused.

conceive of *P*. In 1.4. *The notion of conceivability*, I presented conceivability as objectual in character rather than propositional. I think if Reid were right (and perhaps many of his fellow Shallow Chargers), conceivability would be propositional in character rather than objectual.⁴⁴ Shallow Charge must be denied by conceivabilists. Conceivability proper is a richer imaginative capacity than understanding, entertaining, or supposing or any other shallow epistemic state suggested. The upshot of denying Shallow Charge is that a gap emerges between the conceived scenario and a describing sentence: they are not identical and one may not fit the other. Further, one may confuse the mode in which one relates to a sentence with conceiving of a proposition. We clearly see Stoljar's (op.cit.) two ways of being confused: proposition confusion and mode confusion.

For further reading see Weinberg and Meskin (2006) for an argument to the effect that there is a difference between imagining and supposing. See also Thomas' (1997a) consideration of White (1990). For a discussion of different, conflicting uses of imagination in some disciplines including epistemology of modality see Kind (2013).

3.3.4. The Circularity Objection

The Circularity Objection is a type of Standard Objection that charges that conceivability is a guide to possibility only if "*constrained by priori modal information tantamount to the information that *p* is possible*" Yablo (1993, 12). In other words, the objection has it that conceivability only affords evidence of possibility when the subject already knows that what is claimed as conceivable is possible. Further and importantly, the objection suggests that unappreciated impossibilities are "*almost always*" conceivable (ibid., 19). That is, whenever there is a defeater to the possibility of *P* and the defeater is not appreciated by a subject as such, a scenario *S* representing *P* is almost always conceivable for the subject. The upshot is supposed to be that the subject is so prone to conceive of unappreciated impossibilities that conceivability does not afford evidence

⁴⁴ As before (cf. 1.4. *The notion of conceivability*), I might need to hedge this claim via the conceiving of *scenarios*. Of course, an objector might claim that we can stipulate scenarios as well. Perhaps we can. Though, this sounds to me infelicitous: when "stipulating" scenarios, I am really conceiving of them. There seems to me to remain a difference in the two cases, a difference that may be expressed with the objectual and propositional character distinction.

of possibility. It affords evidence of possibility only when the subject has ruled out any defeaters to P before conceiving of a scenario that the subject takes to verify P . In other words, when the subject has information tantamount to the information that P is possible.

Yablo (ibid., 19) declares that the Circularity Objection is in a weak dialectical position. For, conceivabilists, say, who are doubtful that we often find impossibilities conceivable, will be doubly doubtful that we almost always find unappreciated impossibilities conceivable. Yablo challenges the proponent of conceivable impossibilities to put forward the great number of conceived impossibilities that show conceivability evidentially unreliable as a guide to possibility. We can appreciate the difficulty of showing this since the evidential conceivabilist can offer MMMEs to cases of conceivable impossibilities. For instance, if a subject claims to be able to conceive of a scenario that contradicts the law of noncontradiction – a type i) conceivable impossibility – where the law of noncontradiction is unappreciated by the subject, the conceivabilist can claim this a case of proposition or mode confusion, i.e., that the subject has not conceived of the scenario at all or that he is misdescribing the scenario conceived of. Thus, the conceivabilist can undermine examples supposed to support the claim that we almost always find unappreciated impossibilities conceivable, the premise that is supposed to show that conceivability is evidentially unreliable.

Yablo offers a way that the proponent of the Circularity Objection can sustain that we almost always find unappreciated impossibilities conceivable: by taking it to be a consequence of the notion of conceivability. Ultimately, by offering a Shallow Charge. The notion of conceivability at play here he calls *conceivability_{bp}*, defined as “believability of p is possible”. On this notion, it becomes “something in the order to a conceptual truth” that we almost always find unappreciated impossibilities conceivable. That is, that “someone who doesn’t realize that p is impossible will find its possibility believable” (conceivable_{bp}) (ibid., 20). Of course, this way of sustaining that we almost always find unappreciated impossibilities “conceivable” and thereby erect the Circularity Objection has little import on whether we almost always find unappreciated impossibilities conceivable on the proper notion of conceivability. As such, Yablo celebrates the Circularity Objection as effectively destroying the hopes of those that would consider conceivability_{bp} an epistemological guide to possibility. For good measure, he even throws some wood on the funeral pyre, one piece of wood being that the fact that a subject does not find P impossible is hardly an explanation as to why

the subject would believe P possible. Thus, the conceivability_{bp} of P does not explain why the subject believes possible P . But as is suggested by Yablo (and reiterated in 1.4. *The notion of conceivability*), the proper notion of conceivability does: “*conceiving involves the appearance of possibility*” (ibid., 5).

To read more on the Circularity Objection or what I take to be examples of such see Bailey (2007), arguing all conceivability theses are *unsound*. Vaidya (2010) and Roca-Royes (2011) offers Circularity Objections to conceivabilists that are essentialists or proponents of *de re* modality, arguing that the conceivabilist cannot establish essentialist principles through conceivability without the conceiving subject already knowing of essentialist principles and, thus, that without knowledge of these we can conceive of essentialist impossibilities since conceivability is insensitive to the essentialist principles. I suspect both cases to be Circularity Objections based on Shallow Charges.⁴⁵ Yablo (ibid., 20) suggests that Arnauld offers a Circularity Objection to Descartes of the kind that utilize conceivability_{bp}. Also van Inwagen (1998, 75) says something that suggests a Circularity Objection. He claims that it is doubtful “whether considering a possible scenario according to which p was true would enable us to know that p was possible unless we *knew* that the scenario itself was possible.”⁴⁶

3.3.5. The Enabler Objection

The last kind of Standard Objection to conceivability theses I shall consider is one I shall call the Enabler Objection. The objection is an umbrella term that catches a number of objections that all take a similar pattern: even if there is an epistemic state such as conceivability is supposed to be it merely enables X , and it is X that is really doing the job of justifying the belief in the possibility of the scenario conceived of. What the blank spots are filled in with is what distinguishes the different Enabler Objections. Bealer (2002, 76 n. 4) argues that conceiving is merely a way of generating modal intuitions regarding the conceived scenario,

⁴⁵ Vaidya might be right to attribute to Husserl a conceivability_{bp} conceivability thesis. In turn, he is then right that it runs into a Circularity Objection – what Vaidya calls a *Meno* paradox. In the first paper of the dissertation, I consider Roca-Royes’ objection.

⁴⁶ In turn, van Inwagen claims we never know the scenario to be possible since this requires cognitive capacities beyond us, an objection that I call Depth Charge and consider a Uselessness Objection (see 3.4.2. *Uselessness by Depth Charge*).

and it is really the modal intuitions that justifies the belief in the possibility of the scenario.⁴⁷ Lewis (1986, 90) argues that conceivability has a link to possibility only by being a way of reasoning informally about the principle of recombination,⁴⁸ and it is really the principle of recombination that justifies the beliefs in the possibility in the scenario conceived of. See Cameron (2010) for a response to a conceivability thesis that utilizes both of these. Williamson (forthcoming, §3) argues against a view (not attributed) according to which conceiving is merely an enabler that allows one to entertain propositions (or theory) that are then justified as true or false or probable or improbable on the available evidence – as part a step of reasoning, separate from the step of entertaining – and it is really the second step of reasoning that justifies the belief in the possibility in the scenario conceived of. Very likely, a similar objection can be erected from Bueno and Shalkowski (2015) who pride themselves that they offer an empiricist-friendly epistemology of modality that does not feature conceivability. On their approach, it is our best science (ultimately knowledge of properties of objects) that determine what we can be justified in considering metaphysically possible. So (here I am conjecturing on what they would say), if a subject conceives of a scenario, the justification of whether what is conceived is possible depends on whether the subject knows enough of science to arrive at a reasoned judgement on the scientific viability of the conceived scenario. Conceiving in and of itself does not justify the belief in metaphysical possibility.

Apart from Bealer's, the Enabler Objections all feature that conceiving merely enables a reasoned consideration of a scenario or set of propositions, and that it is really the reasoning in question (based on a principle of recombination, science, or simply "reasoning" of some kind) that would justify any belief in possibility concerning the conceived scenario. In a sense, the conceivabilist may consider some or all of the objections as orthogonal heuristics for forming justified beliefs about possibility that depend on conceivability or on the imaginative capacities at least. It is not clear, however, just how threatened the conceivabilist should be. Of course, the proponents of Enabler Objection say the conceiving *merely enables* X which is doing the real justificatory work, suggesting that once we realize this, we need not be bothered

⁴⁷ See note 31 for a similar Enabler Objection attributed to Kripke.

⁴⁸ The principle of recombination states that "patching together parts of different possible worlds yields another possible world" (1986, 87f).

with actually conceiving any longer. We might as well save cognitive resources and go straight to the formal, rigorous methods of justifying beliefs in possibility. But as Casullo (2012, ch, 12) argues, in a different context, because some area can be reduced to another, mathematics to second order logic, say, it need not entail that the epistemology of the two (one) need proceed by the same methods. If it did, relatively few people would know any mathematics. In other words, it might be cognitively more efficient to “retain” an informal way of reasoning about the matter at hand. In a similar fashion, even if conceiving of *P* merely enables *X* which is doing the real justificatory work in justifying the belief that possibly *P*, conceiving might be a cognitively more efficient way of arriving at justified beliefs of possibility via *X* than simply using the formal, rigorous method itself. Now, this cannot be a correct response. I just described two cases in which we use *X*, the formal, rigorous method, in justifying beliefs in possibility. As such, conceiving is clearly a superfluous element since in both cases we justify by the same means: the formal, rigorous method. We are doing the same thing in the two cases – justifying beliefs in possibility via *X*. Here the line of thought parts ways. The proponent of the conceivability-based epistemology of possibility will argue that clearly, we do not use the formal, rigorous method in arriving in a belief of possibly *P* when conceiving of a scenario in which *P*. Conceiving of scenarios is easy as breathing (exaggerating slightly); formally and rigorously justifying possibly *P* via *X* is not so easy (presumably). In response, the proponent of the Enabler Objection might argue that free, associative thinking in imagination is a fine praxis, often enjoyable, while it seldom justifies any beliefs. In turn, the conceivabilist might rejoin that even the farthest reaches of our capacity to conceive of scenarios is (*prima facie*) the conceiving of metaphysically possible scenarios. Perhaps not all these far out possibilities are relevant to certain epistemological endeavors, our scientific inquiry, say, but that does not suggest that they are not possibilities – even if it suggests that they are not actually true (according to our current best theories of science). The proponent of the conceivability-based epistemology of possibility can thus argue that conceiving justifies beliefs in possibility also beyond what the formal, rigorous method can deliver. Such beliefs in possibility justified via conceivability may stand on shakier grounds since not in the same way formally and rigorously attainable or corroborated by other methods but that simply suggests, according to the proponent, that possibly what is metaphysically possible goes beyond what the other methods can ascertain.

Obviously, this response does not dissuade the proponent of the Enabler Objection and neither does it answer all of them. The Enabler Objection via the principle of recombination remains, at least. But note that Lewis considered conceiving of situations a way of reasoning informally about the principle of recombination. If conceiving plays such a role, it seems conceiving plays a justificatory role even if an informal one at that.

Lastly, note that there is a very obvious sense in which conceiving as a guide to possibility is a form of reasoning. After all, by finding a scenario in which P conceivable, the subject judges P possible. That is, we have two premises and a conclusion: ' CP ' and ' $CP \rightarrow \Diamond P$ ', therefore ' $\Diamond P$ '. As said before, the subject need not explicitly be aware of the second step in the line of reasoning – the relation between conceiving and metaphysical possibility – but as long as the subject reliably attains true beliefs about metaphysical possibility based on conceivability, it seems conceivability is a good epistemological guide to metaphysical possibility. That conceivability should be a form of reasoning is argued by Fischer (forthcoming). According to Fischer, the conceivability-based epistemology of modality is just one “argument-based modal epistemology” among others. In turn, that conceivability may be a form of reasoning may be an argument against Bealer’s reduction of conceivability to intuitions, given intuitions are supposed to provide a non-inferential justification of the modal status of P .

Whether the subject needs be explicitly aware of the first step in the line of reasoning is the matter of the next kind of objection to conceivability-based epistemologies of possibility, the Uselessness Objection.

3.4. *The Uselessness Objection*

The Uselessness Objection is an objection that targets the first premise in an argument for possibility based on conceivability, that something is conceived of, the second premise being that what is conceived is possible. The objection states that even if conceivability entails or affords evidence of possibility, the conceivability thesis is *useless* as an epistemic guide to possibility since we cannot justify whether something is conceived of or not. Typically, the Uselessness Objection focuses on the types of confusion with which we might erroneously judge something conceivable. Stoljar, remember, proposes two types of confusion: proposition confusion and mode confusion. The proponents of the Uselessness Objection by Confusion argue

that we are unable to justify that confusion is not behind finding P conceivable, wherefore we are unjustified in claiming P conceivable. As such, the Uselessness Objection by Confusion turns the Misdescription Model of Modal Error back on the conceivabilists, charging that if they (the objectors) can be wrong about what they conceive of since confused about (supposedly) conceived impossibilities, the same might hold for the conceivabilists with conceivability claims generally.

There is another Uselessness charge, one not bent on confusion. According to proponents of the Uselessness Objection by Depth Charge, justifying a conceivability claim requires cognitive capacities beyond the limited subject – or, rather, conceiving of a scenario that verifies P requires such capacities. So, we in fact know that we, limited subjects, are never justified in a conceivability claim.

Denying Depth Charge together with Shallow Charge brings out a problem I call the Problem of Restriction and Constriction for the notion of conceivability proper which brings into focus mode confusion in justifying a conceivability claim. By denying Shallow Charge, conceiving is held to be a richer notion than simply understanding, supposing, stipulating, etc. There are more *restrictions* placed on conceiving than on X . And by denying Depth Charge, conceiving is held to be not too rich a notion – there are not so many restrictions placed on conceiving so as to *constrict* the plausibility of limited subjects conceiving. Where exactly conceiving lies on this scale of restrictions, however, is not obvious. So, whether one conceives in the manner required by a conceivability thesis may not be epistemically accessible; the subject may confuse the mode of conception.

3.4.1. Uselessness by Confusion

I consider the Uselessness Objection by Confusion introduced by Arnauld as an objection against Descartes.⁴⁹ As we saw in the overview, Descartes accepts Reliability and Accessibility. As noted in the presentation of the Standard Objection, Arnauld offers to Descartes a case in which a subject conceives of a

⁴⁹ The Uselessness Objection is named after the “uselessness interpretation” of Arnauld’s objection as offered by Vaidya (2007). Vaidya considers Arnauld’s objection to Descartes as the source of the Standard Objection as offered by Brueckner (2001). Even if Brueckner is somehow inspired by Arnauld, I consider it inspiration based on a misinterpretation of Arnauld’s objection, if a pervasive one at that (see note 37 and part II of the presentation, 6. *Descartes vs. Arnauld*).

right-angled triangle in Euclidian geometry without the Pythagorean property – something impossible. Arnauld thinks the case inconceivable. However, he submits that someone may misdescribe himself as conceiving of the scenario. The subject in the case is confused somehow – perhaps about one or more of the concepts involved in the sentence ‘a right-angled triangle in Euclidian geometry without the Pythagorean property’. The problem posed to Descartes by Arnauld is how Descartes knows he is not misdescribing himself or his body upon claiming to be able to conceive of them as distinct, just as the subject in the triangle case misdescribes his conceived scenario. Descartes answers by arguing for the Reliability of his conceivability thesis, by having *complete* conceptions of the objects that are involved, where a complete conception of an object is supposed to respect the essence of the object. This is a failed rejoinder to Arnauld’s objection.⁵⁰ Arnauld does not attack Descartes on the Reliability of his conceivability thesis – Arnauld can simply admit that complete conceptions would ensure Reliability – the attack is on epistemic access to conceivability facts, on Accessibility. How does Descartes know his description D of the conceived scenario S as representing the proposition *P* is true of S, or that S is conceived in the right manner? That Descartes claims to possess complete conceptions of objects when clearly and distinctly conceiving is irrelevant to that question, for the question simply becomes how do you justify or know that you possess complete conceptions? Arnauld pushes his objection to the maximum: even in a *best case* scenario, e.g., when conceiving of triangles – something we are supposed to completely grasp if anything – we might misdescribe our conceived scenario as of conceiving something impossible. The problem is this: for any claim of conceivability, it is possible that the conceiving subject is confused such that the description D of the scenario S as representing the proposition *P* is in fact a misdescription of S – even that D is absurd – while the subject may believe it a sound description of S. That is, the justification offered by the conceiving subject to the fact that S represents *P* is not confused is compatible with the description being confused and impossible. Thus, Arnauld can allow that Descartes’ conceivability thesis is true – clear and distinct conceivability infallibly entails possibility – while he can reject the thesis as epistemically helpful in arriving

⁵⁰ But might be a successful reply to Caterus’ Formal Distinction objection which questions whether Descartes is merely tracking a formal distinction between mind and body by conceiving of their distinctness. If Descartes is indeed respecting the essences of mind and of body, it seems the distinction conceived is real and not merely formal.

at knowledge of possibility. In order to arrive at the conclusion that P is possible, the two premises ‘ CP ’ and ‘ $CP \rightarrow \Diamond P$ ’ must be satisfied.⁵¹ Even if we stipulate the second premise as true since we cannot justify or come to know whether the first premise is true, we cannot use the conceivability thesis in gaining knowledge of possibility. So, the conceivability thesis is *useless* as an epistemic guide to possibility.

Arnauldian skepticism is a pervasive skepticism about telling appearance apart from reality – in this case, skepticism about epistemic access to conceivability facts in scenarios constructed *voluntarily* by a conceiving subject.⁵² According to Arnauld, the subject does not have epistemic access to the scenario conceived of and may misdescribe it – even absurdly so. That is, proposition or mode confusion is always a danger. Sometimes Arnauld is said to deny a ‘transparency thesis’ (Berglund 2005) or a thesis on ‘real conceivability projection’ (Almog 2002) that Descartes supposedly accepts. Both amounts to the thesis that if it appears to a subject that he conceives of P , the subject genuinely (really) conceives of P ; the subject has *transparent* epistemic access to conceivability facts from epistemic access to conceivability appearance. If Arnauld is right, it offers a problem to any conceivability thesis that accepts Accessibility. If we can unbeknownst (absurdly) misdescribe any conceived scenario, the reason for thinking a particular conceivability claim justified by a subject seems to be foiled. That is, we can think a scenario clearly and distinctly conceived of even when this is not the case, halting epistemic access to conceivability facts by pointing to a non-deceiving God; we can think a scenario ideally conceived of even when it is not, halting epistemic access to conceivability facts by pointing to idealization; and we can believe a scenario only containing a certain content or on only a specific subject matter and be wrong, halting epistemic access to conceivability facts by insight into the content of the scenario.

The strength of the Uselessness Objection by Confusion only increases when, as we saw in the presentation of the Standard Objection, conceivabilists dodge counterexamples (conceived impossibilities) to conceivability theses by offering Misdescription Models of Modal Error. In this case, the conceivabilist

⁵¹ Again, the formalizations are merely illustrative and should not be considered authoritative of the relation between conceivability and possibility.

⁵² The name ‘Arnauldian Skepticism’ is from Berglund (2005), though I take the skepticism to be of a more general kind than does Berglund. Berglund considers Arnauldian Skepticism skepticism specifically about knowledge of the “completeness” of conceptions of objects.

admits confusion in certain cases, leaving the door ajar for Uselessness by Confusion and skepticism about the epistemic use of the conceivability thesis to seep in across-the-board. For what difference is there to the subject conceiving between misdescription and a sound description of a scenario? It seems the subject cannot tell them apart, rendering any conceivability claim unjustified.⁵³

3.4.2. Uselessness by Depth Charge

What I call Depth Charge is a more recent objection to conceivability theses, an objection offered by van Inwagen (1998). I consider it a Uselessness Objection in its own right and one serious enough that van Inwagen concludes that one should be skeptic about conceivability as an epistemic guide to modality (for discussion see Geirsson 2005, Hawke 2011, and Fischer 2011)

We have modal knowledge of a basic kind, states van Inwagen. He cannot account for the epistemology of the basic modal knowledge we possess other than it is of a non-inferential, fallibly accurate kind in analogy with intuitions of distance. For instance, van Inwagen knows *basically* that a table could have been two feet to the left of its actual position, that John F. Kennedy could have died of natural causes, that it is impossible for there to be liquid wine bottles, and that it is necessary that there be a valley between two mountains that touch at their base. In addition to the mysterious basic modal knowledge we possess, we derive modal knowledge from actuality, logic and mathematics, and through concept mastery. Finally, we can build on our modal knowledge through inferences where the premises, if modal, are of the kinds mentioned above. Any other modal claim is to be considered “extraordinary”.

van Inwagen presents himself as a “modal skeptic” regarding justification or knowledge of extraordinary modal claims, as skeptical that we ever have justified beliefs let alone knowledge of the truth or falsity of extraordinary modal claims.^{54,55} Further, he suggests that Yablo’s conceivability thesis supports modal

⁵³ See Mizrahi (forthcoming) for a “new” argument for external world skepticism based on the appearance / reality distinction, a kind of skepticism that I find closely related to Arnauldian skepticism.

⁵⁴ I agree with Fischer (op.cit., n. 84) that van Inwagen’s claim that we possess basic modal knowledge that does not derive from actuality, logic or mathematics, or concept mastery seems a Moorean shift. Fischer rightly questions whether the Moorean shift helps van Inwagen – by the Moorean shift, why do we not also possess extraordinary modal knowledge? Fischer submits that if our modal knowledge is Moorean, we should be confident of our knowledge only in

skepticism. For, according to van Inwagen, in order to take some proposition *P* to be verified by a conceived scenario *S*, as Yablo's conceivability thesis claims is what one has to do in order to be *prima facie* justified in believing *P* possible, it requires that the conceiving subject is committed, "willy-nilly, to the thesis that a physical universe in which [*P*] came into existence and continues to exist is possible, that there are possible laws of nature and possible initial conditions that permit such a thing" (ibid., 77).⁵⁶ van Inwagen notes that while this sounds trivial, it is rarely the case that conceivability claims are backed by such consideration. In order to be so backed, it requires that the conceiving subject demonstrate that there are possible laws and possible initial conditions that permit such a thing, i.e., whatever is claimed as conceivable. The subject would have to imagine a scenario of a "structural detail" comparable to explanations offered by a "condensed-matter physicist" (ibid., 79) in order to take *P* to be verified by *S*. If the subject cannot do this, all the subject can claim possible is a disjunction containing *P*, say, that transparent iron exists in *S*, and a number of propositions that are incompatible with *P*, e.g., that mass deception regarding the existence of transparent iron is at play in *S*. We might be able to rule out some such incompatible disjuncts, says van Inwagen. But in order to rule them all out, the conceiving subject would have to conceive not merely of a scenario but of an entire possible world where *P* is an integral part. That is, in order for the subject to take a proposition *P* to be verified by *S*, he will have to conceive of an entire possible world in perfect detail (with regards to transparent iron, at least) where *P* is the case. We cannot so conceive; it is beyond the cognitive capacities of humans and other limited subjects. It follows that, if Yablo is right in that we are *prima facie*

cases in which there is broad agreement that we have knowledge and "tread very carefully" when shifting from familiar to unfamiliar contexts – when a case is considered extraordinary.

⁵⁵ van Inwagen (ibid., 74) states of the difference between what we know of *basic* possibility and necessity that "it is less clear whether we know of *any* proposition that it is a necessary truth if it cannot be shown to be true either by reflection on logic and the meanings of words or by mathematical reasoning." In this light, it is difficult to see how he *basically* knows that liquid wine bottles are impossible. Google tells me that the jury is still out with regard to drawing a distinction between liquids and solids other than as ideal states. We might try to supercool a liquid such that it (before glass transition) could contain wine: a liquid wine bottle.

⁵⁶ I wonder if this is correct. I doubt people – even many philosophers – are ready to commit themselves "to the possibility of a whole, coherent reality of which the truth of *p* is an integral part" (ibid., 78) when claiming something is possible. That is of course how we would interpret a possibility claim in Possible World Semantics. But, probably, people would simply commit to the possibility of the actual world being such that *P* were true, not that there is a possible world of which *P* is an integral part, be it a real or abstract kind. Of course, van Inwagen can agree. Maybe this even fits well with his program just with the addition that what people – or many philosophers – will commit to is not enough to justify extraordinary possibility claims. A pressing question to van Inwagen is why not?

justified in a belief about a possibility only if we can conceive of a scenario *S* we take to verify the proposition *P*, and van Inwagen is right in that it takes cognitive capacities beyond us to conceive of a scenario (world) that we would take to verify *P*, then we are never *prima facie* justified in believing a possibility by way of conceivability. In other words, if van Inwagen is right, the conceivability thesis is *useless* as an epistemic guide to possibility, even if the metaphysical thesis is true. And van Inwagen can rightly be a skeptic about extraordinary modal claims. Depth Charge declares conceiving in the sense at use in a conceivability thesis as requiring cognitive capacities beyond us.⁵⁷

I declare that van Inwagen considers Yablo's conceivability thesis to be one that accepts Accessibility. I disagree with his interpretation of Yablo, but agree with his conclusion: (in my vocabulary) if epistemic access to conceivability facts via 'taking *P* to be verified by *S*' requires cognitive capacities beyond us, *uselessness* seeps in, even if the link between conceivability and metaphysical possibility is true. My disagreement with van Inwagen is with his interpretation of Yablo's notion of 'taking to verify'. I do not read Yablo as requiring 'taking to verify' to include epistemic access to conceivability facts. The belief that a conceived scenario *S* verifies *P* may be wrong without annulling justification of the conceivability claim '*CP*', given the subject *takes P* to be verified by *S*. That is, the subject does not need epistemic access to whether *P* is true of *S* in order to be justified in a conceivability claim – it is enough that *P* appears true of *S* to the subject.

Granted, Yablo gives examples of cases where he does not take a proposition to be verified by a conceived scenario. For instance, Yablo (1993) considers Goldbach's conjecture and argues that he cannot conceive of a scenario that gives him the representational appearance of possibility or impossibility; for Yablo, the truth (falsity) of Goldbach's conjecture is *undecidable* on the available conceivability evidence.

⁵⁷ Arnauld's objection to Descartes can be seen as a version of Depth Charge. Arnauld considers the proper notion of conceivability in the conceivability thesis to be a form of conceivability where one has *adequate* conceptions of the objects involved in a conceived scenario. Adequate conception means here that the subject knows for any property *F* whether an involved object *o* in a conceived scenario possesses *F* or not. Descartes replies that he does not require adequate conceptions (only complete conceptions) and that an adequate conception requires divine cognitive capacities. If Arnauld is right that adequate conceptions are required in a conceivability thesis and Descartes is right that such conceptions require divine cognitive capacities, it seems we have a true conceivability thesis (perhaps even trivially true) that is useless for non-divine subjects as an epistemic guide to possibility.

He argues that if Goldbach's conjecture were to be conceivable for him such that the scenario appears true (false), he would have to actually (dis)prove the conjecture in a conceived scenario. He cannot. Thus, it is undecidable for him. It thus looks like Yablo supports van Inwagen: 'taking to verify' demands cognitive capacities beyond those of the limited subject. However, I think this somewhat of a misunderstanding of the case. Indeed, Yablo cannot take himself to conceive of a scenario in which Goldbach's conjecture is true (false), but I think this is due to Yablo possessing *undermining* defeaters to P , where an undermining defeater is a proposition s "such that s is a reason to deny that $\text{con}(p)$ is a reason to think p possible" (ibid., n. 67). As a professor in philosophy and linguistics with specialization in logic and philosophy of mathematics, I consider it probable that Yablo has thoughts on what it takes to justify Goldbach's conjecture as true or false in a scenario that go beyond that of the average subject. Context is important and a non-specialist might take a scenario S to verify P , fallibly justifying the non-specialist's conceivability claim, which a specialist would not take to verify P .⁵⁸ In this way, Yablo's conceivability thesis does *not* support van Inwagen's modal skepticism: 'taking to verify' does not require epistemic access to conceivability facts, it merely requires epistemic access to conceivability appearance (and appearance of possibility).⁵⁹

Note that I am *not* arguing that epistemic access to conceivability facts requires cognitive capacities beyond the limited subject. I am merely arguing that Yablo does not require epistemic access to conceivability facts in order to judge P possible via conceivability. In fact, I do not think epistemic access to conceivability facts is beyond the limited subject, while I reject we have epistemic access to conceivability facts of an infallible kind.⁶⁰

⁵⁸ I note that there might be an answer to Reid's third objection hidden here – why we do not see conceivability arguments used in mathematics. We do not (if that is indeed the case) because most mathematicians recognize "non-proving" conceived scenarios as "non-possibilities" – they do not consider possibility established in the scenario.

⁵⁹ Kung (forthcoming, §3.4.) offers a different reading of Yablo's undecidability. I think it is very much mistaken, as will be clear by comparison.

⁶⁰ Let me note that even if I am wrong in attributing to Yablo a conceivability thesis in which Accessibility is denied, the conceivability thesis outlined and wrongfully attributed to Yablo seems perfectly viable. In fact, I would be much obliged if the critical readers attribute the position to me instead. Much obliged indeed.

3.4.3. The Problem of Restriction and Constriction

The Problem of Restriction and Constriction is the problem of what the notion of conceivability proper is, given the denial of Shallow Charge and Depth Charge. By denying Shallow Charge, the conceivabilist denies that conceivability proper is simply *X*; the imaginative capacity that is conceivability proper is a richer (imaginative) notion than the suggested substitutions – understanding, entertaining, supposing, etc. I understand the denial of Shallow Charge as the claim that there are restrictions placed on the proper notion of conceiving where there are (let us suppose) no restrictions on the shallower notions suggested. In other words, we can suppose any sentence (given it has semantic content),⁶¹ but we might not be able to conceive of the scenario described by the sentence, as suggested by Casullo (1979). Conceiving proper has more restrictions placed on it. That is, more than zero. In turn, by denying Depth Charge it must be denied that conceivability proper has so many restrictions placed on it that it *constricts* the plausibility of limited subjects being in the mental state required for conceiving. In other words, conceiving cannot be too “deep” an epistemic state, where ever the line may go, and neither can it be too “shallow” an epistemic state. Here we are met with Stoljar’s mode confusion – conflating the mode in which one considers *P*, erroneously judging *P* possible on that basis. Perhaps a subject has merely entertained *P* or does not find $\sim P$ impossible and conflates this with conceiving of *P*, erroneously judging *P* possible on this basis. The pressing question offered by the Problem of Restriction and Constriction is: how does a subject justify that he is conceiving of *P* in the right manner? If there is line of epistemic states between shallow restrictions and deep restrictions, and conceivability proper is a point on or segment of the line, how does the subject justify that *P* is conceived of – lies within the segment / on the point – as opposed to considering *P* via some epistemic state lying just outside the boundary of conceiving? If the subject cannot do so, his conceivability claim is unjustified, the objector might argue. Ultimately, the Problem of Restriction and Constriction is simply a continuation of the Uselessness Objection by Confusion since it deepens the problem of mode confusion.

⁶¹ I mean to rule out syntactically well-formed sentences without semantic content like Chomsky’s [1957] (2002) “colorless green ideas sleep furiously”.

All right, we have got a hold of the Uselessness Objection: the conceivability claim, the description D of a conceived scenario S as representing the proposition *P*— might not fit or be true of the scenario conceived of — D might even be absurd. Yet, the subject might take his (mis)description to be true of S, erroneously judging *P* possible on the basis of the conceivability of S. And *P* might be considered in a mode less-than-conceiving, e.g., merely understanding or entertaining., while the subject may be confused about the mode in which *P* is considered such that *P* is believed possible based on the “conceiving” of S. Basically, one can be confused in the two ways offered by Stoljar and erroneously judge something conceivable on this basis. If the conceiving subject does not have access to conceivability facts, the subject cannot be sure that the conceivability claim is true of the scenario nor that the scenario is conceived of in the right manner. Thus, the subject is not justified in a conceivability claim. So, the conceivability thesis might well be true while it is *useless* as an epistemic guide to possibility since, for any conceivability claim, the subject cannot justify that *P* is *genuinely* conceived of opposed to merely *apparently* conceived of.

Depth Charge says that we in fact know that a conceivability claim is not verified by a conceived scenario since, in order to ‘take *P* to be verified by S’ (or to have epistemic access to conceivability facts), it requires cognitive capacities beyond the limited subject. Thus, no conceivability claim is justified, even if the metaphysical thesis is true.

4. Conclusions

In part I of the presentation, in *1. Conceivability Theses*, I offered what I take to be the basic motivation behind conceivability theses and what I take to be some basic concepts and notions at work in them, emphasizing two features of the notion of conceivability proper: first, that conceiving involves the appearance of possibility; second, that conceiving is objectual in character rather than propositional.

I offered the three demarcation principles, in *2. Distinctions and Overview*: Universalizability, Reliability, and Accessibility. The first two principles demarcate the conceivability theses as to their commitments to the relation between conceivability and possibility. Universalizability distinguishes theses as to whether the relation holds in all circumstances (on all subject matters) or only in certain circumstances. Reliability distinguishes theses as to whether the relation is one of entailment or is one evidential. The third principle

demarcates theses as to whether we have epistemic access to conceivability facts – epistemic access as to whether a description *D* of a conceived scenario *S* as representing the proposition *P* is true of *S* opposed to merely apparently so. Proponents of Accessibility argue that we have epistemic access to conceivability facts. Opponents of Accessibility deny that we have epistemic access to conceivability facts. The three principles provides eight branches of conceivability theses and I indexed a number of conceivability theses on the different branches, provided I was aware of any such proponent and that the branch was supportive of a thesis, offering brief explanations in each case of classification.

In 3. *Objections to Conceivability Theses*, I considered a number of objections to conceivability theses, focusing on those that are peculiar to conceivability-based epistemology of possibility. The Benacerraf Objection was really an Integration Challenge, challenging any epistemology of modality to reconcile metaphysics with epistemology; and the Evolutionary-Reliabilism Objection was also really an Integration Challenge, challenging any epistemology of modality to reconcile epistemology with evolutionary biology. Of the objections peculiar to conceivability theses, I considered the Standard Objection and the Uselessness Objection. The “Standard Objection” as originally formulated turned out to be simply a denial of an entailment relation between conceivability and possibility. But the reasons behind the denial were arguments to the effect that there are no relation between conceiving and possibility. Often, the Standard Objection is offered on account of conceivable impossibilities of an *a priori* kind, an *a posteriori* kind, or an *essential* kind, suggesting also that there should be no evidential relation between conceivability and possibility, if we often or almost always conceive of impossibilities. I submitted that Misdescription Models of Modal Error were part of the answer to the counterexamples set by the conceivable impossibilities, pending the respective favored conceivability thesis. The Uselessness objection turned out to be an objection that thrives on confusion. A proponent of the Uselessness Objection by Confusion asks of any conceivability claim whether the subject conceiving is sure that confusion is not involved in the conceivability claim, arguing that if the subject is not sure, the subject is not justified in claiming *P* conceived of. Since the subject cannot tell confused conceivability claims apart from non-confused ones, the subject is never so justified. Thus, the relation between conceivability and possibility might hold true globally and infallibly, yet the thesis remain *useless* as an epistemological guide to possibility. According to Depth Charge we know that the subject is

never so justified in a conceivability claim since epistemic access to conceivability facts via ‘taking *P* to be verified by *S*’ requires cognitive capacities beyond the limited subject.

Next, we turn to the second part of the presentation, where I discuss two objections levelled at conceivability-based epistemologies of possibility: one old and one new.

II. Discussion of Two Cases

In this second part of the presentation, I discuss two cases using the framework presented in part I. In light of the terminology introduced, I spell out which kind of objections to conceivability theses are forwarded in the two cases, respectively, which is otherwise unclear or contested.

First, I discuss what is called the “Standard Dilemma” for conceivability theses, arguing it is unclear what the dilemma is and which conceivability thesis is supposed to be the target of the dilemma. Through the considerations of the first part of the presentation, we shall see that only a single branch of conceivability theses is really targeted, viz., theses that accept Universalizability, Reliability, and Accessibility, and the problem is really of a kind with the Uselessness Objection by Depth Charge.

Second, I discuss the objection offered by Arnauld to Descartes which, as we have seen in part I, can be interpreted in a number of different ways. It appears to be interpretable in pretty much every way of the Standard and Uselessness Objections. I propose Arnauld is offering a Uselessness Objection by Confusion and argue that Descartes fails to reply to the objection satisfactorily. I argue the point through close consideration of the exchange between Arnauld and Descartes in the *Meditations*.

5. The Standard Dilemma

The Standard Dilemma is considered by Roca-Royes (op.cit., 25ff), crediting Worley (2003) as the originator.⁶² Conceivability theses are said to be required to satisfy two virtues in arguing for possibility via conceivability: first, the virtue that conceivability facts are epistemically accessible; second, the virtue that the specific notion of conceivability entails possibility. The dilemma is that no conceivability thesis satisfies both virtues. For if a thesis satisfies only the first virtue, it runs afoul of the Standard Objection – it must allow that we can conceive of impossible scenarios; and if a thesis satisfies only the second virtue, it runs afoul of the Uselessness Objection by Confusion – we do not know whether something is conceived of in the

⁶² If you read Worley’s paper, you will find no mention of a dilemma, let alone a “standard” one. I am here paraphrasing Roca-Royes’ presentation of the dilemma.

right manner. Roca-Royes admits that the dilemma is not devastating to conceivability theses, it is but pressing.

It was the first of the virtues that inspired the Accessibility principle but as it was noted they are not equivalent. Accessibility says that the conceiving subject has epistemic access to conceivability facts. The accessibility virtue requires the non-ideal subject to have epistemic access to conceivability facts. Thus, since ideal forms of conceiving remain epistemically inaccessible for the limited subject, theses that postulate idealizations thereby do not satisfy the accessibility virtue. In turn, they satisfy Accessibility (the demarcation principle) by supposing the ideal subject to have epistemic access to conceivability facts.

Roca-Royes argues that conceivability theses are partitionable into two camps: the epistemic camp containing theses that satisfy the first virtue, and the non-epistemic camp containing theses that satisfy the second virtue. She considers Yablo's conceivability thesis the exemplar thesis of the epistemic camp, writing: "we can grant that epistemic accounts satisfy [the accessibility virtue] since, for this, we only need to grant that it is normally transparent to a subject whether she is imagining a situation that "she takes to verify p"" (ibid., 26). Chalmers' conceivability thesis she takes as the exemplar of the non-epistemic camp.

There are some of things to say here. First, I disagree with Roca-Royes that Yablo's account is one that satisfies Accessibility or even the accessibility virtue. That it is normally transparent to a subject what she *takes* herself to conceive of does *not* entail that she *in fact* conceives of what she takes herself to conceive of – that she has epistemic access to conceivability *facts*. That would require another kind of transparency, viz., epistemic access to conceivability *facts* from epistemic access to conceivability *appearance*. I admit difficulty in reading 'taking to verify *P*' as requiring epistemic access to conceivability facts in this sense.⁶³

⁶³ I do take some comfort in Roca-Royes attributing to Yablo an account that takes conceivability appearance as epistemically accessible and as one that is feasible for the limited subject. I take it as evidence that I am right against van Inwagen that Yablo's account does not support his modal skepticism, as an account which does not understand 'taking to verify' as requiring cognitive capacities beyond the limited subject. Note that both van Inwagen and Roca-Royes understands Yablo's account as satisfying (something like) Accessibility – that the subject in order to be justified in a conceivability claim must have epistemic access to conceivability facts. Whereas van Inwagen claims that the subject *never* has epistemic access (and, thus, never is justified in a conceivability claim), Roca-Royes considers the epistemic access "normally transparent" to the subject. I claim both are wrong: Yablo's is an account that denies epistemic access to conceivability facts, but accepts epistemic access to conceivability appearance through 'taking to verify *P*'.

Second, it seems that the true divider between the camps is Depth Charge: the epistemic conceivability theses deny conceiving requires cognitive capacities beyond the limited subject, the non-epistemic camp accept that conceiving requires cognitive capacities beyond the limited subject (otherwise there would be little need for idealizations).

Third, the Standard Dilemma needs charitable interpretation in order to be even pressing to a conceivability-based epistemology of possibility. For let us accept that conceivability theses can be partitioned into epistemic and non-epistemic camps pending acceptance or denial of Depth Charge, the pressing questions are:

- a) Why must a conceivability thesis that satisfies the first virtue run afoul of the Standard Objection?
- b) Why must a conceivability thesis that satisfies the second virtue run afoul of the Uselessness Objection by Confusion?
- c) What does the partition of conceivability theses have to do with any of this?

From the overview, we know that there are conceivability theses that straightforwardly deny Accessibility while still being perfectly valid conceivability theses. Take Stalnaker's thesis on the U, R, \sim A branch, take Jenkins' thesis on the U, \sim R, \sim A branch, or take any thesis that accept a justification externalist position with regards to the justification of a conceivability claim. Roca-Royes (op.cit., 26f) offers a \sim U, R, A branch thesis herself as a perfectly valid conceivability thesis that avoids the dilemma – one that seemingly satisfies both virtues! The exemplar of the epistemic account, Yablo's conceivability thesis, straightforwardly denies Reliability (the second virtue) while being a perfectly valid conceivability thesis. So, who exactly is supposed to be pressed by the Standard Dilemma? There is a hint: Chalmers' conceivability thesis is the exemplar of the non-epistemic conceivability theses. Also, Worley presses Chalmers' ideal conceivability theses with the dilemma.

It seems the Standard dilemma is only a dilemma for theses on the U, R, A branch. At least, we seem to have ruled out the Standard Dilemma as a problem for theses on the other branches: accepting the second

virtue / Reliability is not sufficient to establish the dilemma, and neither is accepting the first virtue / Accessibility sufficient to establish the dilemma. Only by accepting Universalizability, Reliability, and Accessibility is a dilemma generated. Or, rather, a problem is generated. And why is that? I think the problem boils down to this: if you want an epistemologically useful conceivability thesis, you must deny Depth Charge (and this is where the partition becomes relevant). It is a requirement that conceivability does not require cognitive capacities beyond the limited subject, if a conceivability thesis is to be an epistemological useful guide to possibility (for limited subjects). Proponents of conceivability theses that accept Universalizability, Reliability, and Accessibility might be hard pressed to reconcile their theses with a denial of Depth Charge, rendering their theses open to the Uselessness Objection by Depth Charge.

This seems right to me, though I think the Standard Dilemma needs some interpretation in order to offer this problem, and it seems to me that the Standard Dilemma is a problem for theses on the U, R, A branch for same reason they have difficulties with Misdescription Models of Modal Error as answers to counterexamples in the form of conceivable impossibilities (see 3.3.1. *Conceivable Impossibilities*). A thesis on the U, R, A branch requires that the subject cannot conceive of impossibilities nor misdescribe conceived scenarios in any circumstances. We are not such globally infallible conceivers and describers. That is, cognitive capacities beyond the limited subject might be required for the U, R, A branch conceivability theses, rendering them useless for limited subjects as epistemological guides to possibility (which we may interpret is the charge of the Standard Dilemma). In this light, it might well be wondered whether U, R, A conceivability theses are epistemological theses at all and, so, whether it is fair to object to them on epistemological grounds.⁶⁴

6. Descartes vs. Arnauld

In this section, I consider more thoroughly the exchange between Descartes and Arnauld in the *Meditations on First Philosophy* [1641] (1984). As we have seen, there is broad agreement that Arnauld offers one or

⁶⁴ I note that Chalmers (2010, 155) argues we, limited subjects, do know certain statements to be possible or impossible by knowing them to be ideally conceivable or inconceivable. At least, we have “very good reasons” to think some statements ideally conceivable or inconceivable.

more objections to Descartes, while it is not clear exactly which one(s) it is. I propose Arnauld is offering a Uselessness Objection by Confusion to Descartes and I argue that Descartes fails to reply to the objection satisfactorily. Also, I will enter into specifics of Descartes' conceivability thesis, and how we might interpret Descartes notion of 'clear and distinct conception'. The exchange is interesting since we both have a historically very influential conceivability thesis and a historically very influential objection, while there is neither broad agreement on which kind of conceivability thesis we are dealing with, nor broad agreement on which kind of objection we are dealing with. I suggest that the confusion about the latter might have started with Descartes.

As you will witness, mine is not a scholarly discussion. The discussion contains anachronisms and will not be overly concerned in getting the right of details or historical reasons behind arguments. My guiding concern is to present what I take to be Arnauld's objection and Descartes' reply in the clearest and strongest forms, and with a view to highlighting their philosophical interest. That said I hope to remain faithful to the ideas of Descartes and Arnauld.

First, I present Descartes' conceivability thesis presented in his *Meditations*. Second, I present Arnauld's objection in the *Fourth Set of Objections*. Third, I present Descartes' reply to the challenge in the *Author's Replies to the Fourth Set of Objections*. Fourth and lastly, I conclude.

6.1. Descartes' project in the *Meditations*

In this subsection, I introduce Descartes' project and his conceivability thesis. I present the notion of 'conceiving' that Descartes uses in his conceivability thesis. I consider how, if ever, we can come to possess erroneous beliefs about something. Finally, I consider Descartes' famous application of his conceivability thesis in arguing for the real distinction between mind and body.

6.1.1. Descartes' project and the conceivability thesis

Descartes famously starts out his project by doubting everything he has previously accepted in order to find the foundations of knowledge. Knowledge, according to Descartes, is belief that is absolutely indubitable and indefeasible, i.e., belief that is doubt-resistant and durably so. Thus, his method of doubt by which he

demolishes any doubtable belief says that he should withhold “assent from opinions which are not completely certain and indubitable just as [...] from those that are patently false” (op.cit., 12). That is, only beliefs that he cannot doubt, that he holds to be certain or self-refuting to deny, can he assent to.⁶⁵

Descartes goes on to consider all the beliefs he assents to in order to subject them to the method of doubt, finding his *cogito ergo sum*: “So after considering everything very thoroughly, I must finally conclude that this proposition, *I am, I exist*, is necessarily true whenever it is put forward by me or conceived in my mind” (ibid., 17). He cannot doubt this proposition when it is put forward by himself – it would be self-refuting to deny the *cogito* (when put forward by himself). Even if the external world is merely dreamt of and if a malicious demon has made us such that we are certain of false propositions, we cannot doubt that we exist, if we are thinking. Descartes submits that he now knows what is required for being certain of anything:

In this first item of knowledge there is simply a clear and distinct perception of what I am asserting; this would not be enough to make me certain of the truth of the matter if it could ever turn out that something which I perceived with such clarity and distinctness was false. So I now seem to be able to lay it down as a general rule that whatever I perceive very clearly and distinctly is true. (ibid., 24)

Clear and distinct perception⁶⁶ is our best epistemic state, and we cannot but accept the matter clearly and distinctly perceived as true while attending to it – occurrent clear and distinct perceptions are *doubt-resistant* and *luminous* in Newman’s (1997) terms. Patterson (2008, 231ff) describes two ways that God could have molded our cognitive capacities such that we cannot but assent to the truth of clear and distinct conceptions. On the first interpretation, the phenomenal view, a clear and distinct conception is a “phenomenally distinctive experience, a kind of feeling that compels the will to assent” (op.cit., 232). This perhaps fits with Newman’s luminosity. On the second interpretation, the intentional view, it is rather the truth of the content

⁶⁵ Newman (1997) notes that Descartes might not be working with a justified true belief interpretation of knowledge, but only require durably indubitable belief (or belief with justification that is certain at all times) for knowledge. Thus, according to Descartes on this interpretation, while we may strictly speaking be in error regarding *P* when we are certain of its truth, we possess knowledge of *P* anyway. I take Descartes as requiring truth.

⁶⁶ I shall ultimately translate ‘perception’ and ‘perceive’ with ‘conception’ and ‘conceive’. The notions seem to be used interchangeably by Descartes in the *Meditations*. See for instance the earlier quote on the *cogito* where Descartes says “conceived in my mind”. Also, in the longer quote just given, Descartes uses ‘conceive’ instead of ‘perceive’ in the French version of the *Meditations* (cf. Descartes 1984, 24 n. 2). As far as I can tell, they are also used interchangeably in secondary literature, save by Sievert (1979) who focus on the French version and interpret the distinction between ‘perceive’ and ‘conceive’ as being significant.

of a clear and distinct conception that rationally compels the mind to assent to its truth since God has molded us to assent to self-evident truths. Patterson argues that the second interpretation is better textually supported.

Descartes explains clarity and distinctness in his *Principles of Philosophy* [1644] (Descartes 1985, 207-208): a perception is clear “when it is present and accessible to the attentive mind,” a perception is distinct if it is not only clear but also precise. That is, the perception is distinct if the content of perception is “so sharply separated from all other perceptions that it contains within itself only what is clear.” Descartes is arguing that since he perceives of the *cogito* with clarity and distinctness he cannot doubt the proposition asserted, i.e., since he understands that it would be self-refuting to deny the *cogito* – is certain of its truth via clearly and distinctly perceiving ‘I exist’ – the assertion is *true* or is *established as true*. Further, since clarity and distinctness in the perception of the *cogito* are marks of certainty and, thus, of the truth of the *cogito*, other matters perceived in his mind with such clarity and distinctness are true as well. Here we find Descartes’ “conceivability” thesis. Vaidya (2007) names it (CDP):

(CDP) If x clearly and distinctly perceives that P , then P is true

Note that (CDP) is much stronger than the ordinary conceivability thesis: a strong conceivability thesis (one that accepts Reliability) might say that if P is conceivable, P is *possible*. The consequent of (CDP) has it that P is *true*. A more ordinary “conceivability” thesis is contained in (CDP) since if a subject clearly and distinctly perceives ‘possibly P ’, ‘possibly P ’ is true. The contained “conceivability” thesis is Vaidya’s (op.cit.) interpretation of the thesis that Descartes uses in his argument for the real distinction between mind

and body.⁶⁷ Other interpreters, e.g., Van Cleve (1983) and Yablo (1990), consider the thesis used by Descartes to feature conceivability and possibility, a conceivability thesis we can call (CDPP):⁶⁸

(CDPP) If x clearly and distinctly conceives that P , then P is possible.

The contained modal thesis in (CDP) is not equivalent to (CDPP). That is, (CDPP) appears not simply an instantiation of (CDP) where P is ‘possibly, P ’. If ‘perception’ and ‘conception’ are interchangeable for Descartes (as they seem to be in the *Meditations*), the antecedents of the theses are identical while their consequents are not. The antecedent of (CDPP) contains simply ‘ P ’, just like (CDP), while the consequent of (CDPP) is weaker than that of (CDP) since P is possible rather than true. So, (CDPP) appears not an instantiation of (CDP). But perhaps conceiving ‘ P ’ and conceiving ‘possibly, P ’ is simply the same such that (CDPP) is an instantiation of (CDP).⁶⁹ However, if that is the case, it seems *ad hoc* that truth of ‘ P ’ is established in certain cases and the truth of mere ‘possibly, P ’ in others. Descartes needs truth established, remember, since he is trying to establish knowledge of, e.g., ‘I exist’, not knowledge of mere ‘possibly, I exist’.

There is textual evidence of the weaker thesis in the *Meditations*. Funnily enough, some textual evidence is found in statements like: “I know that everything which I clearly and distinctly understand is capable of

⁶⁷ Briefly, the kind of possibility that Descartes is interested in is *real* possibility, a kind of possibility that says something about the world – that God could have made the world as conceived of – not merely a kind of possibility that says something about the perceiver, concepts, or another kind of formal possibility. I interpret this real possibility as metaphysical possibility though it is far from clear exactly what Descartes takes it to be, or that he is consistent throughout his writings (see Cuning 2002).

⁶⁸ Still other interpreters consider the thesis used by Descartes one that features *understanding* (cf. Wilson 1976) or some fourth or fifth notions (cf. Almog 2002, ch. 1).

⁶⁹ Yablo (1990, n. 17) argues that Descartes is inclined to consider conceiving ‘ P ’ and ‘possibly, P ’ distinct since Descartes says in *Comments on a Certain Broadsheet* [1647] (Descartes 1985, 299):

[E]ven though the rule, ‘Whatever we can conceive of can exist’, is my own, it is true only so long as we are dealing with a conception which is clear and distinct, a conception which embraces the possibility of the thing in question, since God can bring about whatever we clearly perceive to be possible.

(Note that Descartes says ‘perceive’ at the end). It seems to me that the text, if supporting one or the other, actually supports that conceiving ‘ P ’ and conceiving ‘possibly, P ’ is equivalent rather than the opposite. Clearly, however, the thesis is to be that of *clearly* and *distinctly* conceiving ‘ P ’ / ‘possibly, P ’ otherwise no possibility is established via conceiving.

being created by God so as to correspond exactly with my understanding of it” (Descartes 1984, 54), which features ‘understanding’ rather than ‘perceiving’ or ‘conceiving’. Thus, only by considering also ‘understanding’ interchangeable with ‘conceiving’ and ‘perceiving’ does it provide the textual evidence of the weaker thesis.⁷⁰

At this point, you might think that perhaps there are two theses: one to do with perceiving and one to do with conceiving or understanding; the strong thesis (CDP) and the weak thesis (CDPP), respectively. But you can find textual evidence also that ‘conceive’ is used in (CDP). For instance, Descartes writes in the synopsis introducing the meditations that “all the things that we clearly and distinctly conceive of as different substances [...] are in fact substances which are really distinct one from the other” (Descartes 1984, 9). That is, if it is clearly and distinctly conceivable that some x is distinct from some y , x is distinct from y . In other words, if P is clearly and distinctly conceivable, P is true. Clearly, this suggests that it is (CDP) which is used in his argument for the real distinction between mind and body. In fact, the part omitted from the quote claims just that. As we shall see, this is not clear – which already the interpretations along (CDPP) adequately show. Before we get to the argument let me consider the notion of perception / conception / understanding in relation to the contemporary definitions of conceiving.

Descartes explicitly denies that *conception* (the stars are simply meant to point to this mystery notion, ‘perception / conception / understanding’, used by Descartes) is to be understood along the lines of imagination, a concept that he takes to be “contemplating the shape or image of a corporeal thing” (ibid., 19). Such image manipulation relates to the nature of the body and could be mere dream or chimeras. He thinks that to say that we can use the imagination to get to know anything would be “fictitious inventing”. It appears that Descartes takes imagining as being a matter of recombining sensory experiences imaginatively which is similar to contemporary definitions of imagination, as we saw in part I of the presentation, in 1.4. *The notion of conceivability* (cf. footnote 9). So, since he shoots imagination down, can we perhaps equate his notion of *conception* with the narrow sense of conceivability?

⁷⁰ Incidentally, if this is right, Wilson’s interpretation of Descartes’ conceivability thesis (cf. note 68) is equivalent to (CDPP).

Descartes considers a piece of wax. After listing all sensory properties of the wax, he asks: “it has everything which appears necessary to enable a body to be known as distinctly as possible. But even as I speak, I put the wax by the fire, and [the sensory properties listed are lost or changed]. But does the same wax remain?” (ibid., 20). He answers yes and denies that the distinctness of the wax was understood by means of the senses. He then considers if he understood its distinctness by the imagination but denies this as well as “I would not be making a correct judgement about the nature of wax unless I believed it capable of being extended in many more different ways than I will ever encompass in my imagination.” Rather, the distinctness of the wax is “perceived by the mind alone.” He continues:

[T]he perception I have of [the piece of wax] is a case not of vision or touch or imagination – nor has it ever been, despite previous appearances – but of purely mental scrutiny; and this can be imperfect and confused, as it was before, or clear and distinct as it is now, depending on how carefully I concentrate on what the wax consists in. (ibid., 21)

On Descartes’ account, clearly and distinctly *conceiving* the wax is a matter of clearly and distinctly *conceiving* (perhaps ‘understanding’ or ‘perceiving’ sounds better here) the properties of the wax over and above those that can be sensed or imagined. Instead of sensing or imagining properties of an object *o*, the clear and distinct *conception* must be a case of “purely mental scrutiny,” a clear and distinct *conception* of what it takes to be the *substance* of wax. So, now we have yet another term for to include in *conception*: ‘purely mental scrutinizing’. Descartes’ notion of *conception* seems to be a matter of forming an abstract concept or representation of something that does not rely (merely) on imagined or sensed content – perhaps that of the essence of the thing clearly and distinctly *conceived* of. By *conceiving* of the wax clearly and distinctly, Descartes becomes certain that it is the same wax throughout its changes – he clearly and distinctly *conceives* of its *waxhood*.⁷¹

All in all, Descartes’ *conceivability* thesis is if not exactly, then at least close to a conceivability thesis. Of course, Descartes’ notions and thesis is very much a predecessor of the contemporary notions, so this is as

⁷¹ This seems to be the agreement in the secondary literature as well. See Patterson (2008) for an overview. We return to this in considering Descartes’ reply to Arnauld.

it should be. But our considerations of his notion of *conceivability* has not advanced our knowledge of his *conceivability* thesis. So, I return to his conceivability thesis and I drop the stars for now.

One of the important results that are established via the conceivability thesis is the existence of God. This is proved through a clearly and distinctly conceived argument (I will not consider the argument). That is, by (CDP). (I do not quite see how it could be (CDPP) that is at use here: as with the *cogito* above, Descartes wants to establish ‘God’ not ‘possibly, God’.) However, that clear and distinct conception of *P* should entail (or establish) that *P* is true seems to require quite a leap of faith. In fact, that is nearly what is required, according to Descartes: the veridicality of the method is guaranteed by *God not being a deceiver*. That is, God is the creator of our cognitive capacities and has molded us such that we cannot but assent to content clearly and distinctly conceived of. If (possibly) *P* could be false while we clearly and distinctly conceive of *P* this would mean that God is deceiving us, per impossible. This sounds like circular reasoning and is known as the Cartesian Circle (see Newman op.cit., §6): the objection to Descartes that he is arguing circularly by justifying the veridicality of (CDP) by the existence of a non-deceiving God, and justifying the existence of a non-deceiving God by a clearly and distinctly conceived argument – by (CDP).

According to Newman, the circularity is not unavoidable. It depends on whether you interpret the method of doubt as *bounded*, as not applying to all subject matters, or *unbounded*, as applying to all subject matters. On the former interpretation, atheistic knowledge is possible since, e.g., the *cogito* or that there is a non-deceiving God (from which further knowledge may follow) are indubitable and indefeasible subject matters. That is, the method of doubt is bounded so as to not touch upon these indubitable and indefeasible subject matters. On the latter interpretation, the method of doubt is unbounded and touches upon these subject matters as well. Thus, since knowledge requires a non-deceiving God and we only have that through a dubitable argument (since the method of doubt touches upon it – the method is unbounded), knowledge of the *cogito* or of a non-deceiving God (of anything really) is beyond us.

It seems to me that the bounded / unbounded interpretations of the method of doubt track some of the same distinction as that of Universalizability and Reliability for the conceivability thesis, viz., whether a conceivability thesis functions in any circumstances or only in special circumstances, and whether a conceivability thesis entails or merely affords evidence of the possibility of what is conceived of. Accept a

bounded method of doubt and you are at the same time attributing a conceivability thesis to Descartes that denies Universalizability and accepts Reliability: the conceivability thesis functions only in special circumstances, when dealing with an elite class of indubitable and indefeasible propositions, but entails truth. On the bounded view, knowledge is possible via the conceivability thesis. Accept an unbounded view and you are at the same time attributing a conceivability thesis to Descartes that accepts Universalizability but denies Reliability: the conceivability thesis functions in any circumstances, but provides only evidence of truth. On the unbounded view, knowledge is not possible via the conceivability thesis since knowledge requires indubitability and indefeasibility and we only have this if a non-deceiving God exist. Alas, we have only an indubitable yet defeasible belief in a non-deceiving God since it is dubitable when not attending to the argument.⁷²

Now, I do not really care about whether Descartes argues circularly here. Nonetheless, I do think that Descartes considers his conceivability thesis to be one that entails its consequent. That is, I think Reliability holds for his conceivability thesis – whether the conceivability thesis is (CDP) or (CDPP). So, it seems I deny the unbounded view. This is in accordance with my belief that Descartes aims at establishing knowledge that we can “take with us” and not simply have when attending to it clearly and distinctly.⁷³

However, I think there might be something to whether Universalizability holds for (CDP) and (CDPP). Perhaps certain subject matters cannot feature as input to (CDP) but may feature as input to (CDPP). Take ‘Thomas is wearing a yellow hat’ as *P*. This subject matter is not doubt-resistant or luminous when attended to by the mind clearly and distinctly. After all, one can doubt that Thomas is wearing a yellow hat – it may be false. As such, *P* cannot feature as input to the conceivability theses, given their antecedents are identical and only take clear and distinct conceptions as input. Yet, I take it that *P* is clearly and distinctly understandable such that God could create the world so as to correspond to it. That is, perhaps ‘Thomas is

⁷² Sievert (op.cit.) might be read as taking Descartes to have both these theses: one is simply a “perception” thesis, the other a “conceivability” thesis.

⁷³ Newman argues for an unbounded interpretation in which, by repeated meditation, the truth of the existence of God becomes as good as indubitable when not attending the clear and distinct argument for God’s existence. In this way, the veracity of the conceivability thesis is established since God is as good as self-evident. See Newman (op.cit.) for references.

wearing a yellow hat' can feature as input to (CDPP) but not (CDP). If this is right, Universalizability may hold for (CDPP) while not for (CDP). The only subject matters that can feature as input to (CDP) may be the special indubitable and indefeasible propositions that the *bounded* method of doubt does not touch upon – the *cogito*, the existence of God, and (perhaps via the non-deceiving God) mathematics. In turn, any subject matter can feature as input to (CDPP).

Summing up so far, I have said that there are two interpretations of Descartes' conceivability thesis, (CDP) and (CDPP), which may be identical given notions of 'perceiving', 'conceiving', 'understanding' and 'pure mental scrutinizing' are interchangeable to Descartes and given *conceiving* 'P' and 'possibly, P' are synonymous to Descartes. I have said that it seems the theses cannot be identical since, in certain cases, Descartes needs to establish 'P' via clear and distinct conception, e.g., with regards to the *cogito* and a non-deceiving God, and not merely 'possibly, P'. If clearly and distinctly conceiving 'P' / 'possibly, P' were synonymous, this difference in output seems *ad hoc*. This led to a consideration of *bounded* and *unbounded* interpretations of Descartes' method of doubt which suggested conceivability theses that denied Universalizability but accepted Reliability and accepted Universalizability but denied Reliability, respectively. On a bounded interpretation, certain subject matters are not touched by doubt and these subject matters may solely feature as input to a (CDP)-type conceivability thesis, outputting truth. On an unbounded interpretation, all subject matters are touched by doubt and any subject matter may feature as input to a (CDP)-type conceivability thesis, outputting evidence of truth. (Note that this is not the same as outputting 'possibly, P' through (CDPP) – if the conceivability thesis were (CDPP) the output would be evidence of truth of 'possibly, P'.) I said that I could not understand Descartes as having a conceivability thesis that denied Reliability, but that denial of Universalizability in (CDP) but not (CDPP) may explain why certain subject matters are true by clear and distinct conceivability while others are merely possibly true. This might be explainable by positing two distinct conceivability theses that establish subject matter as true or possibly true, respectively, the former only taking certain subject matters as input, the latter taking any subject matter as input. I shall now argue that there is textual evidence that suggests that there is only one conceivability thesis for Descartes.

After the establishment of a non-deceiving God, Descartes states in the *Sixth Meditation*:

It remains for me to examine whether material things exist. And at least I now know they are capable of existing, in so far as they are the subject-matter of pure mathematics, since I perceive them clearly and distinctly. For there is no doubt that God is capable of creating everything that I am capable of perceiving in this manner; and I have never judged that something could not be made by him except on the grounds that there would be a contradiction in my perceiving it distinctly. (ibid., 50)

Further.

But now, when I am beginning to achieve a better knowledge of myself and the author of my being, although I do not think I should heedlessly accept everything I seem to have acquired from the senses, neither do I think that everything should be called into doubt.

First, I know that everything which I clearly and distinctly understand is capable of being created by God so as to correspond exactly with my understanding of it. (ibid., 54)

I read these quotes as suggesting the following: there is a difference between the subject matters of our understanding even after the establishment of a non-deceiving God. In the first quote, I think Descartes is arguing that while mathematics is true since doubt-resistant and luminous when clearly and distinctly conceived of with a non-deceiving God in mind, the material objects mathematics use as subject matter are merely *capable* of existence through their clear and distinct conception. Why so? According to the second quote, something about the external world remains dubitable even while something must be accepted, viz., it remains dubitable whether the conception is true, while indubitable that God *could* create the world so as to correspond with the clear and distinct conception. Of course, this line of reasoning could be used as supporting the difference in subject matter that underlies distinguishing between (CDP) and (CDPP) as relating to acceptance or denial of Universalizability. But I think that would be a mistake. It is the same clear and distinct conception of pure mathematics from which the truth of mathematics is established (with a non-deceiving God in mind) that is used in considering what mathematics take as subject matter – the material objects – as capable of being created as conceived of by God. That is, as possible. This suggests that the very same input has two outputs: something is true and something else is possible. And it is not *ad hoc* what is true and what is possible. In the clear and distinct conception of the case, one subject matter is (lacking a better term) understood as true while the other is understood as possibly true. That is, there is a single conceivability thesis which has two possible outputs, pending the inputted content or how the input gets

processed. Naturally, a proponent of the Universalizability distinction could argue that this is simply the application of the two theses to the same input. In the end, the difference might be negligible. In any case, I shall leave matters as they stand, unsettled.

Before considering Descartes' argument for the distinction between mind and body, I consider his account of error, as it relates to whether Accessibility is accepted by Descartes – whether Descartes thinks we have epistemic access to conceivability facts.

6.1.2. Descartes on error

That Descartes takes God, the creator of our cognitive capacities, not to be a deceiver creates an interesting problem for him: how can we ever be wrong? If God has given us flawless mental powers that allow us to conceive with clarity and distinctness and to know that what is conceived is true or possibly true, then we can never err in our beliefs. We do err, obviously. So, is God a deceiver? No problem, states Descartes, for “it is surely no imperfection in God that he has given me the freedom to assent or not to assent in those cases where he did not endow my intellect with a clear and distinct perception” (ibid., 42). That is, God cannot be blamed for deceiving Descartes when Descartes uses his freedom of will to assent to something which he has not clearly and distinctly conceived of; the imperfection lies solely in Descartes and he alone is to blame for erring. Thus, erring is possible, even with our flawless God given mental capacities to conceive of *P* clearly and distinctly such that we can be certain that *P* is (possibly) the case because of our freedom of will to assent to matters that we have not conceived of clearly and distinctly. If we misconceive *P* and, by our freedom of will, judge *P* true or possible on that basis, the fault of erring (given *P* is false or impossible) is ours, not God's. But even if he cannot avoid error because of his freedom of will, which would require “a clear perception on everything I have to deliberate on, I can avoid error [...] merely on my remembering to withhold judgement on any occasion when the truth of the matter is not clear” (ibid., 43). That is, we can avoid error by checking whether the matter is clearly and distinctly conceived of and only assent to *P* in case it *is* clearly and distinctly conceived of.

Now, in order for a subject to be able to check his conception for whether it is clear and distinct, Descartes must hold that we have epistemic access to conceivability facts; he must accept the Accessibility

principle. The subject must have epistemic access to whether some P is conceived of clearly and distinctly or not – the subject must have epistemic access to the contents of clear and distinct conception and that the content is clearly and distinctly conceived of such that the subject can avoid error by only assenting to the P s that are recognized as clearly and distinctly conceived of. Perhaps, in addition, the subject must have epistemic access to conceivability facts of unclear or indistinct conceptions such that he can avoid error by not assenting to them. If we take the former strategy, then what it would look like on Descartes' account is something like this: if a subject *apparently* conceives of P (if the subject takes himself to conceive of P) clearly and distinctly, then the subject *genuinely* (really) conceives of P clearly and distinctly (see Figure 1).⁷⁴ That is, the apparently clear and distinct conception is transparently recognizable to the subject as genuinely clear and distinct.

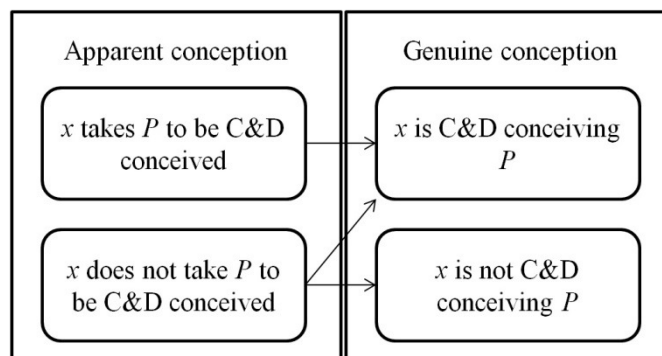


Figure 1: Descartes on apparent vs. genuine conception. In order to explain how we can avoid error by not assenting to misconceptions, I attribute to Descartes a thesis saying that apparent clear and distinct conception is genuine clear and distinct conception.

The subject has epistemic access to what he takes himself as conceiving of and the manner in which he takes it to be conceived of (clear and distinct). Since apparent clear and distinct conception is *transparently* (genuine) clear and distinct conception – are epistemically accessible (recognizable) as clear and distinct – the subject can avoid error by remembering to assent only to subject matters that he takes to be clearly and distinctly conceived of. Descartes states, “I now know that I am incapable of error in those cases where my

⁷⁴ That apparent conception of P is genuine conception of P is the thesis Berglund (2005) calls the “transparency thesis” and Almog (2002) calls “real conceivability projection” (cf. 3.4.1. *Uselessness by Confusion*).

understanding is transparently clear” (ibid., 48). Here he reiterates the sentiment present in his method of doubt, viz., that withholding judgment as to whether *P* is (possibly) true is better than judging that *P* is (possibly) true when you do not take yourself to conceive of *P* clearly and distinctly (even though it might be the case that *P* is genuinely clearly and distinctly conceived of, and even though you are 99% sure that *P* is genuinely clearly and distinctly conceived of). Avoiding error is in focus.⁷⁵

I say that Descartes must be committed to Accessibility. Descartes says nothing about such a thesis in his *Meditations* and there is not much textual evidence for an argument as to why he should accept the thesis, save, perhaps, that God would be a deceiver if it were false on pain of contradiction.⁷⁶ In fact, there is textual evidence that he does not consider apparent clear and distinct conception transparently clear and distinct to the subject. For instance, he says (ibid., 348) “There are, however, few people who correctly distinguish between what they in fact perceive and what they think they perceive; for not many people are accustomed to clear and distinct perceptions.” That is, there are many cases where we think we conceive of something clearly and distinctly while we do not do so. But if this is right, how in the world are we to avoid error by “merely [...] remembering to withhold judgement on any occasion when the truth of the matter is not clear”?

Descartes is given an opportunity by Arnauld to be clearer on his commitments since Arnauld objects to Descartes’ argument for the real distinction between mind and body by rejecting epistemic access to conceivability facts – by rejecting we can recognize clear and distinct conception or misconception as clear and distinct or unclear and indistinct, respectively. Let us take one thing at a time. First, Descartes’ argument for the distinction between mind and body.

⁷⁵ That it could be the case that *P* is genuinely clearly and distinctly conceived of despite *x* taking the conception not to be clear and distinct follows from some *P* not taken to be clearly and distinctly conceived of is not *transparently* not clear and distinct. I have only attributed to Descartes a thesis saying apparently clear and distinct conception is *transparently* clear and distinct.

⁷⁶ One might try to read the following as supporting that Descartes accepts Accessibility via a non-deceiving God: “since my understanding comes from God, everything that I understand I undoubtedly understand correctly” (ibid., 40). But this seems, again, to be a matter of by understanding (clearly and distinctly) God ensures that the world is as according to my clear and distinct understanding, on pain of contradicting God not being a deceiver. It is not a matter of God ensuring that by my *finding* I understand clearly and distinctly, I do understand clearly and distinctly.

6.1.3. The real distinction between mind and body

In the *Sixth Meditation*, Descartes applies his conceivability thesis in his argument for a real distinction between mind and body. He says:

First I know that everything which I clearly and distinctly understand is capable of being created by God so as to correspond exactly with my understanding of it. Hence the fact that I can clearly and distinctly understand one thing apart from another is enough to make me certain that the two things are distinct, since they are capable of being separated, at least by God. The question of what kind of power is required [to do this] does not affect my judgement that the two things are distinct. Thus, simply by knowing that I exist and seeing at the same time that absolutely nothing else belongs to my nature or essence other than that I am a thinking thing, I can infer correctly that my essence consists solely in the fact that I am a thinking thing. It is true that I may have (or, to anticipate, certainly have) a body that is very closely joined to me. But, nevertheless, on the one hand I have a clear and distinct idea of myself, in so far as I am simply a thinking, non-extended thing; and on the other hand I have a distinct idea of body, in so far as this is simply, an extended, non-thinking thing. And accordingly, it is certain that I am really distinct, and certainly can exist without it. (Vaidya 2007, §2.1, brackets are his – original quote is from Descartes 1984, 54)

Thus, it seems that it is (CDPP) which is used in the argument, contrary to his description of the argument in the synopsis. Formalized, the argument reads:

1. If P is clearly and distinctly conceivable, then P is possible
2. If possibly $(x \neq y)$, then $(x \neq y)$ ⁷⁷
3. I clearly and distinctly conceive of $(i \neq \text{body})$
4. From 1. and 3., possibly $(i \neq \text{body})$
5. From 2. and 4., $(i \neq \text{body})$

Here 'i' stands for 'thinking thing' (Descartes' mind) and 'body' for 'extended thing' (Descartes' body). I have allowed some sloppiness in the formalization for sake of simplicity. Most importantly, I have left out

⁷⁷ Descartes pretty much states this principle in the quote: from the fact that he can understand one thing apart from another he is certain that they are distinct, since they could be separated by God (from the possibility of distinctness follows distinctness). Notice that it is logically equivalent to *Necessity of Identity*. Here is the route from one to the other:

- 2. is equivalent to ' $\Diamond \neg(x=y) \rightarrow \neg(x=y)$ '
- which is equivalent to ' $\neg \Box(x=y) \rightarrow \neg(x=y)$ '
- the contrapositive of which is ' $\neg \neg(x=y) \rightarrow \neg \neg \Box(x=y)$ '
- or simply ' $(x=y) \rightarrow \Box(x=y)$ ' – *Necessity of Identity*.

any mention of the essences that Descartes speaks of. The argument is valid. So, objectors must target its soundness. Now, with the argument for the distinction between mind and body in mind, let us turn to Arnauld's objection.

6.2. Arnauld's objection in the Fourth Set of Objections

In this subsection, I introduce Arnauld's case of the right-angled triangle which he sets up to show that a subject can misdescribe a conception of *P* as adequate though it is not adequate. He uses the case to show that the subject does not have epistemic access to conceivability facts, and that Descartes may be wrong in his claim that (*i*≠body) is adequately conceived of. Thus, I take Arnauld's objection to a version of the Uselessness Objection by Confusion. A conceivability thesis may be true but, since subjects cannot establish conceivability facts in a way that rules out confusion, the thesis is *useless* to subjects as an epistemological guide to (possible) facts.

6.2.1. The case of the right-angled triangle

Before introducing his case, let me mention that Arnauld is capitalizing on notions introduced in an earlier objection to Descartes. In the *First Set of Objections*, authored by Johannes Caterus, a distinction by Duns Scotus is presented: "for one object to be distinctly conceived apart from another, there need only be what [Scotus] calls a *formal and objective* distinction between them" (ibid., 72 – see for reference to Scotus), and this distinction is supposed to be something between conceptual and real. That is, a real (metaphysical) possibility cannot be inferred from conception, only a formal possibility wherefrom only a formal distinction between *i* and body can be inferred.⁷⁸ In reply to Caterus, Descartes accepts that such inadequate conception is possible "by an abstraction of the intellect" and that such conception is not enough to infer a real

⁷⁸ Caterus' objection is, of course, the one I called a Standard Objection by Formal Distinction in part I of the presentation, 3.3.2. *Formal Distinction*.

distinction between one thing and another. In turn, he denies that this is the case if the subject has a *complete* conception of the things in question, as he does of *i* and body (ibid., 85f).⁷⁹

Arnauld uses Descartes' admittance that we can conceive inadequately of *P* to argue that *adequate* conception of *P* is required in Descartes' conceivability thesis (ibid., 140). Further, Arnauld argues that we cannot distinguish an adequate conception of *P* from an inadequate one – that we do not have epistemic access to conceivability facts regarding adequacy of conceptions. He argues that a subject does not have epistemic access from an apparently adequate conception of *P* to whether it *is* adequate. Arnauld denies Accessibility. He showcases his argument by an example:

Suppose someone knows for certain that the angle in a semi-circle is a right angle, and hence that the triangle formed by this angle and the diameter of the circle is right-angled. In spite of this, he may doubt, or not yet have grasped for certain, that the square on the hypotenuse is equal to the squares on the other two sides; indeed he may even deny this if he is misled by some fallacy. But now, if he uses the same argument as that proposed by our illustrious author, he may appear to have confirmation of his false belief, as follows: 'I clearly and distinctly perceive', he may say, 'that the triangle is right-angled; but I doubt that the square on the hypotenuse is equal to the squares on the other two sides; therefore it does not belong to the essence of the triangle that the square on its hypotenuse is equal to the squares on the other side.'" (ibid., 141f)

Arnauld is arguing here that a person *x* may find clearly and distinctly conceivable a right-angled triangle (in Euclidian geometry),⁸⁰ 'T(y)', without the Pythagorean property *P*. That is, *x* finds something like '∃y(T(y) & ~P(y))' clearly and distinctly conceivable, judging his conception *adequate*. Using the conceivability thesis, *x* infers that T(y) (possibly) exists without the property *P* and that *P* is not essential to T(y).

However, Arnauld considers it a brute fact that by necessity a right-angled triangle (in Euclidian geometry) possesses the Pythagorean property. He cannot see any possible reply here "except that the person in this example does not adequately conceive that the triangle is right-angled" (ibid., 142). Note that Arnauld here appears to say that we cannot adequately conceive of the *a priori* impossible and that in cases where we take ourselves to do so, we are misdescribing what we conceive of (if anything) as an adequate conception of *P*. Arnauld is explaining a supposed conceivable impossibility by a Misdescription Model of Modal Error

⁷⁹ We shall return to this notion of *complete* conception in Descartes' reply to Arnauld.

⁸⁰ Of course, Arnauld did not state the problem in terms of Euclidian geometry; there were no conception of non-Euclidian geometries at the time. Euclidian geometry was the only geometry in town.

(cf. 3.3.1. *Conceivable Impossibilities*). Arnauld maintains that the person in the example does not know whether he has an *adequate* conception of a right-angled triangle despite his own judgment that it is. So, even though x thinks he can infer a real possibility from his apparently adequate conception of P he cannot, since he does not know whether he has merely apparently adequately conceived of P rather than adequately conceived of P . The subject does not know whether his apparent conception matches the requisite kind of conception in Descartes' conceivability thesis. Arnauld holds that the subject does not have epistemic access to conceivability facts from his apparent conception of P – does not know whether he is making an abstraction of the intellect and is conceiving of P inadequately, as Descartes admitted was possible in his exchange with Caterus. So, the subject cannot use the conceivability thesis to infer (possibly) P .

Arnauld is rejecting Accessibility which I argued Descartes must committed to, if we are to avoid error simply by assenting only to matters we have clearly and distinctly conceived of. Arnauld is rejecting that we have epistemic access to conceivability facts, arguing that there is a gap between apparently and genuinely adequately conceiving of P . If one apparently adequately conceived of P , P might be misconceived and misdescribed – even as of conceiving of impossibility. Thus, the subject cannot infer (the possibility of) P from his apparently adequate conception of P since he cannot tell whether his apparent conception matches the required kind of conception in Descartes' conceivability thesis, the adequate conception, as Arnauld understands it (see Figure 2).⁸¹

⁸¹ Gassendi in *The Fifth Set of Objections* (ibid., 194-195) suggests that Descartes should stop trying to establish his conceivability thesis and instead provide a “method to guide us and show us when we are mistaken and when not, on those occasions when we think we clearly and distinctly perceive something,” a suggestion which fits nicely with Arnauld's objection, I think.

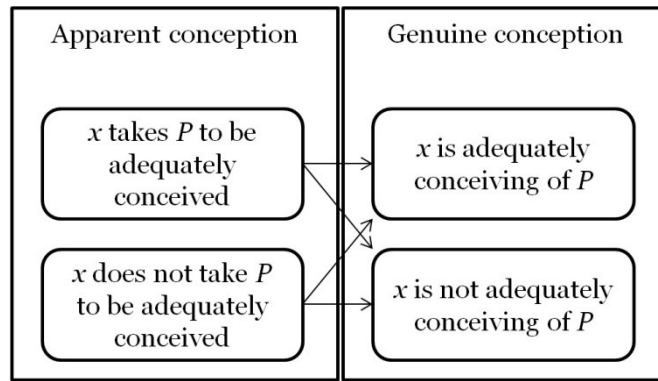


Figure 2: Arnauld on apparent vs. genuine adequate conceivability. According to Arnauld, there is a gap between apparent and genuine conception such that a subject cannot infer the genuine status of a conception from its appearance.

Arnauld likens the triangle case to Descartes' case of clearly and distinctly conceiving of ($i \neq$ body). That is, premise 3. in the formalization of Descartes' argument for the real distinction between mind and body. He says:

But someone may call this minor premiss into doubt [that the conception is adequate] and maintain that the conception you have of yourself when you conceive of yourself as a thinking, non-extended thing is an inadequate one. [...] But how is my perception of the nature of my mind any clearer than my perception of the nature of the triangle? [...] Now although the man in the example clearly and distinctly knows that the triangle is right-angled, he is wrong in thinking that the aforesaid relationship between the squares on the sides does not belong to the nature of the triangle. Similarly, although I clearly and distinctly know my nature to be something that thinks, may I, too, not perhaps be wrong in thinking that nothing else belongs to my nature apart from the fact that I am a thinking thing? Perhaps the fact that I am an extended thing may also belong to my nature. (Almog 2002, 17 – brackets are mine; original passages are from Descartes 1984, 141-143)

In both cases, thinks Arnauld, the subject judges that his conceptions are adequate but since in neither case the adequacy of the conception is epistemically accessible to him from his apparently adequate conception, they may in fact contain abstractions of the intellect and be inadequate. Since the subject cannot tell from his apparently adequate conception of P whether it *is* adequately conceived of, the subject cannot establish that P is adequately conceived of. Descartes cannot assert premise 3. in his argument for the real distinction between mind and body – that he has adequately conceived of ($i \neq$ body) – since he does not have epistemic access to whether his apparent conception of ($i \neq$ body) *is* adequate. Thus, Descartes cannot use the conceivability thesis to come to know that possibly ($i \neq$ body) and, by *Necessity of Identity*, that there is a real distinction between mind and body. This is the case even if the conceivability thesis is true, and if the

conception of ($i \neq$ body) is adequate. In order to infer the possibility of ($i \neq$ body) from conceivability, you need to know that ($i \neq$ body) is adequately conceived of. Arnauld is denying that the latter can be known via the apparently adequate conception of P .

It seems to me that Arnauld's objection is clearly a Uselessness Objection by Confusion: the subject cannot establish that P is conceived of non-confusedly and, so, the conceivability thesis may be true, yet remain *useless* as an epistemic guide to (possible) fact for the subject. Let us move on to Descartes' reply.

6.3. Descartes' reply in the Fourth Set of Replies

Descartes is charged with the objection that he cannot use the conceivability thesis to infer the (possibility of the) matter apparently conceived of. He cannot use the conceivability thesis because he does not have epistemic access to whether his apparent conception of P is adequate, as Arnauld showed with the case of the triangle and extended to Descartes' argument for the real distinction between mind and body. Descartes replies to Arnauld in the *Fourth Set of Replies* but by focusing on Arnauld's use of *adequate* conception rather than *complete* conceptions, he does not provide a solution to the problem that Arnauld is forwarding.

In this subsection, I consider, first, Descartes' overall plan of defense and what he cedes to Arnauld. Second, I introduce Descartes' notion of *complete* conception. Third, I explore why he takes complete conception to be epistemically accessible as complete. Fourth, I consider Descartes' thoughts on the case of the right-angled triangle and on the case of the real distinction between mind and body.

6.3.1. Descartes' defense

Central to Descartes' defense is his notion of *complete* conception versus Arnauld's notion of *adequate* conception. Descartes rejects that an adequate conception of P is required in his conceivability thesis, arguing instead that it is enough to completely conceive of P . He talks of completely conceiving a thing: complete conception of a thing o requires only attributing the essential properties of o , not "absolutely all the properties which are in the thing" as Descartes states is required by Arnauld's adequate conception (ibid.,

155).^{82,83} Thus, simply by clearly and distinctly conceiving of an object *o*, a subject has a complete conception of *o*, as we saw earlier (cf. 6.1.1. *Descartes' project and the conceivability thesis*). However, in order for this to be a reply to Arnauld's objection, as I understand it, it must be the case that a complete conception is epistemically accessible to the subject as complete, whereas adequate conceptions are not epistemically accessible to the subject as adequate.

Descartes agrees with Arnauld that we cannot know whether we possess an adequate conception of a thing, i.e., know that we are conceiving of all the properties of *o*, unless the knowledge is granted by God. For even if we *are* conceiving of all the properties of *o*, as Descartes thinks we might occasionally do, this will not provide us with the epistemic access to the fact that our conception of *o* is adequate. To have epistemic access to such a fact would require an intellect on par with that of God, thinks Descartes, and "this plainly could not happen on pain of contradiction" (ibid., 155). He thus agrees with Arnauld that we do not have epistemic access to adequate conceptions as adequate.

Of course, Arnauld then argues that since we do not have epistemic access to whether we are (genuinely) adequately conceiving of *P* from an apparently adequate conception of *P*, we cannot know whether (possibly) *P* follows from the conception via the conceivability thesis. Descartes' answer to Arnauld's objection is rejecting that adequate conception of *P* is needed in the first place in the conceivability thesis.

Descartes is surprised to learn that his admittance of the possibility of inadequate conception by an abstraction of the intellect and that no real distinction followed from such is interpreted as implying that adequate conception is required for clear and distinct conception of *P* (ibid. 155f). He simply meant that "we need the sort of [conception] that we have not made inadequate by an abstraction of the intellect" (ibid., 156). In other words, what is needed is conception of *P* that is *adequate enough* – so to speak – so it is

⁸² The notions are confusing. The associations one gets from 'adequate' better jibe with Descartes' description of complete conception than that of adequate conception and vice versa. Vaidya (2010) argues as much and switches the notation for clarity. I have maintained the original terminology.

⁸³ Berglund (2005) thinks that Descartes is misunderstanding Arnauld. Berglund takes Arnauld by 'adequate' to have an essentialist account of conceiving of an object *o* similar to the one Descartes is delineating here by complete conception. Berglund submits in a footnote (fn. 9) that his interpretation of Arnauld's notion of adequacy draws on discussions by Yablo (1990, 1993) in which Yablo switches between taking Arnauld as forwarding an essentialist interpretation of adequacy and an interpretation in which Arnauld requires respect for all properties of *o*, as is Descartes' interpretation of Arnauld. I will take Descartes as correctly representing Arnauld. What Arnauld's account really is, is unclear from the *Meditations* alone and an answer would take us too far afield.

epistemically accessible to the subject that the conception of P , e.g., a thing o , is not rendered inadequate by abstraction. Such “adequate enough” conception is what Descartes calls a complete conception of o and which we may interpret as conceiving of o via o ’s essence. Descartes’ notion of complete conception is intimately bound to his notion of a complete thing, where he thinks that a thing is complete if and only if the thing is a substance – capable of existing on its own independently of any other substances.⁸⁴ Commenting on his surprise on Arnauld’s interpretation, Descartes says, “I took ‘a complete [conception] of something’ and ‘[conceiving] something to be a complete thing’ as having one and the same meaning” (ibid., 156). I think we can agree with Yablo (1990, 164) that “this could hardly look less enlightening”. Descartes argues that “by ‘a complete thing’ I simply mean a substance endowed with the forms and attributes which *enable me to recognize that it is a substance*” (ibid., 156 – my italics). Descartes appears to say the following:

- A. If x conceives of o subsisting with only a set of properties M (with all other properties excluded), then possibly, o subsist with only the set of properties M .
- B. o is a complete thing (a substance) if and only if possibly, o subsists with only a set of properties M to the exclusion of other properties.
- C. A subject knows that a conception is complete by *recognizing* that it features a complete thing through only a set of properties M .

Now, A. is simply a restatement of (CDPP):⁸⁵ we can substitute ‘ o subsisting with only a set of properties M ’ in the antecedent and consequent with ‘ P ’ and we have the familiar conceivability thesis. B. I will simply take as a definition of ‘substance’ and ‘complete thing’. On this picture, if an object o can be conceived of as a complete thing qua bearer of only a set of properties M , then o is a complete thing qua possessor of only the set of properties M (cf. Yablo 1990, 168-169, and Berglund 2005, 70-71). We might say that conception of a thing o subsisting with only a set of properties M sets a lower bound on the properties required by

⁸⁴ I am here paraphrasing Yablo (1990, 164).

⁸⁵ Of course, we could restate using (CDP). But since I used (CDPP) in the interpretation of the argument for the real distinction between mind and body, I will use (CDPP) here as well.

something to be *o*; these are the essential properties of *o*.⁸⁶ From A. and B. it is clear that any complete conception of *o* cannot be inadequate because, in virtue of respecting the essential properties of *o* – the lower bound of properties of *o* – the subject has not rendered his conception of *o* inadequate by abstracting or prescind from any essential properties of *o*. The subject has only excluded all the accidental properties of *o* and any other property not related to *o*, say, properties of other substances.

I believe C. is Descartes' answer to Arnauld but, in C., Descartes merely stipulates that complete conception of *P* is epistemically accessible to the subject as complete (as not inadequate) since subjects can recognize from a conception that it contains a complete thing via a set of properties M. That is, it is stipulated that the subject can recognize that the conception respects the set of properties M that are the lower bound of properties for the complete thing *o* such that the thing is completely conceived of. Obviously, this is not a good answer to Arnauld. Let us consider more closely at what he has to say about epistemic access to conceivability facts.

6.3.2. Descartes' on epistemic access to conceivability facts

We saw earlier, in 6.1.2. *Descartes on error*, that Descartes is committed to Accessibility, given we are to avoid error “merely on my remembering to withhold judgement on any occasion when the truth of the matter is not clear”, but that he did not spell out his commitment in the *Meditations*. In fact, it seems he would reject Accessibility. So far, in his reply to Arnauld's rejection of Accessibility, we are none the wiser as to Descartes' thoughts on the matter other than having gotten a confirmation of the commitment and a stipulation that complete conception is epistemically accessible as complete for a subject since a complete conception is recognizable as complete.

Now, Descartes argues that we only know substances (complete things) derivatively through knowledge of the properties they bear. If we were to abstract away from all the properties of *o*, we would no longer know what we were talking about (*ibid.*, 156). Descartes says earlier that if we abstract away from all save

⁸⁶ I shall not enter into whether the lower bound set of properties M of an object *o* are really the essential properties of *o*. I note that there might not be a least lower bound set of properties of *o* but a bunch of minimal lower bounds, depending on what you want to look at. I am grateful for Yablo pressing me on this point.

one property, shape, say, or we simply have an inadequate conception of o , we may be able to say something about the property or properties in question – they are intelligible without a specified substance as bearer – *but they are unintelligible as complete things*. A property considered on its own will be represented as a mere aspect of a substance (ibid., 85f; 159). It follows that we know that there must be one or more substances (complete things) in the vicinity when considering a property or a bunch of properties, and that we will know when we have conceived of a complete thing by adding properties to the bunch because it is then intelligible as a complete thing. We might still need to tinker a bit with the set of properties we are considering since we want the set under consideration to be the lower bound of properties M of the thing in question. Notice that on this picture Descartes is committed to a stronger version of epistemic access than that presented earlier: in addition to epistemic access to clear and distinct (complete) conception of P from apparent clear and distinct conception of P , Descartes must take apparent incomplete conception of P to be transparently epistemically accessible as (genuine) incomplete conception of P (see Figure 3).

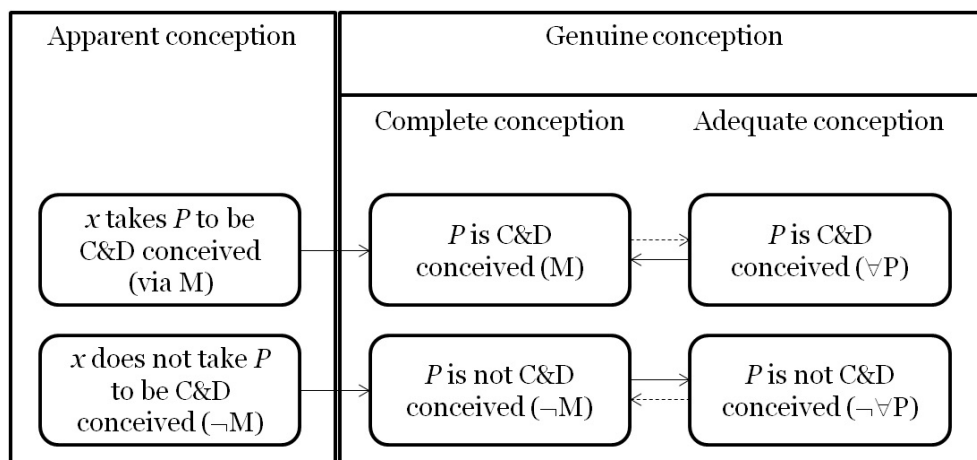


Figure 3: Descartes on apparent vs. genuine conception with complete and adequate conception. According to Descartes, an apparently (in)complete conception of P is transparently a genuinely (in)complete conception of P . Unlike earlier, there is no possibility of an apparently unclear or indistinct conception being a genuinely clear and distinct (complete) conception.

Yablo (op.cit., 167f) describes Descartes' strategy: "one avoids problematic abstraction by thinking of [*o*] in terms of properties such that the supposition of its existing with them alone is not repugnant to reason."⁸⁷

Why should we believe in epistemic access to conceivability facts via this repugnancy-of-reason strategy?

Once again, Descartes merely stipulates an answer to Arnauld, viz., that complete conception is epistemically accessible as complete because only they are intelligible as complete – not repugnant to reason considered via a set of properties M.

Descartes might here be using an inconceivability thesis to support Accessibility in his conceivability thesis: inconceivability of *P* as a complete thing via a set of properties M entails that *P* is not possibly a complete thing with only the set of properties M. This inconceivability thesis itself stands in need of support, and there seems to be room for Arnauldian skepticism here as well since it could be asked whether an apparent inconceivability of *P* is a (genuine) inconceivability of *P*. In addition to a Uselessness Objection by Confusion problem for the inconceivability thesis, adapted versions of all the objections to conceivability theses considered in 3. *Objections to Conceivability Theses* stand before an inconceivability thesis. Thus, using the latter to support the former is like explaining A by pointing to B while leaving B unsupported. Thus, it is far from obvious that inconceivability helps in setting up a principle of Accessibility in Descartes' conceivability thesis.

However, Descartes mentions cases where a repugnancy-of-reason strategy is at play: in considering unities and in considering certain (concepts of) properties. For instance, a hand is a complete thing considered alone, but when considered as part of the unity body (unity of several substances), it is incomplete (ibid., 157). He submits, though, that this sense of incomplete should not be confused with the incompleteness of something considered on its own as a complete thing, and that we are interested here not in unities but in things considered on their own. Further, he notes that not all "things" *can* be considered on

⁸⁷ Almog (2002) finds the same strategy though he argues the question is never when one creates an object by lumping together properties. Rather, the question is "[o]f an already *given* [object *o*] provided by the history of the world, what are the limits of subtractions from the list of its actual [properties], preserving all the while the sense that the story (conceiving) is still about [*o*]?" (op.cit., 33). He maintains that we should not expect algorithmic rules as an answer to this question. We test various candidates and find out by trial and error what kind of properties get our intuitions satisfied. In case our intuitions are satisfied regarding an object *o*, we have a "conceptual fix" on the constitutive properties of *o* – the essential properties of *o*.

its own: “[f]or example, we can easily understand the ‘figure’ without thinking of a circle [...]. But we cannot understand any specific differentia of the ‘circle’ without at the same time thinking of the genus ‘figure’” (ibid.). Thus, there are cases where we asymmetrically can think of one thing without another, but not of the other thing without the one. Descartes might be trying here to support the repugnancy-of-reason strategy on the one case by pointing to other domains, e.g., the domain of concepts, where the strategy is also in use: even certain (concepts of) properties are repugnant to reason when not considered in conjunction with other (concepts of) properties. Some (concepts of) properties asymmetrically necessarily co-occur. We can have a concept of a figure without having the concept of a circle, but we cannot have a concept of a circle without having a concept of a figure. We can thus conceive of a figure without conceiving of a circle, but not conceive of a circle without conceiving of a figure. In neither case can we conceive *completely* of the properties since that would require a bearer of the properties, a substance / a complete thing. So, like a single property might be repugnant to reason without another, a set of properties might be repugnant to reason considered as a complete thing.

With this in mind, Descartes considers Arnauld’s case of the triangle and how it does not extend to the case of mind and body.

6.3.3. The triangle and the mind and body

Descartes argues that the case of the right-angled triangle and the case of the mind and body differs in three ways (ibid., 158f). First, neither the triangle nor the ratio between the square on the hypotenuse and the squares on the other sides (the Pythagorean property of right-angled triangles that this ratio is one of equality) are complete things, whereas *i* and body are complete things. So, while the former are intelligible abstracted from a complete thing, they are unintelligible considered on their own *as* complete things, unlike *i* and body. Descartes is here using the repugnancy-to-reason strategy: both triangle and ratio are repugnant to reason considered as substances, while neither *i* nor body are. Thus, the former are impossible as substances, while the latter are (possible as) substances and, so, are distinct.

Second, while we can clearly and distinctly conceive of a right-angled triangle without being aware of the Pythagorean property, we cannot clearly and distinctly conceive of a triangle having the Pythagorean

property without being aware that it is right-angled. In the case of *i* and body, we can clearly and distinctly conceive of one without the other and vice versa. So, like in the case of figure and circle, we can asymmetrically conceive of right-angled triangle without being aware that *P* but not conceive of a triangle with *P* and fail to be aware that it is right-angled. In the case of *i* and body, we can symmetrically conceive of either with the other excluded. I think that Descartes is arguing that a triangle is conceptually possible without a *specified* ratio between the hypotenuse and the square on the other sides, but a specified ratio is not conceptually possible without a triangle. In the case of *i* and body, either is conceptually possible without the other. Thus, the triangle case is not even conceptually possible.

Third, while we can clearly and distinctly conceive of a right-angled triangle without being aware that *P*, we cannot clearly and distinctly conceive of a triangle while denying *some* ratio to hold between the square on the hypotenuse and the squares on the other sides. Further, we can only deny a *given* ratio, if the respective triangle is completely conceived of and the given ratio is found not to hold of it. Thus, it is impossible to deny the actual ratio of a given triangle and clearly and distinctly conceive of it. In the case of *i* and body, we can clearly and distinctly conceive of the one while denying *any* connection to a property that is in the other and vice versa. So, Arnauld's case of the triangle is simply incoherent: the person in the example has not even clearly and distinctly conceived of a right-angled triangle since he denies a specific ratio of it, the actual ratio.

Summing up, counter to Arnauld's case of the triangle, Descartes states that i) the cases are incomparable since the triangle case does not deal in real (metaphysical) possibility since neither triangle nor Pythagorean property are intelligible as substances, unlike *i* and body; ii) the cases are incomparable since the concepts of triangle and Pythagorean property asymmetrically necessarily co-occur, unlike the concepts of *i* and body; and iii) the triangle case is formally (conceptually) incoherent since the person in the example is denying the actual ratio between the square on the hypotenuse and the squares on the other side while saying it is a clear and distinct conception, unlike the case of claiming *i* distinct from body which is formally coherent. Thus, Descartes replies to Arnauld by arguing that the problems of triangle case do not extend to the case of *i* and body since, in a sense, the former can be shown to be inconceivable while the latter cannot.

It should be clear that this is *not* an answer to Arnauld. Arnauld follows his own example by saying that he can see no reply but to say the person in the example is not clearly and distinctly conceiving of *P*, *clearly* suggesting that the objection is *not* that the impossibility is conceived of. Rather, the objection is that it may be epistemically inaccessible to a subject what he is really conceiving of from the subject's apparent conception, and that this denial of epistemic access render the conceivability thesis, the link between conceiving and real (metaphysical) possibility, epistemically useless even if it is true and even if *P* is conceived of clearly and distinctly.

If Descartes' reply to Arnauld is supposed to provide an answer to this objection, Descartes' reply crucially depends on the stipulation that he has epistemic access to complete conceptions *as complete* – that his apparently complete conceptions of *P* are complete since the former is epistemically accessible as not repugnant to reason, thus featuring complete things. By knowing that his apparently complete conception of *P* is complete and by remembering the conceivability thesis, he knows his conception of *P* matches the required kind of conception in the antecedent of the conceivability thesis and is able to infer (the metaphysical possibility of) *P*.

Descartes states that both *i* and body are complete things: the lower bound set of properties *M* that the substance '*i*' bears are "thought properties" to the exclusion of all other properties – in particular the extended properties. Likewise, the lower bound set properties *M* that the substance 'body' bears are the extended properties to the exclusion of all other properties – in particular the thought properties. Having complete conceptions of *i* and body, Descartes can assert premise 3. in the argument for the distinction between mind and body – that he can clearly and distinctly (and completely) conceive of (*i*≠body). By matching his conception of (*i*≠body) to the kind of conception required in the conceivability thesis, he is able to infer the metaphysical possibility of (*i*≠body) and, by *Necessity of Identity*, that the distinction between mind and body is actual.

6.4. Conclusions of Descartes vs. Arnauld

I think Descartes simply misses the point of Arnauld's objection: it matters little whether Arnauld thought that *adequate* conception of *P* should be the required kind of conception in the conceivability thesis or whether he thought, as Descartes, that the required kind should be *complete* conception. Arnauld's objection is that *regardless* of the kind of conception required in the thesis as long as it is not mere *apparent* conception, you will not be able to *transparently* know that your conception of *P* matches the requisite kind.

Arnauld rejects Accessibility, epistemic access to conceivability facts. Arnauld's example with the triangle shows how a person might misdescribe an apparent conception as (genuinely) clearly and distinctly conceiving of impossibility. Arnauld admits that he does not think that the person in the case has clearly and distinctly conceives of the right-angled triangle without the Pythagorean property; in fact, he seems to think that we cannot clearly and distinctly conceive of the *a priori* impossible. The problem posed to Descartes by Arnauld is how Descartes knows he is not misdescribing himself or his body upon claiming to be able to conceive of them as distinct, just as the subject in the triangle case misdescribes his conceived scenario. If we do not have epistemic access to conceivability facts, it seems we do not know when something is conceived of or not.

Descartes answers by arguing for the Reliability of his conceivability thesis, by having *complete* conceptions of the objects that are involved, and by arguing that the conception of the triangle neither matches the required kind of conception for judging something to be metaphysically possible nor matches the required kind of conception for judging something to be conceptually possible. This is a failed rejoinder to Arnauld's objection. Arnauld does not attack Descartes on the Reliability of his conceivability thesis – Arnauld can simply admit that complete conceptions would ensure that conceivability infallibly entails metaphysical possibility – the attack is on epistemic access to conceivability facts, on Accessibility. How does Descartes know the truth of his description *D* of a conceived scenario *S* as representing the proposition *P* is true of *S*, or that *S* is conceived of in the right manner? That Descartes claims to possess complete conceptions of objects when clearly and distinctly conceiving is irrelevant to that question, just as it is irrelevant whether Arnauld does not possess complete conceptions in the triangle case. The question to Descartes simply becomes how do you justify or know that you possess complete conceptions? Arnauld

pushes his objection to the maximum via the triangle case: even in a *best case* scenario, e.g., when conceiving of triangles – something we are supposed to completely grasp if anything – we might misdescribe our conceived scenario as of conceiving of something impossible.

Thus, for any claim of conceivability, it is possible that the conceiving subject is confused such that the description *D* of the scenario *S* as representing the proposition *P* is a misdescription of *S* – even that *D* is absurd – while the subject may believe it a sound description of *S*. That is, the justification offered by the conceiving subject to the fact that *P* is not confusedly conceived of is compatible with *P* being confusedly conceived of and that *P* is impossible. Thus, Arnauld can allow that Descartes' conceivability thesis is correct with regards to Universalizability and Reliability – clear and distinct conceivability infallibly entails possibility in any circumstance – while he can reject the thesis as epistemically helpful in arriving at knowledge of possibility since we do not have epistemic access to conceivability facts. We do not know when something is conceived of non-confusedly and, so, cannot use the universal and reliable conceivability thesis in inferring possibility from conceivability.

If Descartes' explication of complete conceptions is supposed to answer Arnauld's objection, the rejoinder comes down to a stipulation that complete conceptions of *P* is epistemically accessible *as complete* because the featured things in *P* are not repugnant to reason and are, thus, conceptions of complete things. Descartes does not really argue for the repugnancy-of-reason strategy except pointing to two other cases where he thinks the strategy at play: in conceiving about unities and in conceiving of (concepts of) properties. All milieus in which Arnauldian skepticism could thrive.

Ultimately, Descartes might be closer to giving a reply to Caterus' objection than to Arnauld's. Remember, Caterus' objection is that conception does not entail real (metaphysical) possibility but merely some kind of formal possibility, e.g., conceptual possibility. By having the kind of conception required in the conceivability thesis be complete conception and by having complete conception feature complete things via their essential properties, conceivability is guaranteed to entail metaphysical possibility.⁸⁸

⁸⁸ Of course, a philosopher persuaded by Caterus' objection is likely not persuaded by Descartes' reply. If you agree with the Caterus' objection that only a formal distinction is entailed by conceiving *x* distinct from *y*, then you are likely

Perhaps Descartes' blunder in his reply to Arnauld is behind the tendency in the literature to misunderstand Arnauld's objection. For while Arnauld is credited in the literature for making an important objection to Descartes, not always is the objection credited to him the one he makes. Often Arnauld is understood as making the Standard Objection by Conceivable Impossibilities to conceivability theses (cf. 3.3.1. *Conceivable Impossibilities*). Vaidya (2007) suggests as much and Yablo (1990, 159) says that objections of this kind were put to Descartes repeatedly, "most notably by Caterus [...] and by Arnauld." This interpretation might be explicable by Descartes' reply seeming to be closer to an answer to a Standard Objection than to Arnauld's objection. While I agree that Caterus' is a kind of Standard Objection, I disagree that Arnauld is making one such. Even if the Standard Objection may be interpretable from Arnauld's objection, it is not his primary concern. Arnauld is making a Uselessness Objection by Confusion: since a subject does not have epistemic access to conceivability facts, the subject cannot establish that what is claimed conceivable, *P*, is arrived at non-confusedly and is, thus, unable to use the universal and reliable conceivability thesis in arriving at knowledge of (possibly) *P*.

Summing up, as we have seen, there is broad agreement that Arnauld offers one or more objections to Descartes, while it is not clear exactly which one(s) it is. I have proposed that Arnauld's primary objection is a Uselessness Objection by Confusion and I have argued that Descartes fails to reply to the objection satisfactorily. Descartes' failed response might explain why there is confusion about which objection Arnauld offers to Descartes: ultimately, the confusion might be due to Descartes himself being confused about Arnauld's objection. Through the considerations of the exchange between Descartes and Arnauld, I have also considered how we might interpret Descartes' conceivability thesis, and how we might interpret his notion of 'clear and distinct conception'. I have argued that Descartes' is a single conceivability thesis is one which has two possible outputs, pending the inputted content or how the input gets processed in

not to be persuaded by the repugnancy-of-reason strategy, claiming our inability to conceive of a thing *o* without some property *P* entails that *P* is an essential property of *o*. If you believe that conceivability is not a guide to how the world might be, then, likely, you do not believe that the substances – the things in the world – are essentially as we conceive them to be. That things cannot possibly have essences inconceivable to us and that we can establish the essence of an object *o* by varying its properties in imagination until abstraction of properties from *o* render it repugnant to reason or until addition of properties to a bundle of properties is no longer repugnant to reason.

conceiving of the input: by clearly and distinctly conceiving of P either P is true or P is possible, based on how the content of P is understood. Clearly, matters concerning neither Arnauld's objection nor Descartes' conceivability thesis have been settled by the discussion; the historical exchange between Descartes and Arnauld remains fruitfully debated. I can only hope that my discussion, in light of the conceptual space carved out in the first part of the presentation together with the list of objections, might advance the debate.

Papers

In the following, I present three papers. These are papers intended for publication in academic journals in shorter versions. The papers contain elements that may have been considered in the presentation, e.g., in positioning a conceivability thesis or in laying out an objection. As noted earlier, this is a consequence of the format of the dissertation. The third paper marks the end of the dissertation. I compile a single list of references (both of the presentation and the papers) which follows at the end.

The first paper presents a problem and a dilemma for Roca-Royes' Non-Standard Dilemma for conceivability-based epistemologies of *de re* modality in which she concludes that conceivability cannot be the whole story of our *de re* modal knowledge. First, the structural problem that Roca-Royes finds in the conceivability method in failing to establish *de re* principles is generalized to show that the conceivability method fails to establish any principle unless presupposing it. The generalized result suggests a detachment of Roca-Royes' notion of conceivability from conceivability proper. Second, a dilemma is presented based on the fact that we find the nonidentity inconceivable under pretense of identity between something named twice. On the one horn, conceivability proper is shown sufficient to be the whole story of our knowledge of one *de re* principle, at least, primitively or by brute fact; on the second horn, conceivability improper is shown sufficient to be the whole story of our explicit knowledge of one *de re* principle, at least, by rendering explicit what we implicitly know. It is concluded that conceivability – proper or improper – is able to be the whole story of our explicit *de re* modal knowledge of one *de re* principle, at least, namely *Necessity of Identity*. Finally, it is concluded that Roca-Royes does not show conceivability proper evidentially unreliable as a guide to possibility, even if conceivability improper is.

In the second paper, an externalist conceivability-based epistemology of possibility is presented. Inspired by Stalnaker's theory of intentionality and his thoroughgoing externalist framework, the conceivability thesis is quite unlike others in the literature: according to the thesis, conceivability entails metaphysical possibility in any circumstances, while the conceiving subject does not have epistemic access to whether what the subject claims to conceive of is in fact conceived of. The subject may even absurdly misdescribe his conceptions. This may seem like a problematic, perhaps even self-contradictory, conceivability thesis.

However, in light of a number of objections to conceivability-based epistemologies of possibility, it is argued that the externalist conceivability thesis is superior to its contenders.

While debate is live on the conceivability-based epistemology of possibility, there is hardly any debate on the inconceivability-based epistemology of impossibility. In the third paper, it is argued that the difference is not well-motivated – there is room for debate in either case. The third paper considers inconceivability as an epistemic guide to impossibility, aiming to explore and add support to the underexplored thesis that one can justify beliefs about the impossibility of *P* on the basis of the inconceivability of *P*. Often the inconceivability thesis is deemed implausible from the get-go. For instance, it is argued that cognitive limitations may be a better reason for a subject to find *P* inconceivable than the impossibility of *P*. It will be argued that many reasons for denying an inconceivability thesis lies in aligning the thesis with a conceivability thesis but that there are reasons to consider the epistemological methodology in different terms, suggesting that current lines of objections to the inconceivability thesis do not support its offhand rejection. Three models are offered according to which we may justify beliefs in impossibility on the basis of inconceivability.

Pretense and Conceivability: A reply to Roca-Royes

The paper presents a problem and a dilemma for Roca-Royes' Non-Standard Dilemma for conceivability-based epistemologies of *de re* modality in which she concludes that conceivability cannot be the whole story of our *de re* modal knowledge. First, the structural problem that Roca-Royes finds in the conceivability method in failing to establish *de re* principles is generalized to show that the conceivability method fails to establish any principle unless presupposing it. The generalized result suggests a detachment of Roca-Royes' notion of conceivability from conceivability proper. Second, a dilemma is presented based on the fact that we find the nonidentity inconceivable under pretense of identity between something named twice. On the one horn, conceivability proper is shown sufficient to be the whole story of our knowledge of one *de re* principle, at least, primitively or by brute fact; on the second horn, conceivability improper is shown sufficient to be the whole story of our explicit knowledge of one *de re* principle, at least, by rendering explicit what we implicitly know. It is concluded that conceivability – proper or improper – is able to be the whole story of our explicit *de re* modal knowledge of one *de re* principle, at least, namely *Necessity of Identity*. Finally, it is concluded that Roca-Royes does not show conceivability proper evidentially unreliable as a guide to possibility, even if conceivability improper is.

0. Introduction

In a recent paper, Sonia Roca-Royes (2011) sets up a dilemma for the conceivability-based epistemology of modality, arguing that conceivability cannot be the whole story of our *de re* modal knowledge. The trouble for the conceivability-based epistemology of *de re* modality – an epistemology that holds our ability or inability to conceive of particular scenarios to be the source of our knowledge of *de re* modality – is that the conceivability method is structurally inadequate to establish any *de re* principles through inconceivability, given that there are any such principles. Further, unless knowledge of *de re* principles is established via the conceivability method, we will be able to conceive of scenarios containing *de re* impossibilities. That is, we will be able to conceive of scenarios that contradict *de re* principles, if we cannot establish the principles via the conceivability method, e.g., conceive of a scenario in which Queen Elizabeth has a different origin than her actual origin, a contradiction of the *de re* principle *Essentiality of Origin*. In turn, if we can conceive of *de re* impossibilities, the conceivability-based epistemology of *de re* modality is disabled from explaining our knowledge of *de re* possibilities since conceivability is insensitive to *de re* principles. Thus, conceivability cannot be the whole story of our *de re* modal knowledge.

The aim of this paper is to offer a reply to Roca-Royes on behalf of the proponent of the conceivability-based epistemology of modality. First, I aim to show that the notion of conceivability in Roca-Royes' account of the conceivability method is not the proper notion of conceivability, and that what does or does

not hold for the improper notion of conceivability matters little for what does or does not hold for conceivability proper. This is shown through Yablo's (1993) consideration of what he calls the Circularity Objection. As such, we can reject the import of Roca-Royes' Non-Standard Dilemma – she fails to erect a dilemma for the proper notion of conceivability. Second, granting that it is questionable whether *de re* principles are establishable by conceivability, I aim to erect a dilemma against the conclusion of Roca-Royes' Non-Standard Dilemma by showing that both conceivability proper and conceivability improper, with a slight but innocuous enhancement, can be the whole story of our explicit knowledge of one *de re* principle, if not more, namely, *Necessity of Identity*. Finally, I argue that even if Roca-Royes succeeds in showing conceivability improper evidentially unreliable as a guide to possibility, she fails to do so for conceivability proper. As such, the evidential, conceivability-based epistemology of modality working with conceivability proper delivers on just about everything that Roca-Royes attempts to show that conceivability cannot.

In more detail, in §1, I present the background for Roca-Royes' Non-Standard Dilemma and, in §2, I present the dilemma. In §3, I offer a schema and a list of assumptions behind her account of the conceivability method – the method with which the conceivabilist establishes instances of *de re* principles and the principles themselves. By the schema and assumptions we arrive at the results of Roca-Royes: the conceivability method cannot establish *de re* principles. In light of the schematic conceivability method and Roca-Royes' suggestion on how the conceivabilist might be able to establish *de re* principles nonetheless, I present a generalized inadequacy result and locate the structural problem that she believes is behind the inadequacy of the conceivability method to establish *de re* principles. The generalized inadequacy result shows that the conceivability method is inadequate to establish any principles that are not presupposed.

In §4, I argue that the generalized result shows that the notion of conceivability at play in Roca-Royes' account of the conceivability method is detached from conceivability proper. While offering no authoritative definition of conceivability proper, I show the how the notion is minimally different from Roca-Royes' improper notion of conceivability. The improper notion of conceivability matches a notion Yablo (1993) claims provides a way in which one might establish a Circularity Objection, and it is argued that Roca-Royes' objection is a Circularity Objection. Unfortunately for the proponent of this way of erecting a

Circularity Objection, whether the objection holds or not for the improper notion of conceivability matters little for conceivability proper. Nevertheless, it remains questionable whether conceivability proper can establish *de re* principles, even if the improper notion of conceivability in Roca-Royes' account cannot.

In §5, I highlight a lesson we should take to heart from Yablo's defense against the Circularity Objection, viz., that we should consider what we find conceivable and inconceivable before we erect theories of conceivability and of conceivability-based epistemologies of modality thereupon. I find an inconceivability result that is very broadly agreed upon as intuitive or pre-theoretical and explanatorily salient. As Kripke (1972, 1980) shows by a number of cases, we use names in a way that has a certain modal profile such that if we pretend that there is an identity between something referred to by two distinct names, we find the nonidentity inconceivable.

In §6, on the basis of Kripke's inconceivability result, I erect a dilemma against Roca-Royes' conclusion of her Non-Standard Dilemma: on the one horn, conceivability proper is shown sufficient to be the whole story of our knowledge of one *de re* principle, at least, primitively or by brute fact; on the second horn, conceivability improper is shown sufficient to be the whole story of our *explicit* knowledge of one *de re* principle, at least, by rendering explicit what we implicitly know or presuppose. In both cases, the *de re* principle established is *Necessity of Identity*.

Finally, in §7, I conclude that conceivability – proper or improper – is able to be the whole story of our explicit *de re* modal knowledge of one *de re* principle, at least. This is enough to reject that conceivability cannot be the whole story of *any* of our *de re* modal knowledge, even if it does not show that conceivability can be the whole story of *all* of our *de re* modal knowledge. Whether it can remains to be seen. Finally, I conclude that Roca-Royes does not show conceivability proper evidentially unreliable as a guide to possibility, even if she shows conceivability improper evidentially unreliable by the Circularity Objection.

1. Terminology and Background

A lot of the terminology involved in Roca-Royes' Non-Standard Dilemma stems from an earlier dilemma against conceivability-based epistemologies of modality, the Standard Dilemma. "Standard" because it is based on the Standard Objection, an objection coined by Brueckner (2001). The Standard Objection to

conceivability-based epistemologies of modality is simply a denial of the claim that conceivability of p is sufficient to establish the possibility of p , a denial of a strong version of the conceivability thesis (since dealing in entailment rather than evidence) often invoked in introducing the conceivability-based epistemology of modality. The motivation for the objection is usually based on the claim that we can conceive of scenarios contradicting principles independently judged to be metaphysically necessary. Both contradictions to necessities established *a priori* and *a posteriori* have been suggested. For instance, it has been suggested that we can conceive of a right-angled triangle in Euclidian geometry lacking the Pythagorean property (cf. Descartes 1984),⁸⁹ a contradiction to a mathematical necessity established *a priori*; and it has been suggested that we can conceive of, say, Hesperus as identical to Mars, a contradiction to the necessity of identity where the identity in question – that between Hesperus and Venus – is established *a posteriori* (cf. Kripke 1980).⁹⁰

Roca-Royes (ibid., 24-27) presents the Standard Dilemma, crediting Worley (2003) as the originator.⁹¹ According to the dilemma, a certain version of the conceivability-based epistemology, the epistemic account, faces the Standard Objection on one horn, while another version, the non-epistemic account, faces the objection on the other horn that conceivability facts are not epistemically accessible to the conceiving subject – that whether something is conceived of or not is not epistemically accessible to the subject. The latter is bad for the conceivabilist because it renders the subject unable to argue from conceivability of p to its possibility via the conceivability thesis since the subject cannot establish whether p is in fact conceived of.

⁸⁹ Noting that Arnauld, the person forwarding the objection to Descartes, claims that he cannot see any possible reply to his case “except that the person in this example does not clearly and distinctly perceive that the triangle is right-angled” (Descartes op.cit., 142), I do not think Arnauld is offering a Standard Objection by counterexample to Descartes. Rather, I think he is erecting a gap between a conceived scenario and how the subject describes the case – he is denying epistemic access to conceivability facts (more on this later).

⁹⁰ I am ignoring here the question as to whether Kripke would consider the conceivability of Hesperus as identical to Mars as a counterexample rather than a confused misdescription of some sort (à la what Yablo 2000 dub “Textbook Kripkeanism”). In any case, others consider it conceivable prior to the empirical discovery, at least. That is, consider it a counterexample.

⁹¹ If you read Worley’s paper, you will find no mention of a dilemma, let alone a “standard” one. I am here paraphrasing Roca-Royes’ presentation of the dilemma in Worley’s paper and the differences between the epistemic and non-epistemic epistemologies of modality offered therein.

This objection to the conceivability thesis we can call the Uselessness Objection.⁹² “Useless” because it declares that even if true, the conceivability thesis is useless as an epistemological guide to modality since the subject cannot establish conceivability facts. In short, the Standard Dilemma is that conceivability-based epistemologies of modality must have the following two virtues in arguing for possibility of p based on the conceivability of p , but no conceivability-based epistemology satisfies both:

- (i) Conceivability facts are *epistemically accessible*.
- (ii) The specific notion of *conceivability* entails possibility.

Roca-Royes partitions the conceivability-based epistemologies into two camps: the epistemic camp and the non-epistemic camp. The partition is based on their respective notions of conceivability. In the epistemic camp, the notion of conceivability is relativized to a conceiver in two ways: to the conceiver’s state of knowledge and to the conceiver’s conceptual resources and cognitive capacities. The effect of the relativization is that what is conceivable can change. For instance, the ancients could conceive Hesperus and Phosphorus to be distinct whereas, e.g., Yablo (op.cit.) who knows that both names refer to the planet Venus cannot conceive of Venus being distinct from itself. Thus, Roca-Royes states that something p is conceivable _{γ} for a subject x , if x can imagine a situation x takes to verify p (where γ stands for Yablo – it is his account being used as an exemplar of the epistemic camp). While epistemic accounts satisfies virtue (i) in that conceivability facts are epistemically accessible to the subject, the accounts fails (ii) because what someone finds conceivable might not be metaphysically possible, as the case with the ancients show, if Kripke is right about names being rigid designators.

In the non-epistemic camp, the notion of conceivability is idealized in one or two ways: either the subject has idealized conceptual resources and cognitive capacities or, in addition, the subject has idealized knowledge of all empirical, non-modal facts about the actual world. Note that ‘non-modal’ seems a

⁹² The name is inspired by Vaidya’s (2007) “uselessness interpretation” of Arnauld’s objection to Descartes. An interpretation I am much more inclined to agree with than the interpretation according to which Arnauld is offering a Standard Objection.

misnomer. It is knowledge of the actual physical distribution and composition of the universe from which *non-interesting* modal knowledge of the *possibility* of the distribution and composition is inferable because weaker. Thus, modal knowledge follows immediately from the non-modal knowledge. The subject, however, cannot infer any *interesting* modal knowledge from the empirical knowledge. That is, knowledge as to whether the distribution (or parts thereof) is possibly not the case or is necessarily the case (or whether a property of a specific object in the universe is accidental or essential to an object). The former notion of conceivability is supposed to correspond to Chalmers's (1996, 2002) *Primary Ideal Conceivability* (PIC) and the latter to his *Secondary Ideal Conceivability* (SIC). Given the infallible powers of the PIC- and SIC- subjects it is intended that something p is conceivable_{PIC/SIC} iff p is conceptually/metaphysically possible.⁹³ The non-epistemic accounts are supposed to straightforwardly satisfy virtue (ii). However, they do not satisfy virtue (i) because we, humans, are not ideal conceivers and, so, cannot say whether p is conceivable according to these notions; the conceivability facts are not epistemically accessible to non-ideal subjects.⁹⁴

We arrive at the Standard Dilemma. If the relevant notion of conceivability is epistemic, it does not satisfy (ii). If, alternatively, it is non-epistemic, it does not satisfy (i). Since conceivability is either epistemic or non-epistemic, no notion of conceivability satisfies both virtues required for conceivability-based accounts.

Roca-Royes states that the Standard Dilemma is not devastating – it is but pressing – and provides some routes one might take in answering it, arguing that the routes already have its proponents (op.cit., 26-27 and n. 9). For example, one route is holding that individually, non-ideal conceivers *locally* conceive ideally (regarding subject matters that, perhaps, are simple enough for us to have reliable modal judgments about). Another route is holding that at a community level we are close to the level of an ideal conceiver such that we have reliable modal judgments at this level. How either proposed route gets out of the dilemma is not

⁹³ Chalmers' account is rather more complex than what is suggested here. I will not be considering whether the simplified version here is truly attributable to Chalmers.

⁹⁴ Chalmers (2010, 155) disagrees. He finds “no reason to accept this claim”. Further, regarding the controversial zombie case, he says that our knowledge of what is or is not ideally conceivable “gives us very good reasons” to believe zombies ideally conceivable (ibid.). Yet, it remains unclear to me how exactly we arrive at knowledge that something is or is not ideally conceivable. Also, if we have good reasons only, it seems we may be in error.

really clear, and it is confusing that the locally reliable conceivability thesis offered as a route out of the dilemma satisfies the two virtues that no conceivability thesis is supposed to satisfy according to the dilemma. Also, there are conceivability-based epistemologies of modality aplenty that straightforwardly denies the need to satisfy one or both of the virtues. Yablo's account is one such, denying the need to satisfy virtue 2 by arguing that the link between (in)conceivability and (im)possibility is one evidential, not of entailment. One might wonder why the Standard Dilemma is even pressing. More could be said here but the focus of this paper is not the Standard Dilemma.

2. Roca-Royes' Non-Standard Dilemma

Roca-Royes starts out her Non-Standard Dilemma against conceivability-based epistemologies of *de re* modality with two explicit premises: 1) that essentialism is true and 2) that we have interesting *de re* modal knowledge. Regarding 1), she states that essentialist views partition an object's properties into complementary subsets of essential and accidental properties (op.cit., 22). Extreme haecceitist views argue that the subset of essential properties is always empty. The other extremum of essentialist views, pan essentialism, argues that the subset of accidental properties is always empty. An anti-essentialist is someone who denies the distinction all together.⁹⁵ Regarding 2), the 'interesting' modifier, as already mentioned, is meant to separate modal knowledge into knowledge of possibility which is trivially inferable from actuality and modal knowledge which is not trivially inferable from actuality. The former is non-interesting, the latter interesting. Consider the actual fact of the pen on my table. I am able to infer from this fact alone that i) possibly, the pen is on my table,⁹⁶ and ii) the pen is possibly on my table. Both modal facts are weaker than the knowledge of the pen being on the table. The former is *de dicto* modal knowledge; the latter is *de re*

⁹⁵ I guess this makes Lewis (1986) an essentialist since he takes the properties of an object *o* to be partitionable into accidental and essential properties while the distribution of properties in the subsets changes in distinct contexts of evaluation. We can say that the essential properties of an object *o* are not *absolute* according to Lewis. The subset of properties of *o* that are the essential properties of *o*, {P,Q,R}, are merely essential to *o* in the context of evaluation *c*₁. In the context of evaluation *c*₂, a context distinct from *c*₁, the essential properties of *o* might contain properties distinct from those in context *c*₁, say, {S,T,U}.

⁹⁶ Formally, it is inferred by the Axiom of Possibility: $\phi \vdash \Diamond\phi$ (in a modal logic at least as strong as T, a modal logic that accepts reflexivity). Informally, I guess it is inferred by common sense.

modal knowledge. The difference between *de dicto* and *de re* is more easily spotted in the formalization of the sentences since the scope of the possibility operator takes a different scope: for *de dicto* modality the operator takes full scope of the sentence, for *de re* modality it takes partial scope. Modal knowledge not derivable from the actual fact alone is interesting. For instance, the following is argued not to be trivially derivable from actuality: whether possibly, the pen is on the floor; or whether the pen possibly is on the floor; whether necessarily, the pen is on the table, or whether the pen necessarily is on the table.⁹⁷ The second assumption states that we have *de re* modal knowledge of an interesting kind.

Roca-Royes sets up a principle, (*drME*), that any epistemology of *de re* modality must comply with.⁹⁸

(*drME*) An epistemology of *de re* modality must account for “everyday life” *de re* modal knowledge and, if essentialist truths and other “remote” modal facts are also knowable, it must account for their knowledge (or knowability) as well. (ibid., 23)

The distinctions “everyday life” and “remote” stems from a paper by van Inwagen (1998) and are meant to capture the modal propositions that we have knowledge of (through whatever epistemological means) – which all but the radical modal skeptic is committed to – and the modal propositions that we do not know of since: (1) they concern matters “remote from the practical business of everyday life,” (2) their truth-values “cannot be determined by logic and reflection on the meanings of words or by the application of mathematical reasoning,” and (3) their truth-value is “unknown to us or [is] known to be false” (I am here slightly paraphrasing Fischer (2011, 99); quoted parts are from van Inwagen (op.cit.,74, 84)).⁹⁹

Note that Roca-Royes has a different reading of the distinction: *de re* possibilities are of the “everyday life” kind of *de re* knowledge we are all committed to whereas knowledge of essential properties and of *de re* principles are “remote”. She claims the two readings need not coincide intensionally or extensionally but arise from the same epistemological motivation (ibid., n. 4). Roca-Royes’ reading is stronger than that of van

⁹⁷ While I think everyone can accept that we can infer possibility from actuality, it is more controversial whether we can *only* glean possibilities from actuality. Some might hold that in our acquaintance with the world we perceive necessities also. For example, Legg (2012) argues we observe necessity in *iconic* representations.

⁹⁸ She does not say of what ‘(*drME*)’ is an abbreviation. My guess is ‘*de re* Modal Epistemology’.

⁹⁹ Of course, one might contest which modal facts go into “everyday life” and “remote” modal facts. One might even say all modal facts are of an “everyday life” variety (or the opposite).

Inwagen in that van Inwagen can allow certain *de re* principles to be of an “everyday life” variety, e.g., *Necessity of Identity*. At least, nothing suggests otherwise. This is not the case on her reading where all *de re* principles are “remote”.

The principle, (*drME*), asks of any epistemology of *de re* modality to explain our access to the “everyday life” *de re* modal knowledge we are all committed to – the *de re* possibilities – and to any “remote” *de re* modal knowledge you also happen to be committed to – essential properties and *de re* principles.¹⁰⁰ Thus, in order to satisfy the demands of (*drME*), an epistemology must do two things: explain our knowledge of *de re* possibility and explain our knowledge of essential properties and/or of *de re* principles, if you are committed to any such. In order to show that conceivability-based epistemologies of *de re* modality do not comply with (*drME*), she sets up a dilemma:

- P1 Non-epistemic, conceivability-based epistemologies of *de re* modality fail (*drME*).
- P2 Epistemic, conceivability-based epistemologies of *de re* modality fail (*drME*).
- P3 All conceivability-based epistemologies of modality are either non-epistemic or epistemic.
- C Therefore, conceivability-based epistemologies fail (*drME*) and cannot be the whole story of our knowledge of *de re* modality.

Roca-Royes does not argue for P3, it is merely stipulated – perhaps taken as obvious. I will not be challenging the premise.¹⁰¹ The conclusion leaves it open as to whether conceivability may be part of the story of our knowledge of *de re* modality.

Normally, when providing an argument by way of a dilemma, one would show each horn of the dilemma in turn. Roca-Royes proceeds in a slightly unfamiliar manner by showing, first, that neither epistemic nor

¹⁰⁰ It is not clear how many *de re* principles there are. We have already met *Necessity of Identity* and *Essentiality of Origin*. Presumably, there is also a principle of *Essentiality of Kind*. See Tahko (forthcoming) for discussion of this principle. Likely, there are more. Likely, they are essentialist principles unlike *Necessity of Identity* which does not deal in essences.

¹⁰¹ Though, again, it is confusing that Roca-Royes (op.cit.) has just offered a locally reliable conceivability-based epistemology of modality which satisfies both virtues, seemingly fitting into both the epistemic and non-epistemic camps.

non-epistemic accounts can establish knowledge of *de re* principles, if there are any such *de re* principles, and, second, that neither account can explain our “everyday life” *de re* modal knowledge.¹⁰² I will follow her in this respect, showing one half of each horn at a time since the reasons why both accounts fail with respect to the *de re* principles are closely related and need not be considered separately.

2.1. The conceivability method

In order to show that neither the epistemic account nor the non-epistemic account can establish *de re* principles – principles like *Necessity of Identity* or *Essentiality of Origin* – Roca-Royes considers the way the conceivabilist would attempt to do so. The way a conceivabilist establishes *de re* principles is through a “conceivability method”, establishing a “modal conditional” which grounds instances of a *de re* principle, grounding the principle in turn (ibid., 29). The first step (establishing a modal conditional) is explained through Yablo’s model of modal error (1990, 182ff).¹⁰³ First the model, then the explanation:

“First, I conceive it as possible that *p*, although *p* is necessarily false. Second, that *p* is necessarily false emerges from the truth of some proposition *q*. Third, I do not realize this, [or believe] instead either that *q* is false, or that it is false that if *q*, then *p* is impossible; and that is how I am able to conceive, erroneously, of a situation in which *p*. Thus:

- (a) *q*;
- (b) if *q*, then $\Box\neg p$; and
- (c) my ability to conceive it as possible that *p* is explained by my [unawareness or] denial of (a), or else by my [unawareness or] denial of (b).”

A ‘modal conditional’ is like that of (b). It is established by way of the conceivability method, a method to check through conceivability whether *q* renders *p* necessarily false. Roca-Royes explains that according to the conceivability method we must, first, pretend that the antecedent of the modal conditional, *q*, is true and,

¹⁰² This strategy might be in reflection of Hale (2003) in which Hale expresses doubt as to whether an asymmetrical approach to the epistemology of modality that treats knowledge of possibility as more fundamental than knowledge of necessity will be able to provide a method for coming to know possibilities without involving or presupposing knowledge of necessity.

¹⁰³ Yablo (1990, 185) considers a model of modal error in which the subject is ignorant of (a) or (b) in (c). Here I have inserted ‘unaware’ into the account in accordance with the later paper (Yablo 1993, 34-35) as that is the one Roca-Royes quotes (op.cit., 27-28).

second, attempt to conceive p under the scope of that pretense. Third, “[i]f we find [p] inconceivable (and, as a consequence, impossible-under-the-scope-of-the-pretense), we abandon the pretense and endorse the intended [modal] conditional” (ibid., 28).

From the quote it is clear that the conceivabilist in the eyes of Roca-Royes is a philosopher who holds two theses: the conceivabilist accepts the *conceivability thesis*, holding that conceivability entails possibility (or a weaker version); and the conceivabilist accepts the *inconceivability thesis*, holding that inconceivability entails impossibility (or a weaker version). It is possible to hold one thesis and deny the other (cf. Casullo 1979). Specifically, the inconceivability thesis is often denied.¹⁰⁴

Roca-Royes states that this is the conceivability method of Yablo (1993) and Kripke (1972, 1980), and that Kripke uses the method as a first step in establishing *Essentiality of Origin*. The conceivability method is thus:

1. Pretend q ;
2. Attempt to conceive p under the scope of pretense of q ;
3. If p is inconceivable under the scope of pretense, abandon the pretense and endorse the modal conditional ($q \rightarrow \Box \neg p$).

If we find p inconceivable under the scope of pretense that q and adopt the modal conditional, we have at the same time found an instance of a purported *de re* principle. For example, if we cannot conceive of Hesperus being distinct from Phosphorus under the scope of pretense that Hesperus is Phosphorus, we have an instance of *Necessity of Identity*: $(a = b) \rightarrow \Box(a = b)$. According to the theory, if we get enough instances of a *de re* principle or, perhaps, note that ‘a’ and ‘b’ are arbitrary, we establish the *de re* principle: $\forall x \forall y ((x = y) \rightarrow \Box(x = y))$.

¹⁰⁴ As Evinine (2008, 669) asks: “why should there not be things that are possible that we cannot conceive?” Evinine is here attacking the contrapositive of an inconceivability thesis that holds the relation between inconceivability and impossibility to be one of entailment. The contrapositive of the thesis says ‘ $\Diamond p \rightarrow Cp$ ’ (double negations removed). Evinine is charging that this thesis is implausible. Note that inconceivability theses that deny the link to be one of entailment are not targeted by the charge.

Now, Roca-Royes' account of the details of the conceivability method is sparse; for example, as to what "pretending" is supposed to be exactly.¹⁰⁵ What she does say is that, "theory-neutrally", when we pretend q , we try to put ourselves in a state of mind that mimics the belief that q , while imagining away contrary-to- q beliefs (ibid., 29-30).¹⁰⁶ Finding p inconceivable under the scope of pretense that q depends on the kind of conceivability at hand: on the non-epistemic account, there must be a conceptual contradiction (PIC) or there must be a metaphysical contradiction (SIC); on the epistemic account, the subject must find p under the scope of pretense that q either conceptually or metaphysically contradictory in order to find p inconceivable. Correspondingly, Roca-Royes argues, something p is conceivable_{PIC/SIC/Y} under the scope of pretense that q iff p lacks the relevant contradiction(s).

Note two things here: a) conceivability is negatively defined and b) we do not pretend that q (or parts of q) is necessary. Regarding a), that conceivability is negatively defined means that lack of contradiction in p under the scope of pretense that q renders p conceivable_{PIC/SIC/Y} – no further positive ability of the conceiver is required in order for p to be conceivable, e.g., the mental construction of some scenario of which p is true (see Chalmers 2002, Chalmers 2010, ch. 6). Regarding b), that we do not pretend q as $\Box q$, if q were pretended as $\Box q$, we would only establish $\Box q \rightarrow \Box \neg p$ which would be trivially true in any case where p contains contrary-to- q content.

Related to the last point, Roca-Royes stresses that we are not looking for ' q and p ' contradictions when attempting to conceive p under the scope of pretense that q . This is what we would be doing in the case where we pretend $\Box q$ since the necessity would restrict the evaluation of conceivability of p . $\Box q$ would restrict the evaluation of conceivability of p because the necessity of q would be brought to bear on the

¹⁰⁵ Three notions that have been considered equivalent to pretending are conceiving, supposing, and imagining. At the same time, these notions are not considered equivalent. It is commonly thought that we can suppose the impossible, say, in *reductio* arguments, whereas it can be questioned whether we can conceive, imagine, or pretend something impossible. See Weinberg and Meskin (2006) for an argument that there is a difference between imagining and supposing, and see McGinn (2004) for an argument that there is not (at least, *cognitive imagination* and *entertaining a thought* are equivalent according to McGinn). For a discussion of different, conflicting uses of imagination in some disciplines including epistemology of modality see Kind (2013).

¹⁰⁶ Roca-Royes submits that according to Williamson's (2007b) account of counterfactual evaluation we sometimes retain contrary-to- q beliefs in pretending q . I will set this aside as I will not be considering Williamson's account. Briefly, Roca-Royes argues that knowledge of which contrary-to- q beliefs to retain is not established by conceivability and this knowledge is, thus, had primitively by the conceiver. This is a strategy she later dubs 'rendering the conceiver *suitably* non-epistemic'.

scenario of which we evaluate whether *p* is conceivable – the scenario would contain both *q* and *p* and we would arrive at a ‘*q* and *p*’ contradiction in any case where *p* contains contrary to *q* content (the triviality result). We do not want this, “[i]t should rather happen that [*p*] itself is contradictory under the mere pretense that [*q*]” (ibid., 31).

I can perhaps extend the reasoning a bit here. The antecedent in a modal conditional, *q*, is a pretended fact about the world which is, in an important respect, similar to my knowledge of an actual fact (the kind of knowledge the SIC-subject possesses in abundance), say, knowledge of the location of my pen, in that I can infer the weaker claim of the possibility of the fact from the fact alone. For instance, if my pen had been located here, my pen possibly is located here. Importantly, in both cases, the inferable *de re* possibility is of the non-interesting variety of *de re* modal knowledge. It tells me nothing about the *de re* possibility of the fact not obtaining and neither does it tell me anything about the *de re* necessity of the fact obtaining. The difference between the inferred *de re* possibility from the pretended and the actual fact is, of course, that my *de re* modal knowledge is hypothetical in the case of the pretended fact unlike the *de re* modal knowledge I can infer from an actual fact. Just like some actual fact obtaining, the pretense of a fact *q* about the world should not restrict the conceivability of some other fact *p* obtaining when we are not looking for ‘*q* and *p*’ contradictions. Roca-Royes gives the following sentence as a case (ibid., 32):

(**) If I am sitting, I am necessarily not standing.

Pretending that I am sitting should and does not interfere with the conceivability of a scenario in which I am standing. The pretended fact is something like ‘there is an *x* such that *x* is sitting’ from which we can infer the *de re* modal fact that ‘there is an *x* such that possibly *x* is sitting’. The pretended fact and the inferred hypothetical *de re* modal fact does not interfere with the evaluation of the conceivability of ‘there is an *x* such that *x* is standing’ when we are not looking for ‘*q* and *p*’ contradictions. As Roca-Royes says, “[p]lausibly enough, my being seated does not imply that I am necessarily not standing—even when I am sitting I still retain the modal property of *possibly standing*.” If we were looking for ‘*q* and *p*’ contradictions, we would “fatally overgenerate essentialist claims” (ibid., 32). In this case, we would establish something

like the *de re* principle of *Necessity of Sitting*. We want to avoid such principles (unless, perhaps, we happen to be of a pan-essentialist persuasion, then the more principles the merrier).

If the pretense that *q* introduces some fact, say, that I am sitting actually, and *p* asks for the conceivability of the fact not holding of actuality, things become tricky. I take it that Roca-Royes is denying that her case of sitting and standing is supposed to be such a case. We are not looking for ‘*q* and *p*’ contradiction – it is the properties of sitting and of *possibly* standing in actuality we are considering, not the properties of both sitting and standing in actuality. She argues that this would be a *de dicto* reading of (***) and, indeed, in a case where both *q* and *p* speak of matters in a single world, we are aware of some *de dicto* restrictions on the distribution of properties. For instance, the properties of sitting and standing necessarily do not co-occur as is, perhaps, part of the concepts of the properties and would, therefore, be a ‘*q* and *p*’ conceptual contradiction, which is inconceivable for the PIC- and SIC-subjects at least. The Y-subject might be ignorant of the conceptual principle contradicted and erroneously find it conceivable. Likewise, we know of certain properties that necessarily asymmetrically co-occur, e.g., the properties of being a circle and being a figure; and we know of certain properties that necessarily symmetrically co-occur, e.g., the properties of being triangular and trilateral.

From these assumptions and the conceivability method, Roca-Royes shows why neither the epistemic nor non-epistemic conceivability-based epistemologies can establish ”remote” *de re* modal facts.

2.2. Failure in establishing “remote” *de re* modal facts

With the conceivability method in place, Roca-Royes assumes that *Essentiality of Origin* is true in order to check whether the conceivabilist, be it from the epistemic camp or the non-epistemic camp, can establish the *de re* principle.¹⁰⁷

Take some person *a* with parents *b* and *c*. Can we conceive of *a* with different parents than *b* and *c*? We check using the conceivability method:

¹⁰⁷ Roca-Royes submits that because of this assumption, the objection does not target an extreme haecceitist conceivabilist.

1. Pretend Oa,b,c (a originates from b and c);
2. Attempt to conceive Oa,d,e under the scope of pretense (where d and e are distinct from b and c);
3. If Oa,d,e is inconceivable under the scope of pretense, abandon the pretense and endorse the modal conditional ($Oa,b,c \rightarrow \Box \neg Oa,d,e$).

First, states Roca-Royes, there is no conceptual contradiction in Oa,d,e . Oa,d,e is not ruled out by the concepts involved in the sentence, and neither is Oa,b,c a pretense about conceptual constitutive relations of concepts involved in Oa,d,e that rules it out (ibid., 31). I take Roca-Royes to mean here that if q (Oa,b,c) were about conceptual constitutive relations, q should be pretended as $\Box q$ because, in that case, q would introduce a conceptual necessity, rendering p contradictory to the conceptual necessity introduced in q .

Consider the modal conditional ‘if ‘sister’ means male sibling, necessarily, it is not the case that sisters are female siblings’. It would seem that pretending the antecedent, q , of this modal conditional requires the conceiving subject to adopt a meaning change of the word ‘sister’, introducing a conceptual necessity. The meaning change is brought to bear in all conceptually possible worlds – our pretense would be $\Box q$. Thus, the pretense restricts the scenarios of which we evaluate the consequent of the modal conditional – the conceivability of p (that sisters are female siblings). Since we pretend $\Box q$, we find p inconceivable as it contradicts q , and we adopt the modal conditional.¹⁰⁸ Since there is no conceptual contradiction in Oa,d,e under the pretense that Oa,b,c , Oa,d,e is conceivable_{PIC}. This is agreed upon across the board in the literature, states Roca-Royes (ibid.).¹⁰⁹

¹⁰⁸ An interesting question is whether the PIC- and SIC-subjects are able to conceive of p in this modal conditional. Do they, too, adopt the meaning change of ‘sister’ required by q ? Is it relevant for the evaluation of the conceivability of p ? See (Yablo 2002, Chalmers 2002, and Decker 2007) for discussion.

¹⁰⁹ Roca-Royes notes that a two-dimensionalist might object here since the secondary intension of the concepts might render Oa,d,e secondarily inconceivable. She agrees that this is a way to establish inconceivability of p , but argues that secondary intensions are simply a way of primitively equipping the conceiver with knowledge of *de re* modality, a way of rendering the conceiver *suitably* non-epistemic (more on this later), and that this strategy does not elucidate our

More surprisingly and second, she argues that neither is there a metaphysical contradiction in Oa,d,e under the pretense that Oa,b,c . Remember, what holds for the PIC holds for the SIC; the SIC simply knows of all the empirical facts about the actual world in addition to possessing ideal knowledge of concepts and having ideal cognitive resources. So, she knows the totality of physical facts about actuality consistent with the pretense that Oa,b,c from which the non-interesting, (hypothetical) *de re* possibility of the empirical and pretended facts of the world is derivable. Nonetheless, there is no contradiction in conceiving of a situation with different empirical facts – say a slightly different (consistent) distribution of particles – when we are not looking for ‘ q and p ’ contradictions, as the case of (***) showed. Just as it remains conceivable that I am standing even under the pretense that I am sitting, it remains conceivable that Oa,d,e even under the pretense that Oa,b,c . Only if we were looking for ‘ q and p ’ contradictions would the two be contradictory and looking for ‘ q and p ’ contradictions, remember, fatally overgenerate essentialist claims. Thus, Oa,d,e is conceivable_{SIC}.

Third, since there are no conceptual or metaphysical contradictions in Oa,d,e under the pretense that Oa,b,c , there are no contradictions that a subject from the epistemic camp can be aware of – it is conceivable_Y.

Thus, Oa,d,e is conceivable on all accounts and neither the epistemic nor the non-epistemic accounts are able to establish the modal conditional. So, they cannot establish the instances that would ground *Essentiality of Origin*. This holds as well for other *de re* principles, e.g., *Necessity of Identity*. The conclusion: conceivability-based accounts of *de re* modal knowledge cannot establish “remote” *de re* modal facts, if there are any such facts.¹¹⁰

knowledge of *de re* modality (ibid., n. 15; 42-43). Other philosophers will object here. For instance, anyone convinced that content is wide. Presumably, Roca-Royes will handle them in the same manner as the two-dimensionalist.

¹¹⁰ Another way to see why Roca-Royes’ argument does not target the conceivabilist who is an extreme haecceitist is that the extreme haecceitist conceivabilist can (nearly) wholeheartedly accept the conclusion so far: any p (save ones containing broadly logical contradictions) comes out conceivable from the conceivability method and, thus, possible according to the conceivabilist. It seems the extreme haecceitist conceivabilists’ epistemology is in accordance with her ontology. ‘Nearly’ since conceivable contradictions to *Necessity of Identity* is still a problem for the extreme haecceitist.

So much for two quarters of the dilemma – how neither version of a conceivability-based epistemology of *de re* modality can establish *de re* principles. Let us consider how Roca-Royes shows that the two versions also fail to explain our “everyday life” *de re* modal knowledge.

2.3. Failure in establishing “everyday life” *de re* modal knowledge

Roca-Royes next targets conceivability as an epistemic guide to “everyday life” *de re* modal knowledge, arguing that if *de re* necessary principles are not established by the conceivabilist, “something *outside the method* of conceivability will be needed to elucidate [“everyday life”] *de re* modal knowledge” (ibid., 38).

She shows this as follows: conceivability-based accounts are not able to establish *de re* principles, as we saw before. On the contrary, the conceivabilist will find *p* conceivable on each occasion that *p* does not contain a logical or conceptual contradiction. As such, any conceivabilist holding some form of non-extreme haecceitist essentialism to be true is in trouble. The reason is that the conceivability method is *insensitive* as to whether the modal conditional tested is true or false: *p* will come out conceivable in any case.

In some cases, the conceivability method will give the right result; in other cases, it will give the wrong result. For example, in the case of (**), it is correctly conceivable that I stand when pretending I am sitting; but in the case of an adherent of *Essentiality of Origin* and the modal conditional $Oa,b,c \rightarrow \Box\neg Oa,d,e$, it is incorrectly conceivable that *Oa,d,e* when pretending that *Oa,b,c*.

The conceivabilist is forced to use the account non-uniformly in a manner that he is unable to explain within the account: he is unable to explain when something is correctly or incorrectly conceivable and, thus, when the conceivability method provides us with “everyday life” *de re* modal knowledge – knowledge of *de re* possibility. The conceivability-based epistemologies are “biased by something *outside the [conceivability] method*. This something, furthermore, is doing the real explanatory work in elucidating [“everyday life”] *de re* modal knowledge” (ibid., 39). So, the conceivabilist is unable on pain of either *ad hocness* or of pushing the explanation outside the range of conceivability to provide epistemic guidance from conceivability to “everyday life” *de re* modal knowledge.

The Non-Standard Dilemma is complete: a non-extreme haecceitist conceivabilist must establish *de re* principles through the conceivability method. As shown, neither conceivabilists from the epistemic camp nor from the non-epistemic camp are able to do so. Further, neither camps are able to establish “everyday life” *de re* modal knowledge since the conceivability method is insensitive to the truth or falsity of modal conditionals: any *p* (not logically or conceptually contradictory) turns out conceivable under the pretense that *q* (where *q* does not contain conceptual constitutive relations of concepts involved in *p*) and, so, turn out possible according to the conceivabilist. The non-extreme haecceitist conceivabilist must use the method non-uniformly based on something outside the conceivability method in order to retain a conceivability/possibility link. Thus, non-extreme haecceitist conceivability-based accounts of the epistemology of *de re* modality fails (*drME*): conceivability cannot be the whole story of our access to *de re* modal knowledge.

3. The Structural Problem for Conceivability

All right, we have got a basic hold on the dilemma. In the following, I shall make an effort to enhance our grasp of it. Particularly, I shall try to enhance our grasp of the conceivability method that has a central position in the dilemma. I will do so by introducing a schema of the account of the conceivability method and a list of the assumptions behind it that let us arrive at Roca-Royes’ results (interpreted in Possible World Semantics for ease of exposition). It will be informative also to consider her suggestion on how to arrive at inconceivability of *p* given pretense of *q* by equipping the SIC-subject with knowledge of *de re* principles, by rendering the SIC-subject *suitably* non-epistemic.

In light of the schematic conceivability method and her account of how to arrive at inconceivability by rendering the conceiver *suitably* non-epistemic, I offer a generalized result of her conclusion. The generalized result is that the conceivability method is insufficient to establish *any* kind of principle – not only insufficient to establish *de re* principles – without presupposing the very principles attempted to be established by the method. Thus, conceivability cannot be the whole story of *any* kind of modality. I believe this generalized result is the “structural problem” of the conceivability method that Roca-Royes mentions (*ibid.*, n. 16).

3.1. The conceivability method laid bare

Interpreted in Possible World Semantics, the conceivability method reads:

- 1*. Pretend that the actual world is a q -world;
- 2*. Check whether there are any accessible p -worlds;
- 3*. If there are no accessible p -worlds, infer the modal conditional.

In order to arrive at Roca-Royes' results, we also need the following assumptions all of them easily traced in her paper:

- A1 A subject x pretends something q only if x puts herself in a state of mind that coheres with the belief that q (or, only if x updates her awareness – her set of beliefs – so as to cohere with q).
- A2 Pretense that q might involve a fact of the world like empirical knowledge in that only non-interesting *de re* modal knowledge is inferable from it, pretense that q might involve a necessary fact, it might involve a (necessary) principle, and it might involve any assembly of facts, necessary facts, principles, and their negations.
- A3 Some proposition p is conceivable for a subject x iff x has access to a p -world.
- A4 A world w is accessible to a subject x iff x is not aware of a contradiction in w .
- A5 A subject x is aware of a contradiction in w iff x is aware of a fact or a principle that rules out some element in w .
- A6 a) The PIC-subject is aware of all conceptual (and logical) principles; b) the SIC-subject, in addition, is aware of all empirical facts of the actual world plus all non-interesting possibilities derivable from it; c) the Y-subject is aware of a subset of principles, a subset of empirical facts, and a subset of derivable non-interesting possibilities.

Regarding A1, as mentioned, Roca-Royes is not very informative when it comes to pretense and what it takes to pretend. The unparenthesized part of A1 is what I take pretense to be from her description, retained

in her language (see 2.1. *The conceivability method*). The parenthesized part is my interpretation of what pretense is supposed to be on her account. I sadly recognize that the latter is as uninformative as the former. However, I have found room for ‘awareness’ which is an important notion in many of the following assumptions.

A2 merely defines what the content of pretense might be. We can note that some assemblies of facts etc. might prove difficult or down right impossible for the subject to put herself in a state of mind that coheres with. If there is such a thing as unpretendability, I take it that we should not adopt the modal conditional on this account, e.g., if the pretense is ‘ $r \ \& \ \neg r$ ’, I take it that we should not adopt the modal conditional ‘ $q \rightarrow \Box \neg p$ ’. However, Roca-Royes’ use of pretense stems from Yablo’s account and, as Kung (forthcoming, n. 25) notes, most likely ‘pretend’ can be substituted by ‘suppose’ in Yablo’s account, as he is speaking of the Ramsey test and ‘supposition’ is usually used instead of ‘pretense’ in this context. As such, there may not be any assembly of facts that cannot be supposed.¹¹¹

A3 defines when some proposition is conceivable for a subject: if and only if the subject has access to a p -world. The accessibility relation from subject to worlds is defined in A4: a subject has access to a world if and only if a subject is not aware of any contradiction in the world. By A5, the subject is aware of contradiction if and only if the subject is aware of facts or principles that rule out some element in the world. Behind these assumptions lies Roca-Royes’ negative definition of conceivability according to which no contradiction in p render p conceivable, and Yablo’s model of modal error, according to which we erroneously find p conceivable if unaware of or denying q or $q \rightarrow \Box \neg p$ (both considered in 2.1. *The conceivability method*).

Note that denial cases in Yablo’s model of modal error, i.e., cases in which, e.g., the identity between Hesperus and Phosphorus is denied wherefore it is conceivable that they be distinct, seems to be cases in which the subject x subtracts contents in q from her awareness, expanding the set of worlds in which to evaluate the conceivability of p such that the denial might render some ps conceivable that otherwise would

¹¹¹ Since we standardly suppose that we can suppose impossibilities. See note 105.

contradict necessary fact or principle in x 's awareness. Roca-Royes only speaks of one case in which q influence the conceivability of p , viz., if q contains conceptual constitutive relations such that they might render p inconceivable and that there are no such conceptual constitutive relations in Oa,b,c that rules out the conceivability of Oa,d,e . The import of the case seems to be that if, in q , necessary content is introduced, the introduced necessary content is added to the subject's awareness such that the content restricts the set of possible worlds accessible to the subject – the set of worlds in which to evaluate the conceivability of p . Thus, we can note two ways that pretense might influence the conceivability of p : either by introducing content to a subject's awareness that restricts the set of worlds in which to evaluate the conceivability of p or by subtracting content from a subject's awareness that expands the set of worlds in which to evaluate the conceivability of p . In either case, q only has an effect on the conceivability of p , if q introduces or subtracts necessary content, providing us with the trivial conditionals (where p contains contrary to q content) $\Box q \rightarrow \Box \neg p$, if adding necessary content, and $\neg \Box q \rightarrow \neg \Box \neg p$, if subtracting necessary content. Thus, denial can be treated as part of the pretense that q .

A6 simply defines the awareness of the conceivers introduced by Roca-Royes and, thus, the sets of worlds they respectively have access to – the sets of worlds in which they respectively evaluate the conceivability of p , pending the influence of the pretense that q .

From the assumptions we can see how p might be inconceivable for a conceiver x under the pretense that q : in short, p is inconceivable for x , if q introduces necessary content which p contradicts or if p contradicts principles the conceiver is already aware of that are retained under the pretense that q . Otherwise p is conceivable under the pretense that q . Two examples:

- A If the conceiving subject pretends Oa,b,c and pretends *Essentiality of Origin* to hold, then Oa,b,c would be an essential (though hypothetical fact) of a , rendering a negation of this fact (or of the pretended principle) inconceivable for the subject since such a conception contradicts facts or principles of which the subject is aware.

- B If the conceiving subject were to pretend that ‘John is happy’ and check whether ‘John is a married bachelor’ is conceivable, then, if the subject is aware of the meaning of ‘bachelor’ and q does not deny the principle (subtract the principle from the conceiver’s awareness), p contradicts a principle the subject is already aware of, rendering p inconceivable to x .

On the schematic conceivability method, we arrive at the results of Roca-Royes: under the pretense that Oa,b,c , we are able to conceive_{PIC/SIC/Y} of Oa,d,e and are unable to establish the *de re* principle. In turn, conceivability is insensitive to *de re* principles and is not a guide to *de re* possibility. We are able to so conceive since there is no contradiction in Oa,d,e with logical or conceptual principles and neither is Oa,b,c pretended as a necessary fact by itself or by introducing a principle that render Oa,b,c necessary such that Oa,d,e would be contradictory. So, the PIC-subject is aware of no principle which rules out p given q . Thus, the PIC-subject has access to a possible world in which Oa,d,e ; it is conceivable_{PIC}. Further, the SIC-subject only knows of empirical facts and derivable non-interesting *de re* modal facts – in addition to possessing all the conceptual knowledge of the PIC-subject – and there is no (metaphysical) contradiction in conceiving of, say, a distinct (coherent) physical layout from the one of actuality plus pretense. So, the SIC-subject is aware of no principle which rules out p given q . Thus, the SIC-subject has access to a possible world in which Oa,d,e ; it is conceivable_{SIC}. Since no contradiction conceptual or metaphysical is present in Oa,d,e , it is conceivable_Y: the Y-subject cannot be aware of any fact or principle that rules out Oa,d,e – there are none – and will have access to a possible world in which Oa,d,e . Thus, *Essentiality of Origin* cannot be established via conceivability. In turn, conceivability is insensitive to *de re* principles, rendering conceivability useless as an epistemic guide to *de re* possibility. A similar story is available for other *de re* principles.

3.2. The suitably non-epistemic SIC-subject

Roca-Royes suggests a way for the conceivabilist to amend the sad result: if the SIC-subject were *suitably* non-epistemic. That is, if the SIC-subject were primitively equipped with knowledge of *de re* principles. In this case, p would be contradictory, hence inconceivable, in case it contained content contrary to a *de re* principle or a fact necessitated by a *de re* principle. The SIC-subject would evaluate the conceivability of p in

the set of logically, conceptually, and *de re* possible worlds. That is, A6 is amended to include knowledge of *de re* principles for the SIC-subject which exclude logically and conceptually possible worlds that are not *de re* possible worlds (worlds ruled out by *de re* principles) from the set of worlds in which she evaluate the conceivability of *p*. For instance, under the pretense that *Oa,b,c* and the SIC-subject is equipped with knowledge of *Essentiality of Origin*, she finds it inconceivable that *Oa,d,e* since it is ruled out by fact and principle. At the same time, she will be able to conceive of herself standing, even while pretending that she is sitting, since it is not ruled out by a logical, conceptual, or *de re* principle and facts necessitated by principle.

The worrisome result of equipping the SIC-subject with knowledge of *de re* principles is, Roca-Royes argues, that we have not explained how the *suitably* non-epistemic subject has knowledge of the *de re* principles. Further, the epistemic gap between the subject on the epistemic account and the subject on the *suitably* non-epistemic account is aggravated. It is even more questionable whether the idealized conceivability-based epistemology of modality is useful to non-ideal subjects than what was suggested by the Standard Dilemma.

In truth, the amendment suggested by Roca-Royes might already have come to the reader's mind at this point. After all, the accessible (and conceivable) possible worlds are those not ruled out by the subject's awareness of facts and principles. So, if we were to provide the conceiver with a principle or a fact, certain worlds are bound to be stricken from the set of accessible worlds to the conceiver, just as subtracting a fact or principle might add worlds to the set of possible worlds accessible to the conceiver.

Lurking here is a generalized result of the conceivability method, the structural problem of the method noted by Roca-Royes that stands as reason for the method's insufficiency in establishing *de re* principles.

3.3. The generalized result and the structural problem

The conceivability method only arrives at inconceivability of *p* under pretense that *q*, if *p* contradicts necessary content (fact or principle) pretended in *q* or if *p* contradicts necessary content already in the subject's awareness, retained through the pretense that *q*. Thus, in order to arrive at inconceivability of *p* in a modal conditional from which to establish a *de re* principle, the subject must already be aware of fact or principle that rule out *p* either by introduction of fact or principle that rule out *p* in the pretense that *q* or by

retaining such fact or principle in her awareness even given q . Either way, the subject must be aware of the very principles that are attempted established through the conceivability method. That is, in order to arrive at contradiction and inconceivability in order to establish a principle, the subject must already know of that very principle – generally so! That is, this holds for *any* principle, not just *de re* principles.

To see this, consider a case in which we strip a subject of awareness of a conceptual necessity, e.g., strip the subject of the knowledge that a bachelor is an unmarried man. Now, let the subject pretend that ‘Peter is an unmarried man and a bachelor’. Under this pretense, is it conceivably the case that ‘Peter is a married man and a bachelor’? Well, since the subject is unaware of the principle and q (that Peter is an unmarried man and a bachelor) does not introduce the principle, i.e., the conceptual necessity, the subject is unaware of any fact or principle that rules out p (that Peter is a married man and a bachelor). So, a p -world will be accessible to the subject and, so, it will be conceivable to the subject that p .

Generally, the kind of necessity with which we arrive at contradiction in the conceived scenario must already be established prior to arriving at inconceivability. In motto form: inconceivability of a proposition p for a subject x depends on awareness of a contradiction in p by x . Awareness of contradiction in p by x depends on x 's awareness of fact or principle that rule out an element of p , fact or principle introduced in the subject's awareness through pretense that q or retained in the subject's awareness through pretense. Thus, establishing principles through the conceivability method depends on awareness of fact or principle prior to the inconceivability result with which we attempt to establish the fact or principle.

I believe this generalized result is the “structural problem” of the conceivability method that Roca-Royes mentions (ibid., n. 16). The problem is that conceivability is structurally inadequate to establish principles, period. It is not simply a deficiency that has to do with *de re* principles.

Also, the insensitivity of conceivability to possibility is general. Since principles are not established through conceivability unless already presupposed, we can conceive of whatever would have been contradictory, if the principles had been there to compare with. We can conceive of logical, conceptual, and metaphysical contradictions, contradictions of any kind, if we bar the principles with which we would arrive at contradictions from our awareness.

I declare, however, that the found general structural inadequacy of the conceivability-based epistemology of modality suggests that Roca-Royes' account of the conceivability method and the notion of conceivability inherent in her account is detached from conceivability proper. Both this line of defense and the structural problem found are, in fact, already familiar in the literature on conceivability and possibility. So, in the next section, I shall leave the defense of the conceivability-based epistemology of modality mainly to Yablo (1993).

4. Circularity and Conceivability_{bp}

In his paper, Yablo (1993, 12) describes the Circularity Objection against the conceivability thesis as an accusation that runs thusly: “conceivability is a guide to possibility *only as constrained by prior modal information tantamount to the information that p is possible*” (Yablo's italics). This description seems a snug fit to Roca-Royes' structural problem for the conceivability-based epistemology. Only, on her Circularity Objection, it also the case that inconceivability is a guide to impossibility only as constrained by prior modal information tantamount to the information that p is impossible. I take it that the Circularity Objection is a variation of the Standard Objection. Not because it forwards counterexamples (which Roca-Royes does), but because the Circularity Objection, like the Standard Objection, targets the relation between conceivability and modality. It charges that there is no relation since what is claimed as conceivable or inconceivable is already known by the subject as possible or impossible.¹¹²

Yablo's defense against the Circularity Objection runs partly on a denial of an entailment relation between (in)conceivability and (im)possibility, holding instead the relation to be one evidential in nature (ibid., 12-19). As such, he admits that we can conceive of impossibilities. Importantly, this means that it is not enough to offer a counterexample, a conceivable impossibility, say, in order to offset the evidential, conceivability-based epistemology of modality. Rather, it must be shown that we *often* conceive of

¹¹² The Uselessness Objection, remember, targets claims of conceivability by denying we can establish conceivability facts, i.e., whether or not something is conceived of, since we do not have epistemic access to conceivability facts.

impossibilities and often find possibilities inconceivable such that (in)conceivability be evidentially unreliable as a guide to (im)possibility.

It is undeniably the case that Roca-Royes has set up a dilemma that targets both the conceivability-based epistemologies of modality that accept take the relation between (in)conceivability and (im)possibility to be one of entailment as well as those that take the relation to be one evidential in nature. She shows that we not only often but “almost always” conceive of unappreciated impossibilities, as Yablo would say (ibid., 19). Unfortunately, the way she sustains that we so often conceive of impossibilities is by taking it to be a consequence of the notion of conceivability instead of offering a statistical hypothesis “advanced on the strength of confirming instances” (ibid.). That is, it is a consequence of the notion of conceivability at play in her conceivability method that we cannot establish (necessary) principles unless presupposing the very principles, wherefore we “almost always” conceive of impossibility.

This way of sustaining the Circularity Objection, Yablo celebrates as devastating to the notion of conceivability used in the Circularity Objection as a reliable epistemological guide to modality, but he argues that it is simply irrelevant for whether there is an entailment or evidential relation between conceivability and modality on the proper notion of conceivability.

Yablo issues a challenge to the proponent of the Circularity Objection: “if we are as prone as the objector suggests to conceiving unappreciated impossibilities, I would like to know what some of them are” (ibid.). Roca-Royes could be seen as facing the challenge by forwarding the conceivability of *de re* impossibilities. Still, one might wonder if conceivable *de re* impossibilities are enough to show conceivability evidentially unreliable as a guide to possibility.¹¹³ Ultimately, the question is moot since Roca-Royes sustains that we often conceive of impossibilities by taking it to be a consequence of the notion of conceivability. For this reason, I can disregard the part of Yablo’s defense that runs on the denial of the relation being one of

¹¹³ Even more radically, one might wonder whether the extreme haecceitist or the anti-essentialist is simply right and celebrate the conceivability-based epistemologies as showing the non-extreme haecceitist essentialist position false – were it not for the supposedly conceivable contradictions to *Necessity of Identity* which, I take it, are a problem on all accounts.

entailment and focus on the part of his defense (ibid., 20-21) that considers what is Roca-Royes' way of sustaining the Circularity Objection.

Yablo claims that Arnauld in his objection to Descartes takes “a conceivable proposition [to be] just one not known to be impossible”, a notion of conceivability that Yablo calls *conceivability_{bp}*, defined as “the believability of *p* is possible.”¹¹⁴ On this notion, it becomes “something in the order of a conceptual truth” that we almost always find unappreciated impossibilities conceivable. That is, that “someone who doesn't realize that *p* is impossible will find its possibility believable”, i.e., *conceivable_{bp}*.

Note that we should understand the definition of *conceivability_{bp}* as ‘it is possible for *x* to believe *p* possible’ and that Yablo takes this as equivalent to ‘*x* does not know of / realize / is unaware of the impossibility of *p*’. I stress this since Yablo might be misunderstood as taking ‘*x* believes *p* possible’ as the definition of *conceivability_{bp}* and to be equivalent to *x*'s not being aware of the impossibility of *p*. This will be important in a moment, but noticing the difference now might avoid some confusion later.

I think we can rewrite the quoted definition above to match Roca-Royes' terminology without loss: a conceivable proposition is just one that a subject is not aware of is impossible.¹¹⁵ As such, the notion of conceivability inherent in Roca-Royes' account of the conceivability method is *conceivability_{bp}*.

What does Yablo have to say against the Circularity Objection based on *conceivability_{bp}*? Nothing bad. In fact, he agrees with it. For good measure, he even throws wood on the funeral pyre of a thesis claiming *conceivability_{bp}* as an epistemic guide to modality, viz., that it rules out that one can be completely in the dark about *p*'s modal status. On the *conceivability_{bp}* account, the less one is aware of against the possibility of *p*, the better grounded one is in believing it possible. This is surely false since “you do not acquire justification for *believing* that something is possible simply through lacking justification for *denying* that it

¹¹⁴ I am beginning to wonder just how many different interpretations there are of Arnauld's objection to Descartes. Vaidya (op.cit.) considers three: an “irrelevant” interpretation (according to which only an irrelevant formal distinction is found by conceivability) in addition to the two interpretations à la the Standard and Uselessness Objections already considered. Add now Yablo's Circularity interpretation. A fifth is up my sleeve: a Uselessness Objection by Depth Charge interpretation à la van Inwagen (1998). On this interpretation, the conceivability thesis is useless even if true since conceiving requires cognitive capacities beyond the limited subject. At least, this seems to be the case if *adequate* conceptions of objects are required in conceiving, as Arnauld understands adequate (or is taken to understand adequate cf. Yablo 1990, n. 8), and Descartes is right that it takes divine cognitive capacities to knowingly possess adequate conceptions.

¹¹⁵ And sometimes a subject is not aware of impossibility because there is none to be aware of.

is.” I take the absurd result to be that if x were to consider whether possibly p , x cannot be completely in the dark as to possibly p on the basis of conceivability_{bp}. But we can see that before x considering the matter, the evidence as to the possibility of p is there, waiting in x 's ignorance.

The problem with the Circularity Objection against the conceivability thesis based on conceivability_{bp}, states Yablo, is that even if the inference goes through, it is harmless to the conceivability thesis based on conceivability proper.¹¹⁶ Why? Because the proper notion of conceivability passes the “modal appearance test” (ibid., 4-7). Conceivability_{bp} fails the test. Thus, conceivability_{bp} is not conceivability proper but a distinct notion of conceivability such that what does or does not hold for one has little bearing for the other.

According to the modal appearance test, to find p conceivable proper is to be in a state which (i) is veridical only if possibly p , and (ii) moves x to believe that possibly p . The difference between veridically conceiving and merely conceiving p (both conceiving proper) is supposed to mirror respectively veridically perceiving and perceiving p . The former is possible only if p , whereas the latter is possible even if not p . In the case of conceivability, the former is possible only if *possibly* p (ibid., n. 12). The distinction between veridical and non-veridical conceiving proper is due to Yablo's denial of the relation between (in)conceivability and (im)possibility to be one of entailment. A conceivabilist who accepts entailment must deny the distinction between veridical and non-veridical conceiving fully or partly, pending whether he takes the relation between (in)conceivability and (im)possibility to hold in any circumstance or only in certain circumstances (where it is the subject matter that differentiates the cases). That is, all conceptions proper are of the veridical kind to the conceivabilist that accept an entailment relation holding in all circumstances.¹¹⁷

On the second criteria of conceiving proper, that conceiving proper must move the subject conceiving to believe p possible, this is most obviously part of a notion of positive conceivability (cf. Chalmers 2002).¹¹⁸

¹¹⁶ The proper notion of conceivability he calls “*philosophical* conceivability” (ibid., 7).

¹¹⁷ The principles of Reliability and Universalizability, according to Berglund (2005, §3.3.).

¹¹⁸ Hale (2003) argues that if you know some or enough absolute necessities and have checked that $\diamond p$ does not contradict any of them, you are moved to believe p possible based on its negative conceivability. Just like if you have got no evidence that suggests that the burglar entered the house through the window and have done a thorough investigation, you are moved to believe the contradictory as well – that the burglar did not enter through the window. It seems to me that the analogy is bad, though. If you have done a thorough investigation of the window and find no evidence of forced entry, not only is this not evidence of the burglar having entered the house through the window, it is

Paraphrasing Yablo (op.cit., 4-5), if you conceive of a scenario that you take to verify p is *ipso facto* to have it seem or appear to you that possibly, p .

Let us see the modal appearance test at work. Yablo considers Goldbach's conjecture a case in point against conceivability_{bp}. He calls Goldbach's conjecture *undecidable* on the available evidence (ibid., 11): he finds it neither conceivable nor inconceivable. Since he has no idea whether Goldbach's conjecture is possible, he finds it conceivable_{bp} (by not being aware of the impossibility of Goldbach's conjecture). But, "[he has] no inclination whatever to think it possible, nor [has he] misrepresented anything should it turn out not to be" (ibid., 21).

On the first part of the quote, he later writes what I take to be the same point: "ignorance of the fact that p is impossible does not itself do much to explain why I would conceive it as possible" (ibid., 36). That is, from conceivability_{bp} of p a subject x is not moved thereby to believe p possible – conceivability_{bp} fails (ii) of the modal appearance test.

Here the difference stressed earlier is clear: if Yablo is misunderstood so as to find unawareness of impossibly p equivalent with believing possibly p , then, obviously, x 's unawareness of impossibly p would move x to believe possibly p . In fact, the two would be equivalent. Since he denies that conceivability_{bp} does so, we can see that his definition of conceivability_{bp} must be one saying that unawareness of impossibly p is equivalent to possibly believing p possible.

On the latter part of the quote, I find his explanation less clear. I take his thought to be that conceivability_{bp} also fails (i) of the modal appearance test. I take him to argue that conceivability proper is veridical only if possibly p , and that conceivability_{bp} fails to have any *veridicality conditions* in the sense that x can *not* be aware of necessarily not p regardless of possibly p being the case or not. That is, it does not make sense to describe my not being aware of the impossibility of p as veridical or not, just as it makes no

evidence that he did not. That is, 'no scratch marks on the window' is no evidence for p (that the burglar entered the house through the window) but it is evidence for not- p . The same is not true of the modal case: having checked (evidence of) that $\Diamond p$ does not contradict necessities no. 1-110 does not show (is not evidence for) that $\Diamond p$ does not contradict necessity no. 111.

sense to describe cases in which it is possible to believe p possible as veridical or not.¹¹⁹ I take it that Yablo then supports his (what I take to be his) reasoning by arguing that in x 's conceiving_{bp} of Goldbach's conjecture under its presumed impossibility, x is not misrepresenting Goldbach's conjecture in his thought – x is not aware of the impossibility of *Goldbach's conjecture*. In x veridically conceiving proper of Goldbach's conjecture under its presumed impossibility (per impossible!), it requires x to either veridically conceive proper of some proposition “closely related” to Goldbach's conjecture, misrepresenting this closely related, possible proposition with that of Goldbach's conjecture, or through x being “empirically and/or philosophically misinformed” somehow (ibid., 38-40). So, by not misrepresenting Goldbach's conjecture in conceiving_{bp} of the proposition under its presumed impossibility, Yablo shows that conceiving_{bp} fails (i) of the modal appearance test. Should a notion of conceivability satisfy (i) of the modal appearance test, a misrepresentation or confusion of some sort must be going on in the conceiving of p under its presumed impossibility.

What all this amounts to is the denial that the notion of conceivability at play in Roca-Royes' conceivability method is conceivability proper. Further, whether the Circularity Objection holds for the improper notion of conceivability matters little for whether it holds for conceivability proper. Regarding the assumptions behind her conceivability method, Yablo denies, at least, the implication in one direction of A4:

A4 A world w is accessible to a subject x iff x is not aware of a contradiction in w .

For conceivability proper, Yablo denies that if x is not aware of a contradiction in w , x has access to w . This conditional is false since x can be unaware of a contradiction in w and, yet, be unable to conceive proper of w , i.e., may not have access to w . Equivalently, but just as importantly, he is denying that if x does not have access to w , x is aware of contradiction in w . This conditional is false since x might not have access to w and, yet, not be aware of a contradiction in w .

¹¹⁹ Unless such a case is veridical only if it is possible for someone to be in a state in which they believe p possible. But, again, this state is possible regardless of whether p is possible or not, *pace* Stalnaker.

He can accept the implication in the other direction: if x has access to w , x is not aware of contradiction in w . Equivalently, he can accept that if x is aware of contradiction in w , x cannot conceive proper of w (x does not have access to w). The revised assumption reads:

A4' If a world w is accessible for a subject x , x is not aware of a contradiction in w .

With a revised assumption in the list of assumptions for conceivability proper, Roca-Royes' structural problem for the conceivability method dissipates. It does not follow from the assumptions that x must be aware of contradiction in p with principles x is also aware of in order to find p inconceivable. It may be the case that conceivability is primitively and by brute fact restricted such that x might find p inconceivable regardless of the contents of x 's awareness. For instance, ordinarily, we do not celebrate the ingenuity of the college student that claims to be able to conceive of a contradiction to the law of noncontradiction, as when he claims to be able to conceive that it both rains and does not rain at the same time and place. It is probably the correct move to take the "conceptual paternalism" strategy of Sorensen (1992, 40-41) against the student and deny that he has so conceived (though the letdown can be done more softly than flat denial). Perhaps the student is misunderstanding negation, or perhaps he is able to conceive of a case in which a person describes a very slight drizzle as rain that another person would not describe as rain and misdescribes the conceivability of this scenario as one in which he can conceive of a contradiction to the law of noncontradiction.

This strategy of explaining offered counterexamples by proposition or mode confusion (cf. Stoljar 2006, 74-77) we can call offering a Misdescription Model of Modal Error. In the case at hand, the MMME strategy is used against a conceivable impossibility where the (necessary) principle contradicted, the law of noncontradiction, is one established *a priori* (let's agree). Depending on the strength of the respective conceivabilists conceivability-based epistemology of modality, the MMME strategy might be extended to all supposed counterexamples. That is, also to supposed conceivable impossibilities that contradicts *a posteriori*

established necessities or *de re* principles.¹²⁰ Further, a similar MMME strategy may be used to undermine supposed inconceivable possibilities.

However, whether the MMME strategy can be extended to *de re* principles is questionable, and we may interpret Roca-Royes as exactly questioning this. There might still be the specific problem put forward by Roca-Royes for conceivability proper: we might be able to conceive of contradictions to *de re* principles. That is, Yablo's (i) of the modal appearance test – that the conceivability of *p* is veridical only if possibly *p* – might be dealing with only logical and conceptual possibility in the consequent such that conceivability is only primitively and by brute fact restricted by logical and conceptual principles. In other words, the MMME strategy might only be extendable to contradictions of logical and conceptual principles. In this case, contradictions to *de re* principles are conceivable proper (unless *de re* principles are simply logical or conceptual principles).

We can see this objection as a case of the Standard Objection: conceivability is insufficient to establish *this* kind of modality – usually metaphysical modality – since we can conceive of *this* impossibility – usually an *a posteriori* impossibility. Here, conceivability is insufficient to establish *de re* modality since we can conceive of *de re* impossibility.

Let me stress that this is not argued by Roca-Royes. She argues that contradictions to *de re* principles is conceivable_{bp} by anyone not aware of the *de re* principles and that conceivability_{bp} is insufficient to establish *de re* possibility. This conclusion, we can agree with Yablo, is plausible but irrelevant to conceivability proper. Still, I think a lesson we should take to heart from his defense against the Circularity Objection offers resources to erect a dilemma for Roca-Royes' conclusion that conceivability cannot be the whole story of our *de re* modal knowledge. The lesson first, the dilemma second.

¹²⁰ A strategy against conflicts, or seeming conflicts, of conceivability intuitions that Yablo (2000) calls “Textbook Kripkeanism”.

5. A Lesson and Something Inconceivable

The proper notion of conceivability is harder to pin down than that of conceivability_{bp}, so you might well wonder how to prove it wrong. For instance, you might wonder whether if in each case you were to come up with a scenario you claim is a conceivable impossibility, I could turn you down simply by claiming you have got the wrong notion of conceivability in mind or are otherwise confused. This is not supposed to be the case. Conceivability is supposed to be an ability that does not depend on awareness other than, perhaps, as an enabling condition for conceivability. Thus, I take it to be very unlikely that I can conceive of, e.g., a cute puppy dog without being aware of puppy dogs somehow (like I am able to conceive of centaurs by being aware of centaurs – or their parts – somehow). Yet, I take it as a flat falsehood that anyone can conceive of a contradiction of the law of noncontradiction whether they are aware of the law of noncontradiction or not.¹²¹

Clearly, while there are restrictions on what we can conceive proper what exactly these restrictions amount to is unclear. For this reason, Roca-Royes' charge that conceivability cannot establish *de re* principles and is insensitive to *de re* possibilities is still worrisome to conceivability proper, even if she only shows why it is a problem for conceivability_{bp}. We should therefore take heed of conceivability and inconceivability results as they are our guide to the principles that restrict our ability to conceive and of what we take to be possible or impossible thereby.

This is the lesson we should take to heart from Yablo's defense of conceivability proper from the Circularity Objection: we should consider conceivability and inconceivability results prior to theories of conceivability and of conceivability-based epistemologies of modality – at least, as data that must be explained by such theories. This is also a suggestion that opponents of the conceivability thesis sometimes forward, arguing that we are able to conceive of all sorts of impossibilities (see, e.g., Kung forthcoming). Looking back, this is really the route to go, if you want to forward a Standard Objection against the evidential, conceivability-based epistemology of modality. That is, offer a statistical hypothesis against the

¹²¹ Such contradictions are perhaps understandable, entertainable, or supposable (cf. Reid 2002, Fiocco 2007, and McGinn 2004), but I doubt they are conceivable (cf. Casullo 1979). The charge that conceivability is merely *X* (one of the mentioned notions) and that we can stand, and perhaps often do stand, in relation to impossibility via *X*, I call Shallow Charge. I consider Shallow Charge to be a Standard Objection. The strategy of developing a Circularity Objection based on conceivability_{bp} seems to be a Shallow Charge against conceivability theses.

evidential conceivability thesis based on confirming instances of conceivable impossibilities (or inconceivable possibilities against the evidential inconceivability thesis).

Again, the lesson from Yablo's defense is that we check our conceivability and inconceivability results primarily and erect theories of conceivability in their light, all the while denying certain descriptions of conceivable scenarios as based on confusion or misrepresentation (offering MMEs to certain supposed conceivable impossibilities or inconceivable possibilities). Understandably, this is a difficult enterprise, but we are likely already used to building ships while at sea or, if you prefer, attempting to reach reflective equilibrium between apparent data and theory on other murky waters of epistemology. Let us say that a good case of a conceivability or inconceivability result, i.e., a scenario or a number of similar scenarios that is found to be (in)conceivable, is *prima facie* a case that is generally found to be (in)conceivable. Perhaps generally should be understood as in an educated community – that is one populated by people with some conception of what a counterexample would be, say, to the law of noncontradiction. Thus, conceiving of contradictions to the law of noncontradiction is a no go. We find such cases inconceivable and use the Misdescription Model of Modal Error against people that claim to be able to so conceive. Likewise, many would agree that conceiving of a married bachelor is probably not possible in any sense save by redefining the meaning of 'married' or 'bachelor', a sense not very interesting when it comes to the conceivability (and possibility) of bachelors being married.

It becomes much harder to draw conclusions regarding the *de re* (in)conceivability results. Thus, many think *Essentiality of Origin* is true, but many think we can conceive of scenarios that contradict the principle. It seems conceivable to me. Nevertheless, interestingly and importantly, we find an inconceivability result under pretense for a set of cases that is generally agreed upon and which go against the predictions of Roca-Royes' conceivability method regarding this very set of cases. That is, certain scenarios are generally agreed upon as being inconceivable while they are conceivable according to Roca-Royes' conceivability method (unless presupposing the principles, of course). This set of cases are cases dealing with the conceivability of nonidentity under the pretense of identity, a set of cases that have had enormous impact on philosophy generally but philosophy of language particularly and which new theory must either explain or explain away: the cases are considered explanatorily salient even by opponents to the theory.

Kripke (1980) puts forward cases. For example, that someone other than Nixon might have been president in 1970 while no one but Nixon could have been Nixon (ibid., 48), and that Aristotle could have existed while not teaching Alexander the Great (ibid., 30). The cases are meant as intuitive or pre-theoretical cases that provide data to be explained by a theory of names. Especially, the cases provide data that show names have a different modal profile from definite descriptions and, so, are cases that go against a theory of names prevalent at the time: Descriptivism. A consequence of the modal profile we associate with names is that if Hesperus is Phosphorus, necessarily Hesperus is Phosphorus, even if the names are fixed using definite descriptions (102ff). Kripke explains the intuitive cases with a different theory of names than Descriptivism, viz., by arguing that names are rigid designators. I stress that Kripke explains the intuitive cases by his theory; he does not derive them *post hoc* from his theory of rigid designation.

Briefly put, philosophers are persuaded by the cases. Today, it is hard to get around rigid designation. Even if you want to put forward a different theory of names, you will have to explain the intuitive cases or explain them away – the cases are considered explanatorily salient.

Kripke further puts forward cases to show that natural kind terms behave as names, e.g., that Gold is Gold even if not yellow (ibid., 116ff), which has the familiar consequence that identity between natural kinds discovered empirically are necessary. So, if water is H₂O, the identity is necessary; just as if Hesperus is Phosphorus, the identity is necessary.

Enough of Kripke, all this is well known. What I want to get at is that we have some generally agreed upon intuitive or pre-theoretical cases of conceivability and inconceivability results by which I may press Roca-Royes. Kripke provides us with cases such that if an identity holds, e.g., between something named ‘a’ and ‘b’, we regard the identity as necessary. Consider Yablo’s example (1993, n. 66): under the pretense that salt is sodium, are you able to conceive of the ocean containing more salt than sodium?¹²² On Roca-Royes’ account of the conceivability method, such cases are conceivable.

¹²² Note that Yablo’s example is false: salt is not (simply) sodium. Salt is a mineral composed primarily of sodium chloride, assuming we are dealing with common salt in the example. See <https://en.wikipedia.org/wiki/Salt>.

She admits, though, that the conceivability of the nonidentity under pretense of identity might not be obvious. In justifying her shift from talking about the case of salt and sodium to talk about the origin of *a*, she argues that while the problem of conceivability as an epistemic guide to *de re* modality is structural, *Necessity of Identity* might be “too obvious for me to clearly motivate the worry”, wherefore she switches to the less obvious principle of *Essentiality of Origin* (ibid., n. 16).¹²³

That is, according to Roca-Royes’ account of the conceivability method, it is conceivable under the pretense of an identity between distinct names of something that the something named twice is nonidentical. This is simply at odds with received opinion. If her account of the conceivability method is right, it seems the intuitive cases regarding our use of names should give the opposite result – we should find our intuitive use of names more in line with Descriptivism. Of course, we know how she explains the consensus on the inconceivability of the cases: she argues that we are presupposing *Necessity of Identity* somehow (perhaps in our very concept of identity), locating a contradiction, rendering the cases inconceivable. Notice, however, that this explanation is at odds with the received opinion of Kripke’s cases as intuitive or pre-theoretical and explanatorily salient.

On this explanation of the inconceivability of nonidentity under pretense of identity, the inconceivability is derived through the conceivability method by presupposing *Necessity of Identity*, by presupposing that names are rigid designators. Thus, the cases are derived *post hoc* of theory. The consequence is that there is really no need for proponents of Descriptivism to explain or explain away Kripke’s intuitive cases. The cases are neither intuitive nor explanatorily salient and the Descriptivist could easily rejoin, using Roca-Royes’ account of the conceivability method, that Kripke is presupposing rigid designators in his intuitive cases and, so, that they do not show that names have different modal profiles from definite descriptions. The

¹²³ We can note that also Kung (op.cit., 15) finds that nonidentity under pretense of identity is hard to imagine, but notes that “this seems to be a special feature of identity, not of imagining-under-a-supposition.” Where Roca-Royes in her paper attacks the conceivability method of the conceivabilist, Kung in his paper attacks mostly any case a conceivabilist argues is inconceivable. Roca-Royes derives what we can conceive from her account of the conceivability method; Kung derives an account of the conceivability method on the basis of what we can conceive of. Both come to the conclusion that we can conceive of impossibilities and that conceivability fails as an infallible (and for Roca-Royes also fallible) epistemic guide to modality. Kung argues that conceivability can be an evidential epistemic guide to possibility in limited cases where we can do away with merely stipulative content in conceived scenarios (see Kung 2010 for his account of “Modal Evidence from Imagination”).

Descriptivist can then derive other cases from the tenets of Descriptivism and the derived Descriptivist cases will be as much “intuitive” data to be explained by theory as the cases provided by Kripke.

I think this puts considerable pressure on Roca-Royes’ account of the conceivability method. We miss an explanation of why philosophers generally, erroneously find nonidentity under pretense of identity inconceivable and why they attribute to the intuitive cases a special status in theory. (Of course, we now know that (part of) the reason she considers conceivable non-identity under pretense of identity is because the notion of conceivability at use in her conceivability method is conceivability_{bp}).

6. A Dilemma for Roca-Royes

Let me sum up where we stand. In §3, I showed that Roca-Royes’ structural problem for conceivability, in establishing *de re* principles only by presupposing them, could be generalized as an inability of conceivability to establish any principle without presupposing it.

In §4, I presented Yablo’s defense against such a Circularity Objection, concluding that Roca-Royes’ structural problem for conceivability is due to her notion of conceivability not being conceivability proper. The notion of conceivability at use in her account of the conceivability method is conceivability_{bp}, a notion of conceivability distinct from conceivability proper and which offers no real objection to conceivability proper as an epistemic guide to modality – *de re* or otherwise – even if the arguments put forward by Roca-Royes against conceivability_{bp} goes through. I noted, however, that the restrictions in place on conceivability proper are not readily available for inspection and that the specific problem she presents for conceivability to establish *de re* principles might stand for conceivability proper also. We might be able to conceive of *de re* impossibilities, if conceivability proper is not restricted by *de re* principles primitively.

In §5, I argued that a lesson from Yablo’s defense against the Circularity Objection is that we take heed of conceivability and inconceivability results prior to erecting theories of conceivability and of conceivability-based epistemologies of modality, and I noted that we find a prominent, generally accepted case of an inconceivability result in the inconceivability of nonidentity under pretense of identity, where the identity is of something named twice. Roca-Royes’ account of the conceivability method predicts such cases conceivable. On this basis, I noted that a dilemma could be erected against the conclusion of her non-

standard dilemma that conceivability cannot be the whole story of our *de re* modal knowledge. We can now consider the dilemma.

On the one horn of the dilemma, the inconceivability result shows that Roca-Royes' conclusion that conceivability cannot be the whole story of our *de re* modal knowledge is false, if it is to target conceivability proper. Following the lesson from Yablo, we must take heed of the inconceivability result of nonidentity under pretense of identity. Thus, Roca-Royes' account of the conceivability method is false since it predicts such cases conceivable. Her account of the conceivability method lacks an identity constraint, at least, in addition to the required change of assumption four that the implication only goes in one direction (see 4. *Circularity and Conceivability*_{bp}). The identity constraint must be such that the revised account of the conceivability method for conceivability proper predicts the inconceivability result noted. That is, such that we are able to establish one *de re* principle by conceivability proper primitively or by brute fact, at least, *Necessity of Identity*. If this is right, conceivability proper can be the whole story of our access to *de re* modal knowledge – our knowledge of one *de re* principle, at least.

On the second horn of the dilemma, it is noted that while Roca-Royes' account of the conceivability method with conceivability_{bp} at its center is compatible with the inconceivability result of nonidentity under pretense of identity, the explanation delivered of the incompatibility is at odds the lesson from Yablo that we take heed of conceivability and inconceivability results prior to erecting theories of conceivability and of conceivability-based epistemologies of modality, at odds with the status of the cases forwarded by Kripke as intuitive or pre-theoretical, and at odds with the general philosophical community in the acceptance of the cases as intuitive and explanatorily salient. On Roca-Royes' account of the conceivability method, the inconceivability result is arrived at through presupposing the principles attempted established through the method. Thus, the inconceivability result is derived *post hoc* from theory and is neither intuitive nor explanatorily salient. However, a slight revision of her account enables it to encompass intuitiveness and explanatory salience, even if the cases are still arrived at *post hoc* and are at odds with the lesson from Yablo. If Roca-Royes accepts that the conceivability method, i.e., conceivability_{bp}, is a method by which we render *implicitly* known principles *explicitly* known, she can retain her explanation of the inconceivability result while allowing the result to be surprising (since the subject were not explicitly aware of the principle

rendered explicit by the inconceivability result), intuitive, and explanatorily salient. With the slight revision, however, the dangers of presupposing principles and the problems this produces for conceivability_{bp} in establishing *de re* principles is questionable. On the view at hand, the *de re* principles are comparable to logical and conceptual principles, principles thought to run deep in our language and thought. More importantly, if we render implicitly known principles explicit by the conceivability method, conceivability_{bp} seems able to be the whole story of our explicit *de re* modal knowledge. Again, our *de re* modal knowledge of one *de re* principle, at least: *Necessity of Identity*.

I conclude that conceivability – proper or improper – can be the whole story of our explicit *de re* modal knowledge of one *de re* principle, at least. If correct, conceivability can elucidate our *de re* modal knowledge, even if the conceivability-based epistemology of *de re* modality still fails (*drME*). The account still fails (*drME*) because the account – while satisfying the second requirement of (*drME*) by elucidating our essentialist or “remote” *de re* modal knowledge (of one *de re* principle) – does not satisfy the first requirement of elucidating our “everyday life” *de re* modal knowledge. The conclusion shows false that conceivability cannot be the whole story of *any* of our *de re* modal knowledge, even if it does not show that conceivability can be the whole story of *all* of our *de re* modal knowledge.

But I am getting ahead of myself. Next, let us consider the dilemma in detail and, in §7, the conclusion and its import to Roca-Royes’ Non-Standard Dilemma.

6.1. *De re modal knowledge and conceivability proper*

The first horn of the dilemma against Roca-Royes’ conclusion of her non-standard dilemma argues that her account of the conceivability method is false and that a revised conceivability method, taking into account the inconceivability result of nonidentity under pretense of identity, will be able to establish a *de re* principle: *Necessity of Identity*. Thus, conceivability proper can be the whole epistemic story of our knowledge of one *de re* principle, at least.

At the end of §4, I noted that the non-standard dilemma erected by Roca-Royes might still be problematic for conceivability proper, even if her account of the conceivability method has conceivability_{bp} at the heart of the method. That is, I noted that we are not aware of which restrictions are in place on conceivability proper

in our conceptions, the lesson being, as noted in §5, that we must take heed of conceivability and inconceivability results in our theory of conceivability and let the results guide us to the restrictions that are in place on conceivability and, thus, to a theory of conceivability and whether this is an epistemic guide to any kind of modality. Perhaps, even if this is not Roca-Royes' argument, conceivability is merely restricted by logical and conceptual principles such that we are indeed able to conceive of contradictions to *de re* principles. If this is the case, her conclusion is correct, even if the way to the conclusion is incorrect, being based on an argument that conceivability_{bp} cannot be the whole story of our *de re* modal knowledge.

In §5, I noted that there are generally accepted cases in which we find a contradiction to a *de re* principle inconceivable. In Kripke's intuitive cases we find conceivability and inconceivability results that show we cannot conceive of a nonidentity under the pretense of an identity, even if the object has two distinct names fixed by definite descriptions. For instance, under the pretense that Hesperus is Phosphorus, we cannot conceive of the nonidentity; under the pretense that water is H₂O, we cannot conceive of the nonidentity; and under the pretense that salt is sodium, we cannot conceive of the ocean containing more salt than sodium. This is an effect of how we use names as Kripke's intuitive cases show, perhaps explained by his theory of names as rigid designators. Further, the impact of the cases on the philosophy of language and philosophy generally shows that the philosophical community is persuaded by the cases as intuitive and considers them explanatorily salient. Thus, we have an inconceivability result that shows that Roca-Royes' account of the conceivability method is false since it predicts that we will be able to conceive of the nonidentity. It predicts that we are able to conceive of contradictions to the *de re* principle *Necessity of Identity*. At least, it can be seen that she is not dealing with conceivability proper in her conceivability method: more restrictions are in place on conceivability proper than those of the notion of conceivability at heart in her account. A missing constraint might be:

Identity Constraint

Given the pretense of an identity claim between terms T1 and T2 used referentially, we cannot conceive of the nonidentity of the object referred to by the terms.

The qualifier ‘referentially’ is meant to disqualify cases in which the terms (or a term) bordering the identity sign are used attributively (Donnellan 1966) in which case we can conceive of a nonidentity (perhaps suggesting that it is an illegitimate use of identity in the first place because of equivocation). For instance, ‘the planet closest to the sun is the planet with the greatest temperature variation between night and day of the planets in the Solar System’ or ‘the planet closest to the sun is Mercury’. In both cases, we seem able to conceive of a nonidentity: say, if a solar cell panel was fixed in position in front of the closest planet to the sun, shading the planet, the planet second closest to the sun might be the planet with the greatest temperature variation between night and day of the planets in the Solar System. Importantly, we are in both cases using the description attributively so as to pinpoint whatever satisfies the description in a given case: the x such that $D(x)$. In one case Mercury, in another Venus. If used referentially, we intend to say something of the specific thing satisfying the description – we fix the referent by the description: Mercury.

The Identity Constraint is strictly speaking stronger than required – it would be enough to continue with the use of names only – but it is likely our use of names as referrers that is behind the appeal of the intuitive cases presented by Kripke. So, nonidentity under pretense of an identity claim between terms other than names, but terms still used referentially (even definite descriptions), will be inconceivable as well. In a sense, the Identity Constraint says that it is inconceivable under the pretense that terms T1 and T2 refer to the same thing that the reference of T1 is not identical to the reference of T2. Under the pretense that ‘the planet closest to the sun’ refers to Mercury and ‘the planet with the greatest temperature variation between night and day of the planets in the Solar system’ refers to Mercury, are we able to conceive of the nonidentity of the thing referred to? No.

The claim is that that the inconceivability results of nonidentity under pretense of identity supports that the Identity Constraint is part of the set of principles that primitively or by brute fact constrains conceivability proper (in addition to logical and conceptual principles). Following the lesson from Yablo, we must consider the inconceivability result prior to our theory of conceivability and develop our theory in its light. That is, Roca-Royes is simply wrong in arguing that pretense of q does not interfere with the conceivability of p , only if q contains conceptual constitutive relations of concepts involved in p or if the conceiving subject is presupposing *de re* principles. Primitively or by brute fact, when q contains an identity

claim between terms used referentially and the terms also figure in p used referentially but denying the identity claim, pretense interferes with the conceivability of p so as to make the conceivability of p impossible.

Yablo might be relying on this constraint in denying the conceivability of the ocean containing salt and sodium in different amounts under the pretense that salt is sodium. Likewise, under the pretense that Hesperus is Phosphorus, by brute fact it is inconceivable that Hesperus is not Phosphorus. And pretending that water is H_2O , we are unable to conceive of a scenario in which water is XYZ.

Of course, there might also be weird cases in which we, say, pretend the Eiffel Tower is the Sears Tower (currently known as the Willis Tower) and attempt to conceive of their nonidentity. In this case, if we are able to so pretend, I conjecture that we cannot conceive of the nonidentity as well. But I think we will resist the pretense due to our knowledge to the contrary and will probably interpret the pretense as a matter of locating some shared property that the towers share – in which they share an identity – either metaphorical or factual. If this is the case, it seems we are using the names attributively and will find it possible that they not share the identity.

Now, If we retain the claim that the conceivabilist establishes *de re* necessary principles by modal conditionals and that these are established by the conceivability method but revise the conceivability method with the Identity Constraint (and with the revision of assumption four), we can see that the conceivabilist will be able to establish one *de re* principle: *Necessity of Identity*. For instance, pretend that Mark Twain is Samuel Clemens and attempt to conceive of the nonidentity. Finding that we cannot conceive of the nonidentity under the pretense of the identity, we abandon the pretense and adopt the modal conditional: $(\text{Twain} = \text{Clemens}) \rightarrow \Box(\text{Twain} = \text{Clemens})$. The modal conditional (by the arbitrariness of the constants or by induction from multiple cases) establishes the *de re* principle. So, conceivability proper can be the whole story of our knowledge of one “remote” *de re* principle, at least.

I will discuss the import of the conclusion to Roca-Royes’ Non-Standard Dilemma in §7. Before that, the second horn of the dilemma.

6.2. *De re modal knowledge and conceivability*_{bp}

The second horn of the dilemma acknowledges that Roca-Royes' account of the conceivability method can handle the inconceivability of nonidentity under pretense of identity but claims that the explanation given for the inconceivability result must be rejected because it is at odds with received opinion of the status of the inconceivability result.

Roca-Royes explains the inconceivability result as arrived at *post hoc* of theory which is at odds with the lesson from Yablo, that we consider conceivability and inconceivability results prior to theories of conceivability and conceivability-based epistemologies of modality, with the status of Kripke's cases as intuitive or pre-theoretical, and with the general acceptance of Kripke's cases as intuitive and explanatorily salient. We seem to agree with Kripke that we use names a certain way which a theory of names must explain, a way in which we consider identity between names necessary, given there is an actual or supposed identity between them. We simply do not agree with Roca-Royes that Kripke's cases are derived *post hoc* from a theory of names that presupposes the necessity of identity. I think pressure is on her account for this reason. If she cannot meet the inconsistency with received opinion or explain it away somehow, we have reason to believe her account is false.

This extends the problem of the first horn into the second: in the first horn, her account predicts something conceivable which is generally thought to be inconceivable, wherefore we have reason to reject the account. In the second horn, Roca-Royes' account explains the inconceivability result as arrived at *post hoc* of theory, while the inconceivability result is generally thought to be intuitive and explanatorily salient, which it would not be if arrived at *post hoc* of theory, wherefore we have reason to reject her account. Where we shall really pick up the second horn, however, is with a second acknowledgement. Roca-Royes' account can quite easily be revised in a way that enable it to claim the inconceivability result intuitive and explanatorily salient, even if it is still arrived at *post hoc* of theory.

Obviously, any revised account that I question is in danger of being named a straw man. Nonetheless, the distinction I shall add, the distinction between implicit and explicit knowledge, is sufficiently unexceptional, well known, and plausible that the revised account needs consideration.

Before the introduction of the distinction between implicit and explicit knowledge, inconceivability results are hardly surprising for a conceiving subject. After all, the subject must be aware of the principles with which he arrives at the contradiction that render the case inconceivable. As such, the inconceivability results seem neither intuitive nor provide data that is explanatorily salient. After the introduction, an inconceivability result can come as a surprise for a conceiving subject x since x may not be explicitly aware of the principle with which a contradiction is arrived at. For instance, a conceiving subject x is pretending that Hesperus is Phosphorus and is implicitly aware or knowledgeable of *Necessity of Identity*. The conceiver then attempts to conceive of the nonidentity of Hesperus and Phosphorus under the pretense of the identity and finds the nonidentity inconceivable. The subject abandons the pretense and adopts the modal conditional, in turn, grounding the principle as explicit knowledge by noticing the arbitrariness of ‘Hesperus’ and ‘Phosphorus’ or by induction from cases. The principle that the subject is implicitly aware of is rendered explicit by conceivability_{bp}. The inconceivability result, while arrived at *post hoc* of principles that contradict something the subject is implicitly aware of, retains its status as intuitive and explanatorily salient. The revised account is congruous with received opinion, while perhaps not with the lesson from Yablo.

With the slight revision, however, the dangers of presupposing principles and the problems this produces for conceivability_{bp} in establishing *de re* principles becomes questionable. There were two such dangers. One is that primitively equipping the subject with knowledge of *de re* principles aggravates the problem facing the non-epistemic conceivability theses in failing to satisfy the first virtue of the Standard Dilemma, that conceivability facts be epistemically accessible. Let me ignore this danger. As I said in §1, I consider the Standard Dilemma confusing and wonder why a conceivability thesis should be pressed by not satisfying either or both virtues.

The second danger of primitively equipping the subject with knowledge of *de re* principles is that doing so renders the conceivability-based epistemology of modality a non-foundational epistemology of modality that does not explain our modal knowledge at the foundational level. Conceivability, remember, is then “biased by something outside the method” that does the real explanatory work. This was supposed to be rather embarrassing to the conceivabilist. But consider now that the implicit *de re* principle at play behind the inconceivability of nonidentity under the pretense of identity is at a comparable level to other implicit

principles, logical and conceptual principles, say, that generate inconceivability results when attempting to conceive of contradictions to, say, the law of noncontradiction. These principles are thought to run deep in our language and thought; are thought to be principles that structure our view of reality, perhaps. If this is right, then that the conceivability method is biased by something outside the method in arriving at the correct results seems an embarrassment that loses some of its sharpness: it is somewhat trivial that our conceptions are under the confinements of the structures of thought (here supposing these are implicitly known).

More importantly, if we render implicitly known principles explicit by the conceivability_{bp} method, conceivability_{bp} is able to be the whole story of our explicit *de re* modal knowledge. Again, our *de re* modal knowledge of one *de re* principle, at least: *Necessity of Identity*. This may be an epistemology of modality that is as foundational as we are going to get. If this is right, again, it seems the conceivabilist_{bp} might find the embarrassment bearable.

7. Conclusions

We have the two horns of the dilemma. On the first horn, conceivability proper is sufficient to be the whole story of our knowledge of a *de re* principle since conceivability proper is restricted by the principle primitively or by brute fact, rendering a contradiction to the principle inconceivable. On the second horn, conceivability_{bp} is sufficient to be the whole story of our explicit knowledge of a *de re* principle since the principle is implicitly known, rendering a contradiction to the principle inconceivable. On both horns, the inconceivability of the contradiction to the principle allows a subject conceiving to establish a modal conditional, establishing the principle, in turn. The conclusion of the dilemma is that whatever the notion of conceivability, be it conceivability proper or conceivability_{bp}, conceivability is sufficient to establish explicit knowledge of a *de re* principle.

What shall concern me mostly here is the import or congruence of the conclusion to Roca-Royes' Non-Standard Dilemma. So, let me briefly recall to the reader the Non-Standard Dilemma: Roca-Royes sets up a principle that any epistemology of *de re* modality must comply with, (*dr*ME), stating that an epistemology of *de re* modality must account for:

- i) our knowledge of *de re* possibilities that we are all committed to, and
- ii) our knowledge of essential properties and/or *de re* principles, if the epistemology is committed to any such.

She then shows that neither the epistemic nor the non-epistemic conceivability-based epistemologies of modality satisfy (*drME*). She concludes that the conceivability-based epistemology cannot be the whole story of our *de re* modal knowledge. The reason the conceivability-based epistemology fails (*drME*) is that the epistemology fails to establish *any de re* principles, rendering contradictions to any such principles conceivable. Thus, the conceivability-based epistemology cannot establish any *de re* possibilities since the conceivability method is insensitive to the *de re* principles: whatever you input to the conceivability method – save if you know or presuppose any necessity with which a contradiction is arrived at – will be outputted as conceivable. Since you do not know the principles in question, contradictions to the principles are conceivable.

With the conclusion of the dilemma I have put forward, I can deny that the conceivability-based epistemology cannot establish *any de re* principle. The conceivability-based epistemology – whether working with conceivability proper or with conceivability_{bp} – can establish as explicit one *de re* principle, at least. As such, the conceivability-based epistemology satisfies the second conjunct of (*drME*): it can account for our knowledge of a single *de re* principle, satisfying the epistemological requirements for theory with a minimal commitment to *de re* modality.

Both accounts still fail the first conjunct of (*drME*). On Roca-Royes' account: our knowledge of *de re* possibilities remains unaccounted for. Our knowledge of interesting *de re* possibilities, that is. The reason the accounts still fail the first conjunct of (*drME*) is that a lot of the “everyday life” *de re* modal knowledge we are all committed to the conceivability method that establishes *Necessity of Identity*, whether by

conceivability proper or conceivability_{bp}, is silent on. The accounts do not say anything about the *de re* possibility of pens on floors and, as such, they remain conceivable but insensitively so.¹²⁴

Nonetheless, Roca-Royes' conclusion that the conceivability-based epistemology cannot be the whole story of our *de re* modal knowledge sounds hollow. Even if the accounts fail (*dr*ME), it is clearly false to conclude that conceivability cannot elucidate our knowledge of *de re* modality. Conceivability has been shown to elucidate our knowledge of *de re* modality, even if it has not been shown to elucidate *all* of our *de re* modal knowledge.

Of course, neither has it been shown that conceivability cannot elucidate all of our *de re* modal knowledge: conceivability proper may be primitively restricted by other *de re* principles such that more *de re* modal knowledge can be accounted for, and we may implicitly be aware of more *de re* principles such that conceivability_{bp} can account for more *de re* modal knowledge as well. If this is right, conceivability can account for our knowledge of *de re* possibilities since conceivability – proper or improper – would be sensitive to the *de re* principles.

Looking back, this would be a way of extending the Misdescription Model of Modal Error to all supposed counterexamples. It must be noted, however, that other *de re* principles cannot be *derived* from the foothold gained by the establishment of *Necessity of Identity*; it takes further assumptions to establish essentialist principles than it does to get at *Necessity of Identity*.¹²⁵ Thus, each *de re* principle must drive its own wedge

¹²⁴ Kung (op.cit, 15) locates a further problem: even if we cannot conceive of nonidentity under pretense of identity, the theory says nothing about what we can conceive outside of the pretense. When not pretending anything, are we able to conceive that the ocean contains salt and sodium in different amounts?

¹²⁵ Consider a metasemantic argument for *Necessity of Identity* using Kripke's rigid designators, which is how Kripke established the principle, according to Burgess (2014). (Roca-Royes submits that Kripke did not establish the principle through conceivability, but does not say how he did it otherwise (op.cit., n. 16)). Assume that 'Hesperus' and 'Phosphorus' are rigid designators, designators that refer invariantly to the object in any metaphysically possible world that the terms refer to in the actual world. Now, assume that 'Hesperus' and 'Phosphorus' both refer to Venus actually. It follows that the object referred to (Venus) is the same in all possible worlds in which the object exists. In setting up this argument for *Necessity of Identity*, we assume i) that the two terms are rigid designators, ii) that they refer to the same object actually, and iii) that the necessity in question is metaphysical and understood weakly, i.e., as only applying to worlds in which the object exists. We need have no assumptions about the properties of the object – in particular, which properties are essential to Venus. Roca-Royes claims that rigid designators are of no help to the conceivabilists_{bp} in establishing *de re* principles. She states that in order for rigid designators to be epistemologically helpful in conceived scenarios only the essential properties of, say, Queen Elizabeth II must be what we rigidly designate by 'the Queen', the Queen's actual origin must be among the rigidly designated properties, and we must somehow know which properties are being rigidly designated in order to find it inconceivable that the Queen has a different origin (ibid., 43-

into Roca-Royes' account of the conceivability method – proper or improper – by conceivability and inconceivability results like those found in Kripke's intuitive cases of our use of names. This may be a major problem for those that would extend the MMME strategy to encompass all supposed counterexamples. As Roca-Royes suggests, we may be able to conceive of the Queen with distinct parents (Oa,d,e) from those pretended or actual (Oa,b,c).¹²⁶

But, looking back, we can note that accounts that would extend the MMME strategy to all supposed counterexamples are accounts that hold the conceivability-based epistemology of modality to be one in which the relation between (in)conceivability and (im)possibility is one of entailment and one that holds in any circumstances. And, as we noted, Yablo's – the exemplar of the epistemic, conceivability-based epistemology of modality – was an account that denies that the relation be one of entailment (“fails” the second virtue of the Standard Dilemma). Rather, Yablo holds that the relation is evidential in nature. This account is not offset by counterexamples unless it can be shown that we *often* conceive of impossibilities or

44). It must be stressed that no one here is arguing that rigid designators function like this. This is merely how they would need to function if the conceivabilist on a notion of conceivability_{bp} claims to arrive at an inconceivability result *because of rigid designators* when attempting to conceive of the Queen with non-actual parents under the pretense that she has her actual parents. That is, if the rigid designators should be epistemologically helpful to the conceivability_{bp}-based epistemology of *de re* modality. In other words, we must be *suitably* non-epistemic conceivers in order to locate a contradiction and find a scenario in which the Queen has different origin from actuality inconceivable. In summary, in order to establish other *de re* principles than *Necessity of Identity* through the conceivability_{bp} method further assumptions are needed. We need the three assumptions as before, but we need the further assumptions that the rigid designator ‘the Queen’ picks out the essential properties of Queen Elizabeth II and that we know what these properties are. Only given these assumption do we find a scenario inconceivable in which the Queen has distinct parents from her pretended actual parents: ‘the Queen’ inserts into the conceived scenario rigidly designated essential properties that contradict the scenario we are attempting to conceive of. Thus, there seems to be a difference between *Necessity of Identity* and other *de re* principles such that they cannot be derived from it.

¹²⁶ As can be seen, granting that nonidentity is inconceivable under pretense of identity does not give much to the conceivabilist who wish to establish essentialist principles through conceivability. No property is discovered as essential or accidental, even if identity is discovered to be necessary via conceivability. That identity relations are not very illuminating when it comes to essences of objects is nothing new. As Yablo declares on identity and essence (Yablo 1987, 297) “a thing does not get to be identical with California by having the property of so being, but gets to be California and to have that property, alike, by having certain *other* properties. And it is these other properties that really belong in a thing's characterization.” In this respect, Vaidya's (2010) charge against the conceivability-based epistemology that it cannot establish knowledge of essential or accidental properties of objects because the account runs into a *Meno* paradox stands on firmer ground than does Roca-Royes' Non-Standard Dilemma that argues that it cannot establish *de re* principles (though their objections are otherwise similar in various respects). I conjecture that Vaidya's is also a Circularity Objection sustained by taking it to be a consequence of the notion of conceivability that conceivability is insensitive to essentialist principles. But Vaidya might be right to attribute to Husserl a conceivability_{bp}-based epistemology of modality (see Vaidya op.cit. for references).

find possibilities inconceivable, i.e., unless a statistical hypothesis shows the evidential unreliability of (in)conceivability to (im)possibility based on confirming instances of counterexamples.

Does Roca-Royes offer that? In §4, we saw that she does not. She offers a Circularity Objection according to which we conceive of impossibilities but sustains the claim by taking it to be a consequence of the notion of conceivability: $\text{conceivability}_{\text{bp}}$. $\text{Conceivability}_{\text{bp}}$ does not entail possibility since insensitive to necessity, and might neither afford evidence of possibility, if we almost always $\text{conceive}_{\text{bp}}$ of unappreciated impossibilities. With Yablo, we can more or less celebrate the result since it matters little for whether (in)conceivability proper entails or affords evidence of (im)possibility.

For conceivabilists that deny entailment, e.g., Yablo, the question is not whether conceivability proper entails possibility since sensitive to necessity. Yablo has never claimed the relation to be one of entailment; he claims it is not. The question is whether conceivability affords evidence of possibility. Now, when I conceive of my pen on the floor and find that the pen possibly be on the floor in place of the table on that basis, does this conceivability afford evidence of the possibility of the scenario? I find nothing in Roca-Royes' Non-Standard Dilemma that suggests that it does not. So, the evidential, conceivability-based epistemology of modality working with conceivability proper delivers on the first conjunct of (*dr*ME) as well, regardless of whether $\text{conceivability}_{\text{bp}}$ fails to do so.

Summing up, the aim of this paper has been to offer a reply to Roca-Royes' Non-Standard Dilemma on behalf of the proponent of the conceivability-based epistemology of modality. First, I showed that the notion of conceivability in Roca-Royes' account of the conceivability method is not the proper notion of conceivability, and that what does or does not hold for the improper notion of conceivability matters little for what does or does not hold for conceivability proper. This was shown through Yablo's (1993) consideration of what he calls the Circularity Objection. As such, we can reject the import of Roca-Royes' Non-Standard Dilemma – she fails to erect a dilemma for the proper notion of conceivability. Second, granting that it is questionable whether *de re* principles are establishable by conceivability, I erected a dilemma against the conclusion of Roca-Royes' Non-Standard Dilemma by showing that both conceivability proper and conceivability improper, with a slight but innocuous enhancement, can be the whole story of our explicit knowledge of one *de re* principle, if not more, namely, *Necessity of Identity*. Finally, I argued that even if

Roca-Royes succeeds in showing conceivability improper evidentially unreliable as a guide to possibility, she fails to do so for conceivability proper. As such, the evidential, conceivability-based epistemology of modality working with conceivability proper delivers on just about everything that Roca-Royes attempts to show that conceivability cannot.

Conceivability Externalized

In the paper, an externalist conceivability-based epistemology of possibility is presented. Inspired by Stalnaker's theory of intentionality and his thoroughgoing externalist framework, the conceivability thesis is quite unlike others in the literature: according to the thesis, conceivability entails metaphysical possibility in any circumstances, while the conceiving subject does not have epistemic access to whether what the subject claims to conceive of is in fact conceived of. The subject may even absurdly misdescribe his conceptions. This may seem like a problematic, perhaps even self-contradictory, conceivability thesis. However, in light of a number of objections to conceivability-based epistemologies of possibility, we argue the externalist conceivability thesis is superior to its contenders.

0. Introduction

Conceivability-based epistemologies of possibility are often considered rationalist projects of one variety or another where our mental capacity for constructing or representing situations to ourselves are supposed to enable us to know *a priori* of what is absolutely or metaphysically possible. It is said that if you can conceive of *P*, you are justified or warranted in believing *P* metaphysically possible where, supposedly, the subject conceiving has epistemic access to the conceived situation such that the subject knows what is conceived of. Clearly, a proponent might argue, conceiving can be done in armchair: first, conceive of some situation representing *P*; second, by finding *P* conceivable, judge *P* possible. However, a conceivability-based epistemology of possibility need not be rationalist in nature. After all, our mental capacity to represent situations to ourselves is merely a mental capacity which does not specify that what is inputted into the representational mechanism needs be justified independently of empirical evidence, as content justified *a priori* is standardly defined as being. In this case, conceivability would not provide *a priori* justification of *P*. For instance, when Thomas conceives and judges possible that the milk is either in the fridge or on the table, he inputs certain beliefs about the forgetfulness of his sister in putting the milk back in the fridge after use. These beliefs about the sister are experience-dependent, having been formed after experiencing her forgetfulness.^{127,128}

¹²⁷ A way in which conceiving may be partly empirical in nature is if parts of the contents conceived of can be ascertained only in an empirical manner. Yablo (2002, 457ff) argues that “peeking” with the mind’s eye, e.g., when checking whether a conceived mailbox is yellow, is checking in an empirical manner the contents conceived of.

Further, one need not consider epistemic access to conceivability facts – facts about what is conceived of – a matter of having access to an internal representational vehicle by which we are acquainted somehow with what is true of the conceived situation. On an externalist framework, the contents of thoughts are anti-individualistic and environment-dependent. As such, there is no privileged access to the contents of thoughts that depends solely on the intrinsic properties of subjects, and what is asserted as conceived of by a subject may not match the content of what is in fact conceived of by the subject, if anything – it may even be an absurd description. If one takes the space of content of beliefs and other propositional attitudes to be ways the world might be, and take the ways the world might be to be metaphysically possible ways the world might be, then one has the outline of an epistemology of possibility that suggests a tight relation between conceiving and metaphysical possibility. So tight that every act of conceiving is the conceiving of a metaphysical possibility and what is known as the Standard Objection to conceivability-based epistemologies of possibility – that there is no relation between conceiving and metaphysical possibility – is overcome. The debate on the merits of such a conceivability-based epistemology of possibility must be conducted in a new way: there *is* no problem about the relation between conceivability and possibility.¹²⁹

In the literature on conceivability and the epistemology of modality, we find a curious lack of externalist accounts.¹³⁰ In this paper, we erect an externalist, conceivability-based epistemology of possibility inspired by Stalnaker's comprehensive externalist framework. The features of the externalist, conceivability-based epistemology of possibility are rather different than other proposed conceivability-based epistemologies of possibility since it holds that conceivability globally or for any subject matter entails metaphysical possibility, while it denies epistemic access to conceivability facts (of the same kind as the rationalists, anyway). The thesis is conceivability-based, while empiricist-friendly.

In §1, we present an outline of the conceivability-based epistemology of possibility and situate the externalist conceivability thesis we shall advance: one that accepts the principles of Universalizability,

¹²⁸ A rationalist might consider Thomas' experience with his sister merely an enabling experience, allowing him to understand 'forgetfulness', say. On this interpretation, it can be argued that the possibility inferred from the conceived situation is still arrived at *a priori* – as independent of experience, save enabling experiences.

¹²⁹ Of course, one may question the soundness of the stipulation.

¹³⁰ Though, we do find an empiricist, conceivability-based epistemology of possibility: (Jenkins 2010a).

Reliability, and Epistemic, while denying Accessibility. In §2, we present Stalnaker's causal-pragmatic theory of intentionality from which we shall witness the globally reliable relation between the propositional attitude of conceiving and metaphysical possibility. The globally reliable relation follows very naturally on Stalnaker's framework since any propositional attitude is a relation between an object and a possible state of the world defined by the metaphysically possible worlds. It follows from this idea that one cannot conceive of the metaphysically impossible. In §3, we consider whether the theory of intentionality applies to ordinary, limited subjects or whether the subject is idealized in some way, and we consider Stalnaker's account of epistemic access. On Stalnaker's thoroughgoing externalist framework, there is no internal vehicle of representation by which we are acquainted somehow with the contents of our propositional attitudes. Our epistemic relation to our experiences is like our epistemic relations to everything else in the world: it is anti-individualistic and environment-dependent. As such, a subject may misdescribe what is conceived of in a situation, if anything – even absurdly so. However, that a subject may misdescribe his conceptions does not mean that the subject conceives of impossibility, as the relation between propositional attitudes and possibility entails. But it does mean that we are not infallible when it comes to conceivability claims; that we conceive of what we claim to conceive of in every case. In §4, we consider how the externalist conceivability-based epistemology of possibility fares against a list of objections forwarded against conceivability-based epistemologies of possibility, most notably that we seem to conceive of impossibility. Finally, in §5, we summarize and offer our conclusions: the externalist conceivability-based epistemology of possibility solves problems or, in certain cases, at least fares no worse than other conceivability-based epistemologies of possibility against the objections, suggesting that the externalist account is their superior.

1. The Conceivability Thesis

Conceivability-based epistemologies of possibility¹³¹ have been in epistemological fashion on and off for a great number of years. We shall not go into exegetical considerations but merely run through a basic outline

¹³¹ We speak of 'conceivability-based epistemologies of possibility' and simply 'conceivability theses' interchangeably.

of the conceivability-based epistemology of possibility. The thoughts behind the thesis can be summed up by a tripartite thesis where none of the parts are obviously true and may be put under rigorous, critical research:

- (i) Conceiving of a situation S is a psychological heuristic device for forming beliefs about possibility (of elements true of S),
- (ii) Conceivability is a *reliable* belief forming method for beliefs about possibility (or conceivability *warrants* or *justifies* beliefs about possibility), and
- (iii) Conceivability stands in relation to metaphysical possibility – either an entailment relation or an evidential relation.

Conceivability theses may be partitioned in a number of ways along different dimensions. Berglund (2005, 54ff) cuts conceptual space into four versions of conceivability theses: those that accept or deny Universalizability or Reliability.¹³²

(Universalizability) The conceivability thesis is a *global* truth

(Reliability) Conceivability is *sufficient* or *infallible* evidence for possibility

According to a proponent of Universalizability, (iii) is true *globally* or for any subject matter that one conceives of. Deny Universalizability and you hold that (iii) is only true *locally* or for certain subject matters, when conceiving of the distribution of furniture in a room, say. A denier of Universalizability might also consider (i) and (ii) as only locally true but, minimally, (iii) is considered a local truth. A denier of Universalizability might say that conceivability entails or affords evidence of metaphysical possibility in certain cases but, e.g., only of logical possibility or epistemological possibility in others – where (i) and (ii) still hold but (iii) does not. A proponent of Reliability takes the relation in (iii) to be one of entailment; a

¹³² Obviously, some may deny the principles without thereby being a proponent of a weaker conceivability thesis. We are here merely talking of principles with which to demarcate different conceivability theses, not ways to deny conceivability-based epistemologies of possibility.

denier takes the relation to be one of evidence. Both principles center on the relation between conceiving and possibility: does the relation hold in any circumstances or not and is it one of entailment or is it one evidential? The strongest version of the conceivability thesis, according to Berglund, accepts both principles; the weakest conceivability thesis denies both. In any case, a conceivabilist can erect a conceivability-based epistemology of possibility on one of the four theses.

In Roca-Royes (2011), we find other principles with which we can demarcate conceivability theses: whether a thesis is based on non-idealized or idealized forms of conceiving, and whether the subject conceiving has epistemic access to conceivability facts, i.e., access to whether something is conceived of or not. We shall call the former principle Epistemic and the latter Accessibility.¹³³

(Epistemic) Conceiving subjects are *limited* or *non-ideal*

(Accessibility) Conceivability facts are *epistemically accessible*

Epistemic stands out from the other principles by focusing on mode of conceiving or, more carefully, on the conceiving subject – whether the subject is idealized in some ways or not. The idea is that conceivability theses that deny Epistemic and idealize the subject somehow are better suited at providing a conceivability-based epistemology of possibility in which the relation in (iii) is one of entailment. That is, supposedly, by idealizing the conceiving subject, fallibilities that render a connection between conceivability and metaphysical possibility incredulous are cleansed from the equation, rendering more plausible such a connection.

¹³³ Roca-Royes credits Worley (2003). In the paper, Roca-Royes speaks of a virtue on par with the Reliability principle and she suggests conceivability theses that are locally reliable, on par with denying Universalizability and accepting Reliability locally.

Accessibility can be seen as introducing a fourth thesis beyond (i)-(iii). If one accepts Accessibility, the conceiving subject has epistemic access to whether something is conceived of opposed to merely apparently conceived of. A denier of Accessibility denies that we have access to conceivability facts.¹³⁴

One might wonder why conceivability facts should not be epistemically accessible. Famously, Wittgenstein [1958] (1998, 39) writes:

Someone says, he imagines King's College on fire. We ask him: "How do you know that it's King's College you imagine on fire? Couldn't it be a different building, very much like it? In fact, is your imagination so absolutely exact that there might not be a dozen buildings whose representation your image could be?"--And still you say: "There's no doubt I imagine King's College and no other building."

Wittgenstein is taken here as considering absurd the thought that a conceiving subject should not have epistemic access to the very situation he has just voluntarily constructed in imagination (cf. Kung forthcoming, McGinn 2004 – McGinn talks of mental imagery as attention-dependent). But, first, it is not obvious that conceiving is an attention-dependent cognitive process: a subject may be running conceivability offline such that the situation unconsciously considered in imagination can rise to the attentional level under different circumstances (Williamson 2005, 2007b, forthcoming). In such cases, the subject does not have epistemic access to what is conceived of nor even to an appearance of conceivability. The quick reply, of course, is that the subject gains epistemic access to the situation conceived of upon it rising to the attentional level. But, second, one may still reject epistemic access to conceivability facts, and it is routinely done in certain cases. Sorensen (1992, 40) offers a case in which a college student claims to conceive of a contradiction to the law of noncontradiction. Most logic teachers experience something like this and routinely deny that the student has so conceived, proposing instead that perhaps the student is confused about the meaning of negation or is misdescribing some situation that does not contradict the law of noncontradiction as one that does. A slightly elaborated case from Berglund (2005, 128f) also offers a case

¹³⁴ We note that the Accessibility principle is different from the accessibility virtue that Roca-Royes (2011) considers. Roca-Royes considers the accessibility virtue defined along a non-ideal dimension. That is, even if an ideal subject has epistemic access to conceivability facts this would not satisfy the accessibility virtue since that requires *non-ideal* epistemic access to conceivability facts and ideal epistemic access does not entail non-ideal epistemic access. We consider Accessibility satisfied on an account, if the subject conceiving has epistemic access to conceivability facts, period.

against epistemic access to conceivability facts. Berglund has a subject claiming that he can conceive of a Penrose staircase, an impossible object depicted in the Escher lithograph *Ascending and Descending*. However, from the descriptions offered by the subject, it is clear that he is conceiving of a *depiction* of a Penrose staircase, not the staircase itself as an object. For instance, the subject can only see the staircase in his mind from a single perspective, the perspective of the lithograph. In this case, as in the former with the student, it seems the subject conceiving is offering a false conceivability claim – the subject is not conceiving of what is claimed to be conceived of. If this is right, it seems the subjects need not have epistemic access to conceivability facts.

Let us stop here. Doubtless still further demarcation principles could be introduced with which to carve the conceptual space of conceivability-based epistemologies of possibility but already conceptual space is complex and further complexity would, we think, obscure more than help. That means we have four principles: Universalizability, Reliability, Epistemic, and Accessibility.

It shall be our claim that the externalist conceivability thesis to be forwarded is one that accepts Universalizability, Reliability, and Epistemic, but denies Accessibility.

Let us turn to the externalist conceivability thesis and to Stalnaker's theoretical framework. We attempt to show, in §2, that Universalizability and Reliability holds. Then, in §3, we show that Epistemic holds, while Accessibility does not hold.

2. Stalnaker on Intentionality

Conceivability is our capacity to represent situations to ourselves, situations that purport to involve actual or non-actual things in actual or non-actual configurations (cf. the introduction to and by Gendler and Hawthorne 2002). As such, conceivability is an intentional mental state. Stalnaker offers in *Inquiry* (Stalnaker 1984) a causal-pragmatic picture of intentionality. According to the pragmatic part of the picture, representational mental states (propositional attitudes) should be understood primarily in terms of the role they play in the characterization and explanation of rational action. Central to this picture is that subjects be confronted with a range of possible states of the world towards which the subjects have attitudes, pro and con, acting in ways that conform to their attitudes. According to the causal part of the picture, the relation

between subject and proposition may be causal in kind. Let us focus, first, on the causal part of the causal-pragmatic picture.¹³⁵

Central to Stalnaker's causal account is the relation of *indication*. He suggests that an object can stand in a causal relation to a proposition via indicating a proposition. We can define indication as follows:

(Indication) An object indicates that P if and only if, for some state a of the object, the object is in state a and the proposition that the world is in state $f(a)$ entails that P .

Consider a thermometer. A thermometer can be in various states by displaying various temperatures. Under *fidelity* (normal) conditions, each state a of the thermometer correlates with a state of the environment $f(a)$. Under *fidelity* conditions, this correlation is explained by the environment being in a state $f(a)$ that tends to *cause* the thermometer to be in state a . Say, that the thermometer displays that it is 10°C. Under *fidelity* conditions, the thermometer displays 10°C if and only if the environment is 10°C – is in state $f(a)$. Lastly, the proposition that the environment is in state $f(a)$ entails that P is the case, that 'it is 10°C' is true. Stalnaker argues that indication can reasonably be considered a representational state since information is contained or conveyed by indicating P . Intentionality naturalized.

Stalnaker admits that more needs to be said of *fidelity* conditions while he submits that context and nature and extent of abnormality in a given case influence what is considered *fidelity* conditions for the indicator mechanism in question. It seems that the question of *fidelity* conditions is quite complex. For a given indicator mechanism may take input from different processes, perceptual or linguistic processes, say, and what counts as *fidelity* conditions for an indicator mechanism depends not only on how the mechanism itself normally function, but also on how *like* indicator mechanisms in the environment normally function, on how

¹³⁵ Stalnaker wants to naturalize intentionality, though, in his (2010), he claims that his project is not one of reducing intentional notions to naturalistic ones but, more modestly, to illuminate the consequences for a theory of intentionality if even part of intentionality can be explained in causal-pragmatic terms.

the processes that feed the indicator mechanism normally function, and on how *their* like processes in the environment normally function.¹³⁶

While the *fidelity* conditions are both interesting and problematic they are not of immediate concern and can be put aside. For while an object may indicate P by being in state a under *infidelity* conditions, e.g., if the environment is in state $f(z)$, this does not mean that the object is indicating something impossible: the thermometer is still indicating that it is 10°C. It is in fact a consequence of the indication relation that the impossible cannot be indicated. Under *fidelity* conditions, if a indicates that P , then the world is in a state $f(a)$ such that the proposition that the world is in that state entails that P . But if P is impossible, then there is no state $f(a)$ such that the proposition that the environment is in state $f(a)$ entails P . This holds for all states. Also in an *infidelity* case (where an object in state a indicates that P because of the world being in state $f(z)$) does the proposition that the environment is in state $f(z)$ not entail impossibility. Consider a world in which John has cooled the thermometer with some ice only to reheat it with his hands such that it still displays 10°C. This is entirely possible.

Another interesting consequence of the indication relation is that the necessary is always indicated. For any state a of an object, for any necessary P , and for any state $f(a)$ of the environment, the proposition that the environment is in state $f(a)$ entails P . In other words, a necessary proposition P is always indicated since for any state of the environment (causing objects to be in indicator states), the proposition that the environment is in a state (an arbitrary state) entails that P .

According to Stalnaker, propositional attitudes are kinds of indicator mechanisms. For instance, a subject believes that P just because the subject is in a state that, under *fidelity* conditions, he is in only if P . And under *fidelity* conditions, the subjects is in that state because of P , or because something that entails that P . However, the causal account of propositional attitudes needs to be supplemented with the pragmatic part of the causal-pragmatic picture to be adequate. A belief is a *belief* rather than some other representational mental state because of its connection with action through desire. That is, we distinguish representational

¹³⁶ Cf. Stalnaker's answers to Dennett's, Stich's, and Burge's cases that are supposed to raise problems about belief and belief attributions (1984, 64-68).

mental states, propositional attitudes, by the role they play in the characterization and explanation of rational action. Since representational mental states are indication relations, it follows that a subject cannot believe the impossible and that a subject must believe the necessary – the features are inherited from the indication relation between objects and propositions.

Stalnaker indirectly mentions conceiving as a propositional attitude. He says that to “*distinguish* two propositions is to conceive of a possible situation in which one is true and the other is false” (ibid., 5 – his italics). If *conceiving* is a propositional attitude, it follows that a subject cannot conceive of the impossible and that whatever situation you conceive of all necessary propositions will be true of it.

We now know what indication is, but what are the entities we indicate: what can play the role of “propositions”? According to Stalnaker, propositions are sets of metaphysically possible worlds (PWs). The structure imposed on propositions by being set-theoretic relations between PWs is in accordance with the requirements set by the causal-pragmatic picture of propositional acts and attitudes: we never indicate the impossible (there are no metaphysically impossible worlds), and the set-theoretic relations between possible worlds respect causal relations: if P causes R and P is equivalent to Q, then Q causes R.¹³⁷

Propositions are ways of distinguishing between elements of the PWs. For instance, to *understand* a proposition, the proposition ‘John has injured his foot’, say, is to have the capacity to divide the relevant possibilities in the right way, considering only the PWs where the proposition takes the value true, excluding possible worlds where John has not injured his foot – where the proposition takes the value false. If you dispute the claim, it seems we differ over the state of the world.

It follows on this picture, that there is no way to distinguish necessary propositions since they are true in all possible worlds and, as such, that there is just a single necessarily true proposition. Also, there is simply one necessarily false proposition – the one true in no possible worlds. In the same way, it follows that there is no way to distinguish between logically equivalent propositions: they hold in the same set of possible

¹³⁷ Field (2001, 89f) suggests that what is essential to Stalnaker’s objects of propositional attitudes is their structural relations – that they form a complete atomic Boolean algebra – not what in fact satisfies the structure. The problem of intentionality on this picture, according to Field, is “simply the problem of explaining the attribution of elements of a sufficiently large but otherwise arbitrary complete atomic Boolean algebra to our mental states”.

worlds and are, as such, identical. In this way, one cannot believe (or conceive of) P and fail to believe (or conceive of) Q , if P and Q are logically equivalent.

In summary, in order to explain rational action, subjects must be perceived as confronted with metaphysical possibilities. Subjects' relation to the possible states of the world is a causal relation on par with indication. As such, representation and intentionality is part of the natural order. Some consequences of the causal-pragmatic picture are that subjects are logically omniscient, cannot stand in relation in a propositional attitude to impossibility, and must believe logically equivalent propositions P and Q , if believing P .

If the presented picture of propositional attitudes is correct, then the conceivability of P entails its metaphysical possibility in any circumstance. In the vocabulary of Berglund, the conceivability thesis is one that accepts Universalizability and Reliability.

We have now solved a big problem: how conceivability relates to metaphysical modality. But we often seem to conceive of impossibilities, which is a main reason for objecting to a conceivability thesis that accepts Universalizability and Reliability. The proponents of this objection to the conceivability thesis argue that there are straightforward counterexamples to the thesis in the form of conceivable impossibilities (more below, in 4.1.1. *Conceivable Impossibilities*). How are the seeming counterexamples compatible with the proposed account? We turn to this question in §4.

Before that, we need to consider whether the account is one that accepts or denies Epistemic and Accessibility. In turn, Stalnaker's thought on these issues qualify the answer to the Standard Objection by Conceivable Impossibilities, which is just one version of the Standard Objection.

3. Stalnaker on Epistemic Access

To address the worry that subjects often seem able to conceive – indeed believe – the metaphysically impossible, Stalnaker proposes a solution that appeals to metasemantic ignorance. The potential success of this strategy depends on whether or not Epistemic is accepted. And, as we shall see, while idealizations are in play, a Stalnaker-inspired theory of propositional attitudes such as conceiving applies to ordinary, non-ideal

subjects. As such, it accepts Epistemic. At the same, as we shall see, it also qualifies whether Accessibility is true.

First, let us consider Epistemic. Like a thermometer can never indicate the impossible, always indicates the necessary, and always indicates logical consequences of what it indicates, so the ordinary, limited subject can never believe the impossible, always believes the necessary, and always believes logical consequences of what they already believe. Stalnaker's theory of intentionality applies to the limited subject, accepting Epistemic.

The upshot is that subjects believe much more than would normally be attributed to them – in fact, the subject has an infinite number of beliefs – and that certain beliefs they would attribute to themselves are denied, e.g., the seeming belief of a subject that she does not believe all necessities, or the seeming belief of a subject that he believes something impossible. Stalnaker argues that all these beliefs are needed to explain the rational actions of subjects – are needed on the causal-pragmatic picture. This would seem to suggest an idealization of the subject and a denial of Epistemic. We deal here with the seeming problem of an infinity of beliefs postponing the seeming problem of not believing all these beliefs and believing the impossible to §4.

Stalnaker is explicitly arguing against a linguistic picture of intentionality in forwarding his causal-pragmatic picture. Proponents of the linguistic picture may consider the problem of logical omniscience as one of computational load: how could a finite being have an infinite number of beliefs? But Stalnaker (1984, 68-71, 88-90) argues that many beliefs are merely *tacit beliefs* or *presuppositions* and that these are defined negatively: they are not sentences stored in a “belief box” in a “language of thought”, as the proponent of the linguistic picture would have it, but are instead the “live options – the space of possibilities one allows for – that needs to be represented” (Stalnaker 2009a, 470).¹³⁸ As such, these beliefs do not take up computational space of the system in question, the limited subject.¹³⁹

¹³⁸ Stalnaker is here speaking of computational load in the case of *transparency*. In this case, transparency is a matter of positive introspection of one's beliefs or knowledge in second (third, fourth, etc.) order beliefs. That is, if one believes *P*, one believes that one believes *P*, and so on ad infinitum, if transparency is accepted. Stalnaker is in the paper responding to a problem with this kind of transparency suggested by Hawthorne and Magidor (2009, 2010). Stalnaker argues transparency should be accepted – at least, what he calls “positive introspection”. We shall be silent on positive introspection for the moment. But a problem of computational load because of an infinity of beliefs handled in one case

He declares that the problem of logical omniscience is not even one of computational load. The problem of logical omniscience is really a problem about the accessibility or availability of information to influence action (Stalnaker 1999a, ch. 13), a problem that Stalnaker argues every theory of knowledge and belief face.¹⁴⁰

So, what kind of epistemic access does subject has to the contents of representational mental states? In order to explain the rational actions of the subject, Stalnaker consider the subject omniscient also in the sense that a positive introspection principle applies: both KK and BB principles are in effect, *ad infinitum*. That is, if the subject believes or knows that *P*, then the subject believes that he believes or knows that he knows that *P*, etc. The subject needs to have epistemic access to his representational mental states since this is required in order for the subject to impose his will on the world. Stalnaker (2009a, 401) declares that “it is difficult to make sense of the role of knowledge, belief, and intention in the explanation of rational action without assuming transparency.”¹⁴¹ That is, without assuming that a principle of positive introspection holds.

However, this transparent epistemic access is not a matter of having epistemic access to an internal vehicle of representation by which we are acquainted in some *a priori* manner with the contents of the representation, but is a matter of being appropriately causally connected to the world and the objects that propositions are about.

What content a representation has is dependent on the world that is the causal source of the representation, it is anti-individualistic and environment-dependent, and epistemic access to the propositional content of a representational mental state inherits this complex nature: from our representational mental

probably reveals a way to handle the problem in other such cases as well, say, the one of defining belief states as deductively closed. In both cases, the beliefs are not active beliefs of a linguistic kind stored in a belief box, but simply “live options” tacitly accepted.

¹³⁹ He argues that any theory of knowledge and belief need to make idealizations of this negative sort, while acknowledging that real subjects are not logically omniscient since only possessors of a bounded rationality (Stalnaker 1999b).

¹⁴⁰ Stalnaker states that building linguistic structure into the contents of belief and knowledge fails to address this issue. In order to explain accessibility of information to influence action, it cannot be that beliefs of subjects must be of a linguistic nature since much action is not linguistic action at all and may not be expressible linguistically. Consider the talented but inarticulate chess player who can chose a move in a game of chess based on her beliefs about the beliefs of the opponent but cannot articulate a reason for her move (op.cit., ch. 14). Here the beliefs attributed to the opponent cannot be of a linguistic nature; otherwise the chess player should be able to express her reasons for her move.

¹⁴¹ This was the transparency found problematic by Hawthorne and Magidor (cf. note 138).

states we cannot tell whether we are appropriately causally connected to the world such that our representations have the content we take them to have. It follows that the subject does not have *a priori* epistemic access to the contents of a representation, and that a subject may misdescribe the content of his thoughts.¹⁴²

This does not preclude “privileged access” to our thoughts, which is really what is going on with regards to positive introspection. In his (1999a, ch. 10, 209), Stalnaker writes:

We do not need narrow or purely internal content to explain privileged access to the content of one’s thoughts. The explanation is simpler: the external facts in virtue of which my Freud thoughts are about Freud are the same external facts in virtue of which my thought about my Freud thoughts are about Freud. The external environment in which I think my thoughts is the same environment as the one in which I reflect on those thoughts.

The “privileged access” here is simply a matter of having higher order cognitive capacities that take as input representations from lower order cognitive capacities: the indicator mechanism that registers objects passing on a conveyor belt and stores information in a simple code is a simple example of a lower order cognitive capacity (à la a thermometer with a small memory bank). If the mechanism in addition has an indicator mechanism that registers what is input to memory, this indicator mechanism is a higher order cognitive capacity with privileged access to the representations of the lower order indicator mechanism. The content of the higher order representation is derivative of the content of the lower order representation – why the thought about the Freud thought is also a Freud thought, pending the lower order representation is appropriately causally connected to Freud and has Freud content thereby.

We have enough here to see that Accessibility is denied: a conceiving subject does not have epistemic access to conceivability facts – epistemic access to whether something is conceived of opposed to merely apparently conceived of. A subject may claim to conceive of some *P* which the subject does not conceive of.

¹⁴² We take it that this is how a “McKinsey Recipe” is stopped. According to McKinsey (1991) if we have *a priori* access to what we think, say, that I am thinking water thoughts, and if we know that water thoughts depend on the environment being one that has H₂O, then a subject may have *a priori* access to the environment. By denying that we have *a priori* access to the contents of our thoughts, Stalnaker stops the McKinsey Recipe. We may take ourselves to have water thoughts without knowing what “water” is – what the content of the “water” thought is.

The subject may even claim that *P* is impossible. It remains the case that no *P* is impossible and that each act of conceiving is the conceiving of a metaphysical possibility; likewise for other propositional attitudes.

Yet, two questions remain salient: 1. Do we have *a priori* epistemic access to our representations – to how the world appears to us? 2. How do we gain knowledge of the environment and, thereby, the content of our representations?

To the second question, Stalnaker considers the most promising strategy one that “recognizes that claims to knowledge are essentially contrastive and context-dependent” (op.cit., 208). Thus, we gain knowledge of the world and of the contents of our representations by engaging with the world, discovering whether there is water in it since, in a context, we can distinguish the water worlds from relevant non-water worlds. Stalnaker professes (2008, ch. 5) that his contextualism is of a “deep” variety, i.e., one in which there is no context that has a privileged status and in which there is no privileged knowledge. The context must provide an account of the information that eliminates possibilities – the live (skeptical) options that can be ignored in the context.¹⁴³

In turn, this provides an answer to the first question: there is no privileged knowledge – we do not have *a priori* epistemic access to our experience (what we take to be the contents of our representations). Our epistemic relation to our experience is like our epistemic relation to anything else in the world: “our knowledge of the internal world is as indirect as our knowledge of what lies beyond it. Or more plausibly, [...] we need a better conception of what it is for knowledge to be direct” (Stalnaker 2008, 93).

On Stalnaker’s framework, direct access is via context-dependent belief ascriptions: epistemic access to representations, and their contents alike, is a matter of ascribing propositional attitudes towards content to a subject with the materials we find in our engagement with the world. We, as theorists, attribute thoughts to thinkers as a means of explaining rational action. The thoughts we attribute to a subject depends on the context that we are in – how we are causally connected to the environment. A subject knows the content of

¹⁴³ Thus, a change in context when evaluating whether someone knows something, say, whether Peter knows he is facing water rather than twater in a slow switching scenario, might mean that Peter gains or loses knowledge. This is not an issue in the internal cognitive mechanism of Peter, but simply due to shifting contexts of evaluation (cf. 2008, 121ff).

his thoughts and can act on them accordingly, given a theorist's description of them reflect the world as it seems to that subject.¹⁴⁴

So, we have a conceivability thesis at our hands that accepts Universalizability, Reliability, and Epistemic, but denies Accessibility. Conceiving entails metaphysical possibility in any circumstances. However, a subject does not have epistemic access as to whether what is claimed to be conceived of is in fact conceived of. Whether the claim is true depends on facts about the world, facts that are not epistemically accessible to the subject in an *a priori* manner. We turn to the objections, and consider the benefits and faults of the theory.

4. Objections and Replies

We can divide the objections to conceivability-based epistemologies of possibility in several ways. We will briefly consider two objections that offer problems on any account of the epistemology of possibility, the Benacerraf Objection (Benacerraf 1973) – or the Integration Challenge (Peacocke 1999) – and the Evolutionary-Reliabilism Objection (Nozick 2001), both described by Vaidya (Vaidya 2007). Against these objections we shall argue that the externalist conceivability thesis outlined is, at least, no worse off than the contenders. More care will be reserved for the objections peculiar to the conceivability-based epistemologies of possibility: the Standard Objection and the Uselessness Objection.

Consider the argument for possibility based on conceivability an argument based on two premises to a conclusion:

- (1) something, e.g., a blue swan, is conceived of,
- (2) what is conceivable is possible,

- (3) something, e.g., a blue swan, is possible.

¹⁴⁴ See Stalnaker (1999a, 25, 2008, 130f, and 2009b, 243) on direct access. We have drawn inspiration here from Batty (2009).

The Standard Objection is an umbrella term that covers a number of objections that target the second premise in the argument, the conceivability / possibility relation, arguing that there is no relation between conceiving and metaphysical possibility. The Uselessness Objection is also an umbrella term that covers a number of objections that target the first premise in the argument, the conceivability claim, arguing that conceivability facts cannot be established (wherefore the relation between conceivability and possibility is epistemically *useless* even if true).¹⁴⁵ We start with the problems peculiar to conceivability. We summarize and draw our conclusions in §5.

4.1. *The Standard Objection*

The Standard Objection is an objection we consider coined by Brueckner (2001) where he summarizes the objection as follows (ibid., 187): “conceiving of the truth of φ is not sufficient to establish the Possibility of φ ”. Note that Brueckner is criticizing Chalmers’ conceivability thesis or, rather, Chalmers’ response to the Standard Objection. We can see that the Standard Objection as formulated is merely a denial of Reliability. What are important, however, are the reasons put forward against the entailment or evidential link between conceivability and metaphysical possibility. As such, we consider as Standard Objections a great number of objections that all target the second premise in an argument for possibility based on conceivability, viz., that what is conceived of entails or affords evidence of possibility. As the name suggests, the Standard Objection is an objection that we often find in the literature against conceivability-based epistemologies of possibility. We find five varieties: 1. Conceivable Impossibilities, 2. Formal Distinction, 3. Shallow Charge, 4. The Circularity Objection, and 5. The Enabler Objection. We consider the objections in turn and offer responses.

4.1.1. Conceivable Impossibilities

Proponents of Conceivable Impossibilities objections argue, just as the name suggests, that the link between conceivability and metaphysical possibility is not one of entailment since we seem able to conceive of

¹⁴⁵ The Uselessness Objection is named after Vaidya’s (2007) “uselessness interpretation” of Arnauld’s objection to Descartes.

situations that are independently judged to be metaphysically impossible. That is, the proponent of Conceivable Impossibilities suggests that there are straightforward counterexamples to the version of the conceivability thesis that accept Universalizability and Reliability.¹⁴⁶ Since the externalist conceivability thesis forwarded accepts both, the thesis holds that we cannot conceive of impossibility, period. So, a single counterexample is problematic and must be accounted for. Proposed conceivable impossibilities include:

- i) We can conceive of *a priori* impossibilities. That is, we can conceive of contradictions to necessities that do not depend on empirical content for their knowability – broadly logical (logical and conceptual) impossibilities. For instance, we can conceive of a right-angled triangle in Euclidian geometry that does not possess the Pythagorean property.
- ii) We can conceive of *a posteriori* impossibilities. That is, we can conceive of contradictions to necessities that depend on empirical content for their knowability. For instance, we can conceive of a scenario contradicting an identity discovered empirically, say, that Hesperus is Phosphorus.
- iii) We can conceive of *essential* impossibilities. That is, we can conceive of contradictions to essentialist principles, say, *Essentiality of Origin*. For instance, we can conceive of Queen Elizabeth with non-actual parents.

The example given of a type i) conceivable impossibility is offered by Arnauld as an objection to Descartes [1641] (Descartes 1984). At least, Arnauld is often suggested as offering the Standard Objection by Conceivable Impossibilities.¹⁴⁷ Most examples of both type ii) and type iii) conceivable impossibilities are

¹⁴⁶ If a conceivabilist denies either of these principles, Universalizability or Reliability, the challenge of offering supposed counterexamples becomes much harder: a counterexample may not be problematic for a locally reliable conceivability thesis, a thesis that denies Universalizability. And against the conceivability thesis that denies Reliability, a statistical hypothesis advanced on confirming instances may be needed (cf. Yablo 1993). That is, it must be shown that we so often conceive of impossibility that the thesis is rendered evidentially unreliable.

¹⁴⁷ See Wilson (1976), Yablo (1990), and Vaidya (2007). Noting that Arnauld claims that he cannot see any possible reply to his case “except that the person in this example does not clearly and distinctly perceive that the triangle is right-angled” (Descartes 1984, 142), we do not think Arnauld is offering a Standard Objection by Conceivable Impossibilities to Descartes.

introduced and considered in (Kripke 1980).¹⁴⁸ We can note that type ii) conceivable impossibilities are problematic for any epistemology of modality that considers knowledge of modality arrived at through *a priori* means since the knowability of the necessities in question is supposed to be based on empirical means. Someone might argue that type iii) conceivable impossibilities are simply of type ii), others might argue they are conceivable impossibilities of type i). Whichever is the case, conceivability of contradictions to essences (or even *de re* modality) has been forwarded as a special problem to conceivability-based epistemologies of modality besides the problems offered by the other conceivable impossibilities (see Vaidya 2010, Roca-Royes 2011).

Now, as stated, the externalist, conceivability-based epistemology of possibility forwarded accepts both Universalizability and Reliability and deny that we ever conceive of impossibility. The strategy Stalnaker proposes for accounting for such “illusions of possibility” is misdescription based on metasemantic ignorance (Stalnaker 2008, 31ff). He suggests that illusions of possibility are to be considered cases in which a subject conceives of a situation that is a metaphysical possibility but misdescribes the situation as a case of which the statement in question is false – as *not* metaphysically possibly. That is, the subject *claims* to conceive of a metaphysically impossible situation but is conceiving of a metaphysically possible situation. We consider Stalnaker’s response in *Inquiry* (1984) and in his *Assertion* papers (1978, 2004).

In *Inquiry*, Stalnaker proposes ways in which a subject may fail to describe correctly beliefs held. One such way is if the subject has multiple belief states – a way in which a subject is not ideal (the ideal subject would have only one coherent belief state). Stalnaker (1984, 81-87) suggests that a subject may have multiple incompatible belief states, disposing the subject to behave in different ways in different contexts. Thus, in a context, certain beliefs held in a “compartmentalized” belief state may not be epistemically accessible to the subject, and the subject may describe himself as a non-believer.

Another way in which a belief held by a subject may seemingly not be held by the subject is due to metasemantic ignorance. Stalnaker introduces the following distinctions on the problem of equivalence, i.e., the problem that if a subject believes *P* and *P* is logically equivalent to *Q*, the subject believes *Q* (ibid., 72ff).

¹⁴⁸ But see also (Yablo 1993, Chalmers 2002, 2010, Berglund 2005, and Evinne 2008).

While the expressions “that P ” and “that Q ” are schemas for sentential complements which denote propositions, this is not the case for the statement “ P and Q are equivalent”. Rather, this is a schema for a claim about the relation between two expressions. That is, ‘ P ’ and ‘ Q ’ in this statement stand in for expressions that denote things that express the proposition P . He declares that the problem of equivalence cannot be that a subject must believe or know that P is equivalent to Q whenever P is equivalent to Q since a subject may fail to realize that the *sentence* ‘ P ’ is equivalent to the *sentence* ‘ Q ’ – that they denote the same proposition. Of course, the subject in question believes or knows Q by believing the equivalent P (since logically omniscient), but the subject would not describe himself as believing Q since he fails to realize what the sentence denoting Q means, i.e., that it denotes Q , and it may be wrong to attribute a belief in Q to the subject in such a case. In other words, the subject may misdescribe beliefs held due to being metasemantically ignorant.

Stalnaker exposes here a gap between expressions and propositions: expressions have more structure than does the propositions denoted by expressions. As such, a subject may be metasemantically ignorant of what an expression means, i.e., which proposition is expressed by a sentence, but may also be metasemantically ignorant of how to express a proposition believed, if there is an expression that denotes the proposition (cf. the talented but inarticulate chess player, in note 140).

Stalnaker suggests that the more complicated an expression is, the likelier it is that a subject fails to know what it means – which proposition it denotes. Also, he declares that, in a context, if a subject is not appropriately causally connected to an object which the subject speaks of, the subject may misdescribe her beliefs. Consider Mabel (*ibid.*, 75) who describes that she has arthritis in her thigh.¹⁴⁹ In this case, the subject both lacks metasemantic information and is factually mistaken about some fact of the world. In other contexts, the subject may be able to distinguish between possibilities concerning the object in question well enough to correctly describe her beliefs, say, if Mabel describes herself as having arthritis in her knee. In this case, Mabel is dividing the PWs correctly and represents (denotes) P by her expression.

¹⁴⁹ The original case is from Burge (1979).

Compartmentalization of belief states and metasemantic ignorance form a two part strategy of explaining why deductive inquiry seemingly yields new content, where it in fact does not. For instance, why deducing the result of a mathematical expression like ‘ $27 + 55 = 82$ ’ seemingly provide the logically omniscient subject with new information. If (a) it is a nontrivial task to see which proposition is denoted by an expression or sentence, and (b) it is a nontrivial task to put separate beliefs together into a single coherent belief state, then it possible to see the processing of information that the subject already has as a phenomenon with the same structure as the reception of new information: the integration of separate belief states may be as simple as putting two and two together, but it may also require extensive computation or creative activity. According to Stalnaker, this is what is done in deductive inquiry.¹⁵⁰

In (Stalnaker 1978, 2004), he provides a two-dimensional semantics that explains the gap between propositions and their expressions such that reinterpretation is required when a subject claims to believe (or conceive of) impossibility, that Hesperus is not Phosphorus, say. The two-dimensional semantics has the added advantage that it explains what information is conveyed by expressing the necessarily true proposition.

According to the two-dimensional semantics, the information conveyed by a sentence such as ‘Hesperus is Phosphorus’ is the necessarily true proposition since the proposition it expresses is the one true in all possible worlds. However, when uttering such a statement a Gricean conversational rule is violated: one should not utter information that is already in the common ground (which it is since all participants in the conversation believe the necessarily true proposition – it is true in all PWs of the common ground). For this reason, what is expressed by the utterance must be reinterpreted as conveying *metasemantic* information instead of the *purely semantic* information which, remember, is the necessarily true proposition. That is, what is being conveyed by an utterance of ‘Hesperus is Phosphorus’ is the contingent information about what the expression in question means, not the necessarily true proposition that the expression actually denotes. This kind of information Stalnaker calls the *diagonal* proposition.

¹⁵⁰ We note that compartmentalization does not seem to pull the major load in the explanation of deductive inquiry. Each “compartment” belief state is deductively closed and, in each, the necessarily true proposition is true. Rather, the load is pulled by metasemantic ignorance. So, putting two and two together may be a matter of gaining metasemantic information.

In a two-dimensional matrix we can plot PWs i and j : i is the actual world and j is some non-actual world in which ‘Hesperus’ refers to Mars.

	i	j
i	T	T
j	F	F

In i , the proposition expressed by ‘Hesperus is Phosphorus’ is the necessarily true proposition. In j , the proposition expressed by ‘Hesperus is Phosphorus’ is the necessarily false proposition. The diagonal proposition is the one that for each world x is true in world x if and only if the proposition expressed in x is true in x . In the case at hand, the reinterpretation of the information conveyed by someone saying ‘Hesperus is Phosphorus’ is that the meaning of the individual terms could have been different such that a different proposition could have been denoted by the sentence. Which proposition ‘Hesperus is Phosphorus’ could have expressed is vague and is determined in a case-by-case basis with lots of charitable interpretation.

Likewise, if a person claims to believe that ‘Hesperus is not Phosphorus,’ he is claiming something necessarily false, which excludes all possible worlds from the context of the conversation, rendering further conversation without common ground. Again, a Gricean conversational rule is violated and reinterpretation of the statement is required, if we are to explain the beliefs of the subject as a perspective of the world – as a perspective of a way the world might be – which can be used to explain rational action. The subject in question does not believe (or conceive) that Hesperus is not Phosphorus. Rather, the subject believes (conceives of) something metaphysically possible, while misdescribing the case as impossible.

Misdescribing a metaphysical possible situation as an impossible one involves using expressions in a non-standard way, picking out objects or properties with expressions that they do not actually pick out. A theorist reinterprets the claim made by the subject claiming to conceive of impossibility in order to locate the world as the subject takes it to be in the space of alternative possibilities, the space of metaphysical possibility.

Offering a Misdescription Model of Modal Error (MMME) to the Standard Objection by Conceivable Impossibilities is in fact a rather standard response. The account at hand, however, is extreme in the sense that the metasemantic ignorance is supposed to handle *all* cases of supposed conceivable impossibilities. The conceivability theses that deny Universalizability or Reliability can use the MMME strategy in more limited ways, extending it only to *a priori* conceivable impossibilities, say.¹⁵¹

In any case, the externalist conceivability thesis holds that we cannot conceive of impossibility and that in each case in which a subject claims to so conceive, the subject is misdescribing a possible situation as impossible, if the subject is conceiving of a situation at all. The subject in question may be conceiving of a situation in which expressions are used in a different way than we do actually. Such a situation is entirely possible.

One might wonder whether this particular MMME strategy, based on metasemantic ignorance, is better suited to certain conceivable impossibilities than others. For instance, Stalnaker suggests that the contents of mathematical attitudes are propositions that deal in the relation between expressions or semantic structures exhibited by expressions and either the one true proposition or the one false proposition. That is, the subject matter of mathematical propositions is language or linguistic structure, as implied by the fact that competence in mathematics essentially involves operating with some kind of notation. If this is right, then when a subject fails to know some mathematical proposition, it is because the subject is missing some metasemantic information – information about what an expression means – wherefore the subject would not describe himself as knowing or believing the mathematical proposition in question and, wherefore, it would be misleading to attribute such a belief to the subject in question. If Stalnaker is right that the subject matter of mathematical propositions is language or linguistic structure, then metasemantic ignorance might be well suited for dealing with explaining the error, e.g., when a subject claims to conceive of ‘ $1 + 1 = 3$ ’.

¹⁵¹ This is a reason why the stronger argument for the evidential unreliability of conceivability as a guide to possibility is much harder to set up. A denier of Reliability can argue that certain conceivable impossibilities that the opponent offers as proof of the fact that we *often* conceive of impossibility are simply misdescriptions, not counterexamples, and that conceivability remains an evidentially reliable guide to possibility.

The subject in question does *not* conceive of a situation of which this is true, nor does the subject believe this. What the subject may be doing is misdescribing his conceptions and beliefs because confused about what ‘1’, ‘+’, ‘=’, or ‘3’ means. A theorist reinterprets the conceivability claim, that ‘ $1 + 1 = 3$ ’ is conceived of, as denoting some other possible, diagonal proposition (as providing metasemantic information) instead of the proposition the sentence actually denotes (instead of the *purely semantic* information), the necessarily false proposition.

But how far the strategy extends beyond mathematics is unclear since other subject matters are not about language or linguistic structure. We might extend the metasemantic MMME strategy to cases in which someone claims to conceive of a contradiction to the law of noncontradiction: the subject might be confused about the meaning of ‘negation’, and a reinterpretation by a diagonal proposition might be correct. But this is a case of logical necessity which might be on par with mathematical necessity in taking language or linguistic structure as its subject matter. The metasemantic ignorance MMME strategy might even be right when it comes to *a priori* necessities generally, given they deal with language or linguistic structure. It is less clear with regards to conceivable impossibilities that contradict *a posteriori* or *essential* necessities that seem not to deal with language or linguistic structure (cf. Soames 2006). Stalnaker is adamant that it does (cf. Stalnaker's 2006 response to Soames).

In one case, the expression that one lacks metasemantic information about is a linguistic object, the expression ‘+’, say; in other cases, the expression that one lacks metasemantic information about is a name of a concrete object, ‘Venus’, ‘Queen Elizabeth’, or even ‘the paperweight in my hand’, say. In any case, the contents of our thoughts and expressions are anti-individualistic and environment-dependent, and we gain knowledge of our representations and their contents alike by engaging with the world.

If not properly causally connected to the object (object broadly construed), then a subject may be ignorant about how to divide the possible worlds regarding a sentence that includes the name of the object – may be ignorant about which proposition the sentence denotes. We have already considered the case of Mabel and arthritis. And we have already seen that this does not mean that the speaker, Mabel, needs be considered metasemantically ignorant in a context in which she divides the relevant possibilities in the right way, as when she claims she has arthritis in her knee. Thus, not knowing which proposition is denoted by a sentence

including a name in one context does not mean that a subject must be metasemantically ignorant about which proposition is denoted by a sentence including the name in another context (counter to what Williamson 2011 seems to argue is a consequence of Stalnaker's account).

In fact, this is argued as an explanatory virtue of the theory. For instance, it explains how children become more knowledgeable by engaging with the world; from understanding things by only being able to divide possible worlds in simple ways, to more complex ways (cf. Stalnaker 1984, 64f). As he says, “[w]e [...] develop means for expanding our representational resources, and for incorporating information from different contexts into more inclusive contexts” (Stalnaker 2008, 137).

It remains the case that there is only one necessarily false proposition, the one true in no possible world, and the error in common to finding impossibility conceivable is lacking metasemantic information, that what one is claiming to conceive of denotes the necessarily false proposition. The metasemantic information that one lacks may be regarding linguistic entities that deal with other linguistic entities or it may regarding linguistic entities that deal in concrete worldly objects. The metasemantic ignorance MMME strategy extends to all cases of conceivable impossibilities: if you claim to conceive of P , if P is metaphysically possible, you might be right; if P is metaphysically impossible, you are wrong – you are not conceiving of P , but you might be conceiving of a situation of which a different proposition expressed by ‘ P ’ is true, a diagonal proposition. Such a situation is entirely possible.

4.1.2. Formal Distinction

In the *First Set of Objections* to Descartes’ *Meditations*, Caterus presents a distinction by Scotus: “for one object to be distinctly conceived apart from another, there need only be what [Scotus] calls a *formal and objective* distinction between them” (Descartes op.cit., 72 – see page for reference to Scotus). This distinction is supposed to be something between conceptual and real. That is, a real (metaphysical) possibility cannot be inferred from conceivability, only a formal possibility. We can consider this kind of possibility as epistemological or conceptual. What is important is that the kind of possibility that conceivability entails or affords evidence of is not metaphysical possibility.

Often this kind of Standard Objection is made in close connection with the Standard Objection by Conceivable Impossibilities: if we can conceive of situation A which is independently judged metaphysically impossible, why consider the conceivability of situation B which is independently judged metaphysically possible as a guide to metaphysical possibility? More likely, in both cases, conceivability merely entails formal possibility (whatever we interpret this as), and, accidentally, this formal possibility is at times in agreement with what we independently judge metaphysically possible.¹⁵²

From a Stalnakerian point of view The Standard Objection by Formal Distinction is borderline incoherent. We start not with concepts (or whatever the formal notion is supposed to encompass) and construct possibilities from them. Rather, we start with the metaphysical possibilities and “explain the content of a [subject’s] representational resources in terms of the ways in which those resources are used to discriminate between possibilities” (Stalnaker 2008, 31). According to the thoroughgoing externalist position, remember, epistemic access is not a matter of having access to an internal representational vehicle by which we are acquainted somehow with the contents of representations. In fact, “the metasemantic interpretation yields no account or interpretation of *a priori* truth or knowledge, and does not depend on any notion of the *a priori*” (Stalnaker 2004, 312). The Standard Objection by Formal Distinction is a Cartesian internalist spectre which the thoroughgoing externalist rejects.

4.1.3. Shallow Charge

What we call Shallow Charge is another old objection to conceivability theses, an objection offered by Reid in his *Essays on the Intellectual Powers of Man* [1785] (Reid 2002). Reid offers four objections of which the first introduce Shallow Charge. In turn, the objection is instrumental in both the second and fourth objections as well, but we shall ignore the three other objections. In his first objection, Reid says: “Whatever is said to

¹⁵² A recent proposal of this kind of objection may be found in Sturgeon (2010), where he argues that the best *a priori* conception is merely an infallible guide to conceptual possibility and that to suppose that conceptual and metaphysical modalities are aligned would be to suppose magic is at play, if metaphysical modality is supposed to be mind-independent. The first part can be seen as charging conceivability of an *a priori* variant with a Standard Objection by Formal Distinction; the second part offers a charge more on par with the Benacerraf Objection (cf. the second section of Jenkins 2010b).

be possible or impossible is expressed by a proposition. Now, What is it to conceive a proposition? I think it is no more than to distinctly understand its meaning.” (Reid op.cit., 330). He then states that we can understand both possible and impossible propositions.

Consider Arnauld’s triangle case once more: you, the reader, most likely understood the description of the case. If Reid is right, this meant you conceived of the situation – you conceived of something impossible, a triangle in Euclidian geometry without the Pythagorean property. If that is right, Reliability must be denied. Conceivability does not entail possibility, obviously so.¹⁵³

Of course, Reid is not alone in forwarding a Shallow Charge against conceivability theses, McGinn (2004) and Fiocco (2007) are other examples. Fiocco considers conceiving simply a matter of stipulating something to be the case and that we can stipulate impossibilities. On that basis he denies any role to conceivability in the epistemology of modality. McGinn considers “cognitive imagining” as equivalent to entertaining a thought and notes we can entertain thoughts about impossibilities.¹⁵⁴ As such, Shallow Charge is the charge that conceivability is merely *X* and since we can stand in relation via *X* to impossibility (perhaps often do so) conceivability of *P* does not entail (nor affords evidence of) possibly *P*.

Many a proponent of conceivability-based epistemology of possibility would probably here refer to (Casullo 1979) in which Reid is criticized for relying on an ambiguity in the phrase ‘to conceive of a proposition’. Casullo states that the phrase can either mean understanding the sentence which expresses the proposition or conceiving of the situation described by the proposition. Casullo declares that one may do the former without being able to do the latter. That is, Reid (and the other proponents of Shallow Charge) provides false definitions of conceivability, deducing unpalatable consequences from it.

However, our reply requires slightly more attention, for many of the proposed notions with which conceiving is to be “simply” identical to are propositional attitudes. As such, it seems that we cannot stand in relation to impossibility via these “identical” notions either. But impossibility is simply the proposition that

¹⁵³ And perhaps since we can understand all sorts of impossibilities, conceivability is even evidentially unreliable as a guide to possibility.

¹⁵⁴ McGinn might not really be objecting to conceivability theses, he is merely setting out his own theory which can be considered orthogonal to conceivability.

is true in no PW, and one may understand the necessarily false proposition by having the capacity to divide the relevant possibilities in the right way – by grasping that there is no possible world in which the proposition is true. Conceiving is a matter of representing a situation to oneself of which some proposition is true. Therefore, a subject cannot conceive of a situation of which the necessarily false proposition is true. As such, a subject may understand a sentence that denotes the necessarily false proposition while being unable to conceive of a situation of which the necessarily false proposition is true. Against Reid, understanding is not conceiving.

Against Fiocco's 'stipulation', the notion is more akin to Stalnaker's notion of an *acceptance concept* than of conceiving, and conceiving is not an acceptance concept on Stalnaker's framework. A propositional attitude concept is an acceptance concept, if the attitude is said to be correct whenever the proposition is true. But it is infelicitous to say that conceiving of a situation of which *P* is true is correct if the proposition is true.

Against other proposed notions that conceivability is to be "identical" with, we shall leave matters unsettled. But we call the objection Shallow Charge for a reason: if someone charges that conceiving is merely *X* and deduces unpalatable consequences from *X*, the argument seems to have several traits in common with the Straw man informal fallacy.

4.1.4. The Circularity Objection

The Circularity Objection is a type of Standard Objection that charges that conceivability is a guide to possibility only if "*constrained by priori modal information tantamount to the information that p is possible*" Yablo (1993, 12 – his italics). The objection has it that conceivability only entails or affords evidence of possibility when the subject already knows that what is claimed as conceivable is possible. Further and importantly, the objection suggests that unappreciated impossibilities are "*almost always*" conceivable (ibid., 19). That is, whenever there is a defeater to the possibility of *P* and the defeater is not appreciated by a subject as such, *P* is almost always conceivable for the subject. The upshot is supposed to be that the subject is so prone to conceive of unappreciated impossibilities that conceivability not only does not entail possibility, neither does it afford evidence of possibility. It affords evidence of possibility only when the

subject has ruled out any defeaters to P before conceiving of a scenario that the subject takes to verify P – when the subject has information tantamount to the information that P is possible.

Yablo declares that the Circularity Objection is in a weak dialectical position. For proponents of conceivability theses, say, who are doubtful that we often find impossibilities conceivable, will be doubly doubtful that we almost always find unappreciated impossibilities conceivable. It seems the Circularity Objection is in even a weaker dialectical position against the externalist conceivability thesis forwarded. After all, unlike Yablo, we deny that we *ever* conceive of impossibility.

So, what about the charge that in order to conceive of a situation of which P is true such that it entails the possibility of P , it is required that the subject knows P is possible? Here is a line of reasoning according to which the charge is plausible. On the Stalnaker framework, we start with the metaphysically possible worlds and explain the contents of a subject's representational resources in terms of the ways in which those resources are used to discriminate between possibilities. Thus, in order to conceive of P , it must already be the case that P is true in a possible world.

However, we do not require that the subject believes or knows that P is possible in order to conceive of a situation of which P is true. For many propositions, the subject does not believe or know that P or that possibly P before conceiving of a situation of which P is true. But, of course, the subject may conceive of P s that are believed or known to be possible beforehand. Only with regards to necessities and logical consequences of believed propositions will it be the case that the subject knows of the possibility of the propositions before conceiving. In any case, the Standard Objection by Circularity is denied: it is not the case that in order to conceive of a situation of which P is true, the subject must know P is possible.¹⁵⁵

There may well be a problem like the Circularity Objection lurking in belief attribution or, rather, when to reinterpret / diagonalize a statement made by a subject (take it as providing metasemantic information instead of the purely semantic information). For, in order to diagonalize, a theorist must believe that what an

¹⁵⁵ Yablo (1993) offers a way that the proponent of the Circularity Objection can sustain that we almost always find unappreciated impossibilities conceivable: by taking it to be a consequence of the notion of conceivability. Ultimately, by offering a Shallow Charge (see 4.1.3. *Shallow Charge*). Yablo's reponse: celebrate the Circularity Objection as effectively destroying the hopes of those that would consider X an epistemological guide to metaphysical possibility, but deny that the result has any import for conceivability.

utterance expresses – the proposition denoted by the utterance – violates a Gricean conversational rule. For instance, if a subject claims that ‘Hesperus is not Phosphorus’, the subject asserts the necessarily false proposition which excludes all possible worlds from the context of the conversation, rendering further conversation without common ground. In order to diagonalize, the theorist, a participant in the conversation, must know that the sentence denotes the necessarily false proposition such that what is instead expressed by the utterance is the metasemantic information about the meaning of constituent terms in the sentence – that the sentence via the individual terms contingently denotes the necessarily false proposition. If that is right, diagonalization requires prior beliefs or knowledge about PWs: that some utterance denotes a necessarily false or necessarily true proposition such that upon its utterance in a context reinterpretation / diagonalization is required. At the very least, the theorist must come to believe or know of the purely semantic information denoted by the utterance upon hearing the utterance, in order to diagonalize. Otherwise, the theorist will not diagonalize and the utterance will be interpreted as providing purely semantic information. We guess that, in a conversation in which the statement is not diagonalized, the conversation will henceforth be nonsensical.¹⁵⁶ It is not obvious that the common ground is merely defective since each participant presupposes the same things (let us suppose); among the things presupposed by all participants being that ‘Hesperus is not Phosphorus’ is true. If we understand Stalnaker correctly, he acknowledges this problem (Stalnaker 2010, 157). He suggests that diagonalization does not come into play in the context of the conversation. But from a third perspective on the unfortunate conversation we can diagonalize the lot. We know that diagonalization is required by knowing which proposition is expressed by ‘Hesperus is not Phosphorus’.

4.1.5. The Enabler Objection

The last kind of Standard Objection to conceivability theses we shall consider is one we call the Enabler Objection. The objection is an umbrella term that catches a number of objections that all take a similar pattern: even if there is such an epistemic state as conceivability is supposed to be, it merely enables X, and it

¹⁵⁶ A similar worry is raised by Stanley (2010, 110f).

is *X* that is really doing the job of justifying the belief in the possibility of the situation conceived of. What the *Xs* (or blank spots) are filled in with is what distinguishes the different Enabler Objections.

Bealer (2002, 76 n. 4) argues that conceiving is merely a way of generating modal intuitions regarding the conceived situation, and that it is really the modal intuitions that justifies the belief in the possibility of what is true of the situation. Lewis (1986, 90) argues that conceivability has a link to possibility only by being a way of reasoning informally about the principle of recombination, and that it is really the principle of recombination that justifies the beliefs in the possibility of what is true of the situation conceived of.¹⁵⁷ Williamson (forthcoming, §3) argues against a view (not attributed) according to which conceiving is merely an enabler that allows one to entertain propositions (or theory) that are then justified as true or false or probable or improbable on the available evidence – as part of a step of reasoning, separate from the step of conceiving. Bueno and Shalkowski (2015) argue it is our best science (ultimately knowledge of properties of objects) that determine what we can be justified as metaphysically possible. So, if a subject conceives of a situation, the justification of whether what is conceived of is possible depends on whether the subject knows enough of science to arrive at a reasoned judgement on the scientific viability of what is true of the conceived situation.¹⁵⁸

Against Bealer, we reiterate what was said against the Standard Objection by Formal Distinction (see 4.1.2. *Formal Distinction*). That is, thinking that there are special rational, internalist insights is a Cartesian spectre that should really be done away with on a proper, thoroughgoing externalist position.¹⁵⁹

¹⁵⁷ See Cameron (2010) for a response to a conceivability thesis that utilizes both of these Enabler Objections.

¹⁵⁸ Bueno and Shalkowski do not set forward this Enabler Objection in the paper; we are here merely attributing to them the objection. In any case, they pride themselves that their account does not depend on conceivability.

¹⁵⁹ Nonetheless, there may be more agreement between Stalnaker and Bealer than initially supposed. According to Bealer, the modal intuitions are a kind of truth-tracking intuitions that one gets by “determinately understanding” some concept (2002, 103). For instance, “intuiting” that the concept “multigon” applies to cases beyond what the term has been used to encompass, e.g., in applying the concept also to triangles. Stalnaker finds the notion of a concept unclear, but he agrees that competence with a concept should be “explained in terms of the ability to form accurate conceptions of possible situations in which [the respective concept is] exemplified” (2008, 32). And, as we have seen, understanding is a matter of dividing the possible worlds in the right way. Thus, understanding the sentence ‘a triangle is a multigon,’ in a context, is a matter of dividing the relevant possibilities in the right way, considering the PWs where the propositions expressed takes the value true. It would seem that their thoughts on understanding are not far apart, even if their views on internalism / externalism and on two-dimensional semantics are worlds apart.

Apart from Bealer's, the Enabler Objections feature that conceiving merely enables a reasoned consideration of a situation or set of propositions, and that it is really the reasoning in question (based on a principle of recombination, science, or simply "reasoning" of some kind) that would justify any belief in possibility concerning the conceived situation. In a sense, we may consider the objections as an orthogonal heuristics for forming justified beliefs about possibility that depend on conceivability (or on the imaginative capacities at least). It is not clear just how threatened we should be of the Enabler Objection.

Of course, the proponents say that conceiving *merely enables X* which is doing the real justificatory work, suggesting that once we realize this we need not be bothered with conceiving any longer. We might as well save cognitive resources and go straight to the formal, rigorous methods of justifying beliefs in possibility. But as Casullo (2012, ch. 12) argues, in a different context, because some area can be reduced to another, mathematics to second order logic, say, it need not entail that the epistemology of the two (one) need proceed by the same methods. If it did, relatively few people would know any mathematics. In other words, it might be cognitively more efficient to retain an informal way of reasoning about some matter at hand. In a similar fashion, even if conceiving of *P* merely enables *X* which is doing the real justificatory work in justifying the belief that possibly *P*, conceiving might be a cognitively more efficient way of arriving at justified beliefs of possibility via *X* than simply using the formal, rigorous method itself.

Now, this cannot be a correct response. We just described two cases in which we use *X*, the formal, rigorous method, in justifying beliefs in possibility. As such, conceiving is clearly a superfluous element since, in both cases, we justify by the same means: the formal, rigorous method. We are doing the same thing in the two cases – justifying beliefs in possibility via *X*.

Here the line of thought parts ways. We argue that clearly, we do not use the formal, rigorous method in arriving in a belief of possibly *P* when conceiving of a situation of which *P* is true. Conceiving of situations is easy as breathing (exaggerating slightly); formally and rigorously justifying possibly *P* via *X* is not so easy (presumably). In response, the proponent of the Enabler Objection might argue that free, associative thinking in imagination is a fine praxis, often enjoyable, while it seldom justifies any beliefs. The rejoinder can be offered by the Stalnaker-inspired conceivability thesis: even the farthest reaches of our capacity to conceive of situations is the conceiving of a metaphysically possible situation. Perhaps not all these far out

possibilities are relevant to certain epistemological endeavors, scientific inquiry, say, but that does not suggest that they are not possibilities, even if it suggests that they are not actually true (according to our current best theories of science). We thus argue that conceivability justifies beliefs in possibility also beyond what the formal, rigorous method can deliver. Such beliefs in possibility justified via conceivability may stand on shakier grounds since not in the same way formally and rigorously attainable or corroborated by other methods, but that simply suggests that possibly, what is metaphysically possible goes beyond what the other method can ascertain.

Obviously, this response does not dissuade the proponent of the Enabler Objection and neither does it answer all of them. The Enabler Objection via the principle of recombination remains, at least. But note that Lewis considered conceiving of situations a way of reasoning informally about the principle of recombination. If conceiving plays such a role, it seems conceiving plays a justificatory role even if an informal one at that. And perhaps Stalnaker agrees with Lewis with regards to the principle of recombination; he is quoted by Stanley (2010, 1) as saying “[w]e can describe and think about the world only with the materials we find in it.”¹⁶⁰ But this may simply be another way of stating the thoroughgoing externalist position: that we start in the middle, in the world, and theorize about our world from there (cf. Stalnaker 2008, ch. 1).¹⁶¹

Lastly, let us simply state that there is a very obvious sense in which conceiving as a guide to possibility is a form of reasoning. After all, the subject conceives of a situation of which P is taken to be true and by finding the situation conceivable, the subject judges P possible. Thus, the subject reasons from his finding P conceivable to possibly P . That is, we have two premises and a conclusion: ‘ CP ’ and ‘ $CP \rightarrow \Diamond P$ ’, therefore ‘ $\Diamond P$ ’.¹⁶² The subject need not be explicitly aware of the second step in the line of reasoning – the link between conceiving and metaphysical possibility – but as long as the subject reliably make correct judgments

¹⁶⁰ Stanley’s quote of Stalnaker seems to originate from the book *Philosophers* by photographer Steve Pyke published in 2011 by Oxford University Press.

¹⁶¹ We ignore problems otherwise thought to beset the principle of recombination. See Bueno and Shalkowski (2004, 97f) and Menzel (2013).

¹⁶² We do not take the formalization as authoritative, they are merely for illustrative purposes (cf. the first remark of Jenkins 2010b).

based on conceivability, it seems conceivability is a good epistemological guide to metaphysical possibility. That conceivability should be a form of reasoning is argued by Fischer (forthcoming). According to Fischer, the conceivability-based epistemology of modality is just one argument-based modal epistemology among others.¹⁶³

Whether the subject needs be explicitly aware of the first step in the line of reasoning is the focus of the next kind of objection to conceivability-based epistemologies of possibility.

4.2. *The Uselessness Objection*

The Uselessness Objection is an objection that targets the first premise in an argument for possibility based on conceivability, that something is conceived of. The objection states that even if conceivability entails or affords evidence of possibility, the conceivability thesis is *useless* as an epistemological guide to metaphysical possibility since we cannot establish whether something is conceived of or not. Typically, the Uselessness Objection focuses on the types of confusion with which we might erroneously judge something conceivable.

Stoljar (2006, 74ff) finds two types of confusion in the literature: proposition confusion and mode confusion. Proposition confusion occurs when one conflates one proposition *P* with another *Q*, erroneously judging *P* conceivable based on the conceivability of *Q*. Mode confusion occurs when one conflates the mode in which one considers *P*. Perhaps one has merely entertained *P* or one does not find $\sim P$ impossible and conflates this with conceiving of *P*, perhaps erroneously judging *P* possible on this basis. In neither case it seems the subject can tell from the first-person phenomenal character of the epistemic state whether the description of the situation as of conceiving of *P* is *in fact* a case of conceiving of *P*. That is, conceivability facts seem not derivable from conceivability appearance.

The proponents of the Uselessness Objection by Confusion argue that we are unable to justify that confusion is not behind finding some *P* conceivable, wherefore we are unjustified in claiming *P* conceivable.

¹⁶³ In turn, that conceivability may be a form of reasoning may be an additional argument against Bealer's reduction of conceivability to intuitions, given intuitions are supposed to provide a non-inferential justification of the modal status of *P*.

That is, the subject is unable to tell confused conceiving apart from non-confused conceiving. As such, the subject is unjustified in claiming some *P* conceived of.¹⁶⁴ Another way to frame the Uselessness Objection by Confusion is in terms of an appearance / reality distinction: the subject conceiving cannot tell whether *P* is merely apparently conceived of versus really conceived of. Also, the objection can be framed as simply a denial of Accessibility: a conceiving subject does not have epistemic access to conceivability facts.

There is another Uselessness charge, one not bent on confusion. According to proponents of the Uselessness Objection by Depth Charge, justifying a conceivability claim requires cognitive capacities beyond the limited subject. Or, rather, conceiving of a situation that one takes to verify *P* requires such capacities. So, we know that we, limited subjects, are never justified in a conceivability claim.¹⁶⁵

We shall only consider the Uselessness Objection by Confusion. Depth Charge we propose is handled in much the same fashion as Shallow Charge: as it is simply denied that conceiving is merely *X*, it is simply denied that conceiving requires cognitive capacities beyond the limited subject. A more thorough reply will have to be considered elsewhere.¹⁶⁶ We turn to the Uselessness Objection by Confusion.

Clearly, as the Uselessness Objection by Confusion is framed it will not target the externalist conceivability thesis. The externalist conceivability thesis rejects Accessibility and we might simply agree with the Uselessness Objection by Confusion: there is no unrestricted context in which we can establish whether *P* is in fact conceived of. We deny that epistemic access is a matter of having *a priori* epistemic access to an internal representational vehicle by which we are acquainted somehow with the contents of representations. Thus, framing the objection in terms of the subject being unable to tell apparent from real conceiving apart from a first-person phenomenal character is buying into Cartesian internalism that the externalist rejects.

¹⁶⁴ We take it that Arnauld is making a Uselessness Objection by Confusion to Descartes (see note 147).

¹⁶⁵ The Uselessness Objection by Depth Charge is made by van Inwagen (1998).

¹⁶⁶ By rejecting both Shallow and Depth Charges a problem rise which we may call the Problem of Restriction and Constriction. By denying Shallow Charge, conceiving is held to be a richer notion than simply understanding, supposing, stipulating, etc. There are more restrictions placed on conceiving than on *X*. And by denying Depth Charge, conceiving is held to be not too rich a notion. There are not so many restrictions placed on conceiving so as to *constrict* the plausibility of limited subjects conceiving. Where exactly conceiving lies on this scale of restrictions, however, is not obvious. We ignore this problem as well, though it seems to fit squarely with Uselessness Objections – perhaps as a kind of mode confusion.

But just as clearly, the externalist conceivability thesis is targeted by the gist of the objection: for each conceivability claim made by a subject, it is indeterminate from the perspective of the subject whether misdescription is taking place, whether the subject is describing the situation conceived of in an incorrect manner – perhaps even absurdly so. It takes a theorist with knowledge of metaphysical possibility to know whether diagonalization is required on the conceivability claim made by a subject. Thus, there is a clear sense in which the subject is unable to ascertain whether what he claims is conceivable is in fact conceivable.

But this is an acknowledged consequence. There is a gap between propositions and the sentences that express propositions. Sentences are structured entities where propositions are coarse-grained, and it may not be obvious which propositions is expressed by a sentence or how to express a proposition via a sentence.

Importantly, reinterpretation / diagonalization is a *special case*, parasitic on the standard interpretation assumed to give the right result in the *normal case* (cf. Stalnaker 2004, 304ff). That is, in a context, in the vast majority of cases, the subject conceiving is reliably able to say *correctly* what is conceived of.

Also, even if the subject is not semantically competent with an expression, believes arthritis is something you can have in the joints and the thigh, say, whether diagonalization is required in a context depends on whether the relevant possibilities under consideration touch on this issue. If the subject claims to conceive of a situation in which she has arthritis in her knee and judges the situation possible on this basis, that the subject in other context is not semantically competent – does not divide the PWs correctly – does not mean that diagonalization is required in the context at hand (cf. Stalnaker 2010, §2).

Thus, metasemantic ignorance is a special case, and it may not even matter in a given context. In sum, in a context, it is normally the case that subjects are reliable in what they express themselves as representing in conceived situations, viz., a situation of which *P* is true.¹⁶⁷

¹⁶⁷ You might worry here that the answer is too easy: it seems merely stipulated that we are normally reliable judges of the contents of what we represent in our propositional acts and attitudes. The worry might take two forms: first, as hyperbolic skepticism about knowledge of the world, and, second, a worry about the world on this picture as mind- and context-dependent rather than robustly realistic. The hyperbolic skepticism is denied on the Stalnaker framework by the account of knowledge as contrastive and deeply context-dependent. However, the second worry is, perhaps, not as easily alleviated (cf. Magidor 2010, §4). If there is no unrestricted context in which we can evaluate whether we *know* or *conceive* of *P*, then the world may seem mind- and context-dependent. Stalnaker states that the demand that we, as theorists, construct contexts in which we can represent representations of subjects as perspectives on the same reality of

4.3. *The Benacerraf Objection*

Benacerraf (1973) poses a dilemma for an explanation of mathematical truths. If you explain mathematical truths by some sort of Platonist realism about numbers, the semantics offered are on par with the semantics for (most of) the rest of language in being referential.¹⁶⁸ Each expression in the sentence ‘ $1 + 1 = 2$ ’ refers to a Platonic object which has a necessary relation somehow. However, the epistemology of the Platonist objects is rendered mysterious in the sense that there is no causal interaction with the objects in the Platonist realm as there is casual interaction with much of what we otherwise describe in language, say, dogs, plants, and the neighbor. Should you offer an anti-realist explanation of mathematical truths, a satisfactory epistemology might be more readily available. However, it is questionable that the semantics will mesh with the semantics for the rest of language and the resulting semantics might not satisfactorily express the mathematical truths that we want to express.

Peacocke (1999) describes the dilemma as the “Integration Challenge”, as the challenge of reconciling an acceptable metaphysics with an acceptable epistemology for some specific subject matter. Benacerraf’s dilemma is simply the Integration Challenge on the subject matter of mathematical truth: reconciling mathematical metaphysics with mathematical epistemology.

The dilemma of interest here is not about mathematical truth but an analogous dilemma for modal truth. A modal realist can offer a semantics that is on par with the semantics for the rest of language but does so by paying epistemological coin, by offering modal truth-makers with which we cannot causally interact: concrete possible worlds. An anti-realist can offer entities we can interact with but pays in semantic coin by offering a semantics that is not on par with that of the rest of language and one that might analyze modal claims in an unsatisfactory way.

In §2, we argued that to a certain extent the propositions are held by Stalnaker to be sets of possible worlds simply because that would ensure the structure of propositions to be one that satisfied the

which we are part is ambitious and is “enough to ground a robustly realistic conception of the world” (Stalnaker 2008, 138).

¹⁶⁸ Most of since there remains the problem case of fiction. When we speak of Sherlock Holmes, saying he lives at 221B Baker Street, we do not consider this statement referential in the same way as when we say ‘I’m happy to meet you’, upon greeting someone.

requirements set by the causal-pragmatic picture. In fact, Stalnaker is quite explicit about this. He takes possible worlds as primitive, and considers his Moderate Modal Realism a modal realism, since he holds

- a) that what makes a statement possible is explained in terms of quantification over possible worlds;
- b) that some such statements are true;
- c) that the concept of a possible world basic in a correct account of the way we represent the world in our propositional acts and attitudes.

However, he denies that possible worlds are of the same sort as the actual world.¹⁶⁹ He says (Stalnaker 1984., 57):

[P]ossible worlds are primitive notions of the theory, not because of their ontological status, but because it is useful to theorize at a certain level of abstraction, a level that brings out what is common in a certain range of otherwise diverse activities." [...] "[T]o believe in possible worlds is to believe only that those activities have a certain structure, the structure which possible worlds theory helps to bring out.

From this quote we stress that Stalnaker does not consider his possible worlds semantics existence committing (at least not in Lewis' sense of existence) though he is quantifying over possible worlds. In this way, Stalnaker may be foreshadowing the two kinds of commitment suggested by Azzouni (2004): by quantifying over certain objects, you incur a *quantifier commitment* in the logical sense; by asserting the existence of an object, you incur *ontological commitment*. According to Azzouni, quantifier commitment does not entail ontological commitment.¹⁷⁰ Thus, when Stalnaker states that PWs exists because they are

¹⁶⁹ That possible worlds should be things of the same sort of the actual world is one of four theses held by Lewis, the proponent of what Stalnaker calls *Extreme Modal Realism*. Stalnaker (ibid., 45) refers to Lewis (1973, 84-86) in the passage that deals with the four theses. Today, it is probably more natural to refer to (Lewis 1986) for his view on possible worlds.

¹⁷⁰ You might worry that existential quantification simply means 'there exists' and, thus, that a quantifier commitment is ontologically committing. But consider cases of fiction. For instance, when we say stuff about Sherlock Holmes we do not want to commit to the existence of Sherlock Holmes, presumably. At least, not in quite the same way as when we speak of dogs, plants, and the neighbor. This suggests that we are all quite familiar with the difference between

needed theoretically to explain rational action, we need not understand the claim in a way that is ontologically committing.

In turn, Stalnaker may be perfectly happy to concede that his possible worlds theory is *m-conservative* in the sense of (Bueno, Shalkowski 2004, 2015). According to Bueno and Shalkowski, a theory of modality TM is m-conservative if and only if for any set of modal claims M and any modal assertion A, A follows from TM + M only if it follows from M alone (where neither M nor A involve reference to the ontological status of modal truth-makers). That is, if a theory of modality is m-conservative (does not change truth values) with regards to the set of modal claims M that does not involve reference to the ontological status of modal truth-makers, then there is no need to take the theory as ontologically committing to the objects of the theory; the theory is ontologically neutral between realist and anti-realist interpretations of modality.¹⁷¹

In this way, we might interpret Stalnaker as using possible worlds as *expressive* devices only, devices useful for theorizing at a certain level of abstraction, a level that bring out the structure that the objects of propositional attitudes must have in order to offer a correct account of the way we represent the world in our propositional acts and attitudes.

However, in his (2012, 8f), Stalnaker states that PWs are “*properties–ways the world might be*”. Thus, PWs on Stalnaker’s account do not seem to be merely expressive devices useful for theorizing at a certain level of abstraction, but to be properties of the world.

If PWs are properties of the world, the way Stalnaker naturalizes (parts of) intentionality by arguing that we are causally connected to propositions via indicating possible states of the world and the propositions entailed might be clearer. After all, we are often causally connected to properties of objects. A subject appropriately causally connected to a knife might find the knife sharp. But, of course, the problem was never how to explain how we know of actualized possibilities; the problem is how we know of non-actualized possibilities. How do we *indicate* that the knife is possibly dull, given the knife is sharp? Thus, even if we

quantifier commitment and ontological commitment: if we ask someone whether she thinks Sherlock Holmes exists when she claims he lives at 221B Baker Street, we will most likely be met with an incredulous stare.

¹⁷¹ Bueno and Shalkowski show that possible worlds semantics is m-conservative and argue that this suggests that we can simply do away with possible worlds in talking about modality and in formalizing modal talk.

can indicate propositions and might be causally related to “non-modal” propositions that are actually true, it remains unclear how we are causally connected to the properties of the world that are not actually true.

We submit that the Benacerraf Objection / Integration Challenge has not been answered. Much is left unclear. Even if it is shown how part of intentionality is naturalized, one might worry that only the non-interesting parts of modality have been given a natural explanation.

However, it is not obvious that any epistemology of modality offers an account superior in this respect. The Integration Challenge is a challenge for all non-skeptical accounts of the epistemology of modality. Obviously, this does not entail that the challenge should not be met, but we consider it satisfactory for our purposes that the externalist conceivability thesis forwarded is, at least, no worse off than the contenders.

On a final note, we might consider the aim of the theorist in ascribing propositional attitudes to subjects as a way to posit that we are connected to mere possibilities: the possible states of the world. The aim of attributing beliefs to subjects is to explain their rationality and behavior. As Stalnaker has it, belief attribution is the direct route to a subject’s representations and their contents alike, and we use the materials we find in the world in order to ascribe beliefs. Thus, we might ascribe someone beliefs and desires that explain their actions as rational. Crucially, the attributed beliefs have content that is metaphysically possible, even if the proposition entailed by the state of the world desired is not instantiated (actual). Thus, we ascribe propositional attitudes to subjects about mere possibilities.

4.4. The Evolutionary-Reliabilism Objection

In Vaidya (2007), Nozick (2001) is credited as forwarding the Evolutionary-Reliabilism Objection to epistemology of modality which states that whatever account given of the epistemology of modality, the epistemological methodology better be explainable as part the adaptively advantageous cognitive capacities that have developed through natural selection or, at least, be a byproduct of such capacities. Further, the subject matter that we are supposed to know about should give an adaptive advantage to the knowers over non-knowers.

We see the objection as an additional Integration Challenge: the Evolutionary-Reliabilism Objection demands that while answering the Integration Challenge of reconciling metaphysics with epistemology, the epistemology forwarded must also be reconciled with evolutionary biology.

According to the Evolutionary-Reliabilism Objection, if the epistemology cannot be explained as part of the cognitive capacities developed by natural selection or if knowing of the subject matter does not offer an adaptive advantage, there is simply no reason as to why we should have developed the capacity – the belief forming mechanism – to believe or know something about the subject matter at hand. If there is no such belief forming mechanism, we are not justified in our beliefs about modality. Nozick considers metaphysical modality (mostly necessity) such an unimportant subject matter since there is no adaptive advantage in knowing about it. It would be much more relevant to know stuff about the actual world than stuff about other or all possible worlds. As such, he considers it likely that we do not have the capacities in question and that we do not possess justified beliefs or knowledge about metaphysical modality.

As with the last Integration Challenge between epistemology and metaphysics, the objection offers a challenge to any epistemology of modality, not only for the conceivability-based epistemologies of metaphysical possibility. If the objection as presented by Nozick is supposed to only address our supposed knowledge of necessity, as Vaidya suggests, it might not be relevant for the conceivabilist epistemology of possibility. However, we understand the objection as more of a general Integration Challenge than specifically targeting knowledge of necessity. As such, also the conceivability-based epistemology of possibility is required to reconcile epistemology with evolutionary biology.

Stalnaker proposes a causal way of being related to propositions and PWs, a way that delivers beliefs in necessities. Knowing about necessities is necessary for rational action on Stalnaker's account. If this is right, it would seem the Stalnaker-inspired conceivability thesis has something to say on the Evolutionary-Reliabilism Objection: rational action is adaptively advantageous, and in order to explain rational action we must perceive ourselves as confronted with a range of possible states of the world towards which we have attitudes, pro and con, such that we act in ways that conform with our attitudes.

If you are not convinced, we retreat simply to the ‘no worse off’ position: the externalist conceivability thesis is, at least, no worse off than its contenders.¹⁷²

5. Conclusions

We have unveiled an externalist conceivability thesis inspired by Stalnaker’s comprehensive, thoroughgoing externalist framework. According to the externalist conceivability thesis, conceivability globally and infallibly entails metaphysical possibility. This is a very strong conceivability thesis which accepts both Universalizability and Reliability, while it holds for ordinary, limited subjects, accepting Epistemic. However, the externalist conceivability thesis denies Accessibility – it denies that the subject conceiving has epistemic access to conceivability facts. On the thoroughgoing externalist framework, it is denied that epistemic access is a matter of having *a priori* epistemic access to an internal representational vehicle by which we are acquainted somehow with what is true of a conceived situation. Whether our propositional attitudes have the contents claimed is an anti-individualistic and environment-dependent matter, which cannot be gleaned simply from our representations. Thus, when a subject claims to conceive of impossibility, reinterpretation or diagonalization of the assertion is required such that the assertion is taken as expressing metasemantic information instead of the purely semantic information, which would go against Gricean conversational rules. There are in fact no cases of conceiving of impossibility, each act of conceiving is an act of conceiving of metaphysically possibility. It just so happens that the subject is fallible when it comes to describing the conceived situations – the subject may be metasemantically ignorant, describing the situation falsely – even absurdly so. This is a rare phenomenon, however. In the vast majority of cases, the subject correctly describes the conceived situations as of *P* being true of the situation. Thus, the first premise in the

¹⁷² Let us briefly mention here that Williamson (2005, 2007b, forthcoming) proposes that the imagination is both “selective” and “reality-oriented” such that one’s imagination is, in normal use, not completely independent of what the world is like – it is responsive to evidence. In this way, Williamson suggests that the imagination is often used to evaluate conditionals (is evolved as a standard means for evaluating conditionals and modal claims). For instance, the primitive hunter in imagination considers whether he can jump a stream in order to escape a sabre-toothed tiger. Since he can imagine it and his imagination is selective and reality-oriented, he judges that he can jump over the stream. Such abilities seem important for our survival, and give an adaptive advantage over non-knowers. See also Kroedel (2012). Both Williamson and Kroedel are proposing *counterfactual*-based epistemologies of modality, but imagination has prominent positions in both accounts.

argument from conceivability to possibility is *normally* establishable for a subject. The subject is normally reliable in arriving at the first premise of the conceivability argument: ‘*P* is conceived of’. The link between conceiving and metaphysical possibility on the Stalnaker framework is given by conceiving being a propositional attitude, where propositions one has attitudes towards are metaphysically possible states of the world. For this reason, the second premise in the argument is given: ‘conceivability of *P* entails metaphysically possibly *P*’. Finally, the subject arrives at the belief that ‘*P* is possible’. Our ability to conceive is a good guide to metaphysical possibility.

The externalist conceivability thesis answers a great many of the objections to conceivability-based epistemologies of modality. Against the Standard Objection that attacks the link between conceiving and metaphysical possibility, the externalist account offers a secure link. We do not conceive of impossibilities, while we may misdescribe our conceptions – even absurdly so. That there should be some formal kind of modality which we track by conceiving rather than metaphysical modality is most likely a Cartesian spectre that we reject. That conceivability should be merely *X* and that we often stand in relation to impossibility via *X* is denied, conceiving is not identical to *X*. That we can only conceive of a situation of which *P* is true, given we already know *P* is possible is false (while there may be cases in which we conceive of *P*, already knowing *P* possible). It may be the case that we can only diagonalize an assertion, if we know the purely semantical information asserted violates a Gricean conversational rule, but this is as it should be. Finally, that conceiving of *P* should merely enable *X*, and that it should really be *X* that does the justificatory work in the belief that possibly *P* is not obvious: there may be internalist persuasions behind the objection, the objector might think conceivability as informally justifying possibly *P*, the “reasoning” (or rigorous, formal method) that would do the justifying might not be able to justify certain beliefs about possibility that can be justified via conceivability, and, finally, conceiving might rather trivially be an exercise in reasoning from conceivability to possibility.

Against the Uselessness Objection, the externalist thesis might simply agree that conceivability facts are not epistemically accessible, if this is supposed to be of a rationalist, *a priori* kind of epistemic access. On the other hand, in the normal case, subjects are quite reliably able to judge correctly what is conceived of in a situation. Ultimately, whether the contents of representations are as we take them to be is anti-individualistic

and environment-dependent, and it takes effort and engagement with the world to get to know about our representations and their contents alike.

There may still be questions with regards to the two Integrations Challenges – the challenges of reconciling metaphysics with epistemology and reconciling epistemology with evolutionary biology, but rational action seems evolutionary advantageous and we explain rational action via attributing propositional attitudes to subject that explain their view of the world as a way the world might be. This is the direct route to a subject's representations and their contents alike, in a given context. As such, we are confronted with a range of (metaphysically) possible ways the world might be and act in accordance with our attitudes, pro and con, toward the different possibilities. What we are confronted with and causally related to is simply the world and its properties. If this is not a satisfactory answer to the Benacerraf and Evolutionary-Reliabilism Objections, it seems the externalist conceivability thesis is merely no worse off than its contenders, concerning these Integration Challenges.

The externalist conceivability thesis presented provides a plausible conceivability-based epistemology of possibility and it offers replies to objections that other theses have problems with, even if it should simply be no worse off in certain cases. We consider the externalist conceivability thesis the superior conceivability thesis.

Inconceivability as a Guide to Impossibility

‘The debate on whether inconceivability is an epistemic guide to impossibility’ is a description that has no reference. ‘The debate on whether conceivability is an epistemic guide to possibility’, however, is a description that has a reference. In the latter case, the debate is live; in the former, there is next to none. In this paper, we aim to explore and add support to the underexplored thesis that one can justify beliefs about the impossibility of *P* on the basis of the inconceivability of *P*. Often the inconceivability thesis is deemed implausible from the get-go. For instance, it is argued that cognitive limitations may be a better reason for a subject to find *P* inconceivable than the impossibility of *P*. We argue that many reasons for denying an inconceivability thesis lies in aligning the thesis with a conceivability thesis but that there are reasons to consider the epistemological methodology in different terms, suggesting that current lines of objections to the inconceivability thesis do not support its offhand rejection. We offer three models according to which we may justify beliefs in impossibility on the basis of inconceivability.

0. Introduction

The aim of this paper is to explore and add support to the underexplored thesis that the one can justify beliefs about the *impossibility* of *P* on the basis of the *inconceivability* of *P*. The inverse thesis that *conceivability* is a guide to *possibility* has received extensive attention, although it has been waning slightly in the wake of the intense discussion of Chalmers’s two-dimensional version of the conceivability thesis (cf. 2002, 2004, 2010), while the inconceivability thesis has received almost no attention. Both supporters and critics of the conceivability thesis often either assume that any considerations concerning conceivability as a guide to possibility apply *mutatis mutandis* to inconceivability as a guide to impossibility (e.g., Yablo 1993, Stoljar 2006, ch. 7); or they quickly reject inconceivability as a guide to impossibility as a non-starter, immediately refuted by counterexample, or as being hopelessly optimistic on behalf of human powers of imagination (e.g., van Woudenberg 2006). But this overlooks important differences in the nature and reliability of the evidential roles of conceivability and inconceivability, and overlooks potential ways in which inconceivability may guide one to justified beliefs about impossibilities.

If inconceivability could guide us to justified beliefs about impossibility, it would provide access to a stronger modality than what we get from conceivability: if the inconceivability of *P* tells us about the impossibility of *P*, then, by the duality of possibility and necessity, the inconceivability of *P* tells us about

the necessity of not-*P*. And necessity is modally stronger than possibility.¹⁷³ This in itself sometimes motivates pessimism about the role of inconceivability. As Gregory notes, “It is harder, I think, to justify inferences from unimaginability to impossibility [...] than it is to justify inferences from imaginability to possibility [...]. Those differences are fitting. Possibility is a much weaker property than necessity. It ought therefore be harder to justify beliefs about impossibility than beliefs about possibility” (Gregory 2004, 346). One aim in the following is to show that this difference in modal strength actually *aids* inconceivability as a guide, in certain respects.

The plan of the paper is the following. In §1, we introduce two versions of the conceivability thesis and two similar versions of the inconceivability thesis, divided by their denial or acceptance of whether the relation between (in)conceivability and (im)possibility is one of entailment or is one evidential. In §2, we consider the *prima facie* case against the inconceivability thesis. We consider three arguments: an argument from limits of imagination, an argument from negativity of the antecedent, and an argument from lack of appearance. In §3, we offer three models according to which inconceivability is a guide to impossibility. Finally, in §4, we conclude that reasons for denying inconceivability as a guide to impossibility often rests in aligning this thesis with a conceivability thesis, but that there are reasons to consider the epistemological methodology in different terms, suggesting that current lines of objections to the inconceivability thesis do not support its offhand rejection. The three models we offer may serve as starting points for an inquiry into whether inconceivability can justify beliefs in impossibility.

1. (In)conceivability and (Im)possibility

As is familiar on the literature on the conceivability-based epistemology of possibility, the conceivability / possibility link is perceived to be one of two: either conceivability is supposed to *entail* possibility, or

¹⁷³ See Hale (2003) who states that one might have a possibility-first approach or a necessity-first approach to the epistemology of modality such that one is more basic than the other. In turn, Hale argues that the possibility-first approach will not get you knowledge of necessity, while the necessity-first approach will get you knowledge of possibility (but see note 177).

conceivability is merely supposed to *afford evidence* for possibility. This offers two branches of conceivability theses: an entailment branch and an evidential branch.

The conceivability thesis that accepts an entailment relation between conceivability and possibility, CON, offers a thesis that, if true, may play a role in an epistemology of modality, insofar as justified beliefs about the antecedent can justify beliefs about possibility. The conceivability thesis that accepts an evidential relation between conceivability and possibility, CON-e, holds that conceivability affords evidence of possibility. That is, CON-e is an epistemic thesis implied by CON, but also by weaker theses (for example the weaker thesis that *most* conceivable propositions are possible).

(CON) Conceivability of *P* entails possibility of *P*

(CON-e) Conceivability of *P* is evidence of possibility of *P*

Now, in a similar fashion to CON and CON-e, we can divide inconceivability theses along the dimension of acceptance of an entailment relation or an evidential relation between inconceivability and impossibility. Thus, we have two inconceivability / impossibility links: INCON and INCON-e. The inconceivability thesis that accepts an entailment relation between inconceivability and impossibility, INCON, offers a thesis that, if true, is more directly relevant to justifying beliefs about impossibility, insofar as justified beliefs about inconceivability can justify beliefs about impossibility. In turn, the inconceivability thesis that accepts an evidential relation between inconceivability and impossibility, INCON-e, is an epistemic thesis implied by INCON as well as by weaker theses (for example that *most* inconceivable propositions are impossible).

(INCON) Inconceivability of *P* implies impossibility of *P*

(INCON-e) Inconceivability of *P* is evidence of impossibility of *P*

A crucial difference between the entailment theses and the evidential theses is that proponents of evidential theses can allow counterexamples in the form of, respectively, conceivable impossibilities and inconceivable possibilities, as long as the counterexamples are not abundant enough to render the evidential

theses evidentially unreliable. For this reason, arguments against evidential theses tend to be rather murkier than arguments against the entailment theses, CON and INCON, respectively, which can be shown false by a single counterexample. Let us consider the case against INCON and INCON-e.

2. The *Prima Facie* Case Against INCON/INCON-e

Although rejection of inconceivability as a guide to impossibility seems to be the default among modal epistemologists, it is quite rare to find arguments, let alone sustained arguments, directed specifically against this thesis. As stated in the introduction, the inconceivability thesis has not received a lot of attention as a thesis independent of the conceivability thesis. Criticisms, however brief, tend to take one of three forms: (i) arguments from limits of imagination, (ii) arguments from negativity of the antecedent, and (iii) arguments from a lack of positive appearance. We consider them in turn.

2.1. Argument from limits of imagination

If inconceivability entails impossibility, then, by its contrapositive, possibility entails conceivability. But it seems overly optimistic to suppose that we can conceive of everything that is possible. As Evnine asks: “why should there not be things that are possible that we cannot conceive?” (2008, 669). For example, “one may be unable to conceive [of] a certain scenario, due to, for instance, fatigue, drugs or an uncommon moment of dullness, in all of which cases, however, [INCON] licenses the inference to impossibility” (van Woudenberg 2006, 213).

Also, there are apparent counterexamples to the claim that everything that is inconceivable is impossible. Gregory, for example, says that he “cannot imagine parallel lines meeting but parallel lines can meet” (2004, 344). Again, a case where INCON licenses the inference to impossibility, contradicting the independent judgment that parallel lines can meet.

An initial response on behalf of INCON may be to adopt an entailment relation that denies contraposition – interpret INCON with some weaker conditional, e.g., Stalnaker’s (1968) conditional according to which we evaluate $A > B$ by going to the closest possible world in which A is true and differ minimally from the actual world and check whether B is true. By this move, INCON would not implausibly entail that everything

possible is conceivable. Note that Stalnaker believes his conditional satisfies modus tollens. He argues that from $A \supset B$ and $\sim B$, $\sim A$ is inferable. In this case, from INCON and (not-not-)possibly P , (not-not-)conceivably P is inferable. If that is right, then a defender of the entailment thesis may want another conditional, given modus tollens needs denial as well as contraposition.¹⁷⁴ However, this move does not solve anything really since INCON still has problems with counterexamples and, in this case, it does not look like adopting a weaker conditional can do the trick of saving entailment. The problem is modus ponens (or having a conditional and a true antecedent while the consequent is false), and a conditional that does not satisfy modus ponens seems not a conditional at all. So, it looks like the proponent of INCON would be giving up entailment to save entailment by opting for a weaker conditional, a Pyrrhic victory, if a victory at all.

A better response on behalf of INCON may be to undermine the supposed counterexamples. As is familiar from the conceivability literature, proponents of CON seldom accept counterexamples and attempt to undermine supposed counterexamples in a number of ways, typically by arguing that the subject claiming to conceive of an impossibility is somehow confused (cf. Stoljar 2006, §4.5.). We call this offering a Misdescription Model of Modal Error. In the same way, the proponent of INCON may try to undermine counterexamples by arguing that the subject claiming to find some possibility inconceivable is merely confused. Perhaps Gregory is describing the case above correctly as inconceivable but is forgetting to add that he is limiting the case to Euclidian geometry. In this case, it is not possible for parallel lines to meet. Or perhaps the subject is merely resisting conception of the scenario due to its inconvenient (possible) truth (e.g., manmade global warming) or due to its moral unpleasantness (Gendler 2000). In both cases, the resisted scenario may be conceivable yet is refrained from being conceived of, in which case they are not inconceivable. The subject claiming to find something inconceivable may simply be misdescribing his conception or lack thereof. However, it is not obvious that the Misdescription Model of Modal Error is a well-motivated response in light of every counterexample.

¹⁷⁴ Perhaps Holton's (2000) "truth minimalist with Gappiness" conditional would do, though Beall (2000) argues that it has the rather unfortunate consequence of entailing Curry's paradox, entailing that everything is true.

A better response overall may be to move from INCON to INCON-e since it is not clear that the objection targets INCON-e at all. As stated, INCON-e is compatible with cases of inconceivable possibilities. INCON-e is even compatible with a great many possibilities being inconceivable, as long as there are not so many inconceivable possibilities as to render inconceivability unreliable as a guide to impossibility. And, of course, the proponent of INCON-e may offer a Misdescription Models of Modal Error to certain supposed counterexamples as well, making the case all the harder for the objector to show INCON-e evidentially unreliable. Further, INCON-e does not entail the implausible contrapositive of INCON, or even an evidential version of such a contrapositive. Even if possibility does not even render conceivability probable, inconceivability may still render impossibility probable since the probability of *P* being impossible on *P* being inconceivable may be higher than the probability of *P* being conceivable on *P* being possible, e.g., if the proportion of inconceivable propositions that are impossible is relatively higher than the proportion of possible propositions that are conceivable. If this is the case, inconceivability may be a fallible but reliable epistemic guide to impossibility, even though there are cases in which what one cannot conceive of is possible.

There is a possible problem with this response, however: what underlying metaphysical relation explains INCON-e, if INCON is false?¹⁷⁵ We shall offer three models according to which inconceivability can justify beliefs in impossibility; each may be considered a way of explaining INCON-e. The relation between inconceivability and possibility need not be a simple metaphysical relation, as the one suggested by INCON.

¹⁷⁵ Murphy (2006) argues that, pending the partition of propositions into possible or impossible camps (or even an undecidable camp), the reliability of either CON-e or INCON-e may follow from the reliability of the other. He then goes on to argue that there are more possible propositions than impossible propositions and for that reason that the reliability of CON-e follows from the reliability of INCON-e while the opposite relation does not hold. If Murphy is right, it seems we can extend the case to show that even if CON is correct and entailment holds for conceivability to possibility (there are no conceivable impossibilities), then it does not follow that INCON-e is reliable. But then again, we wonder how Murphy's equations hold up, given we are plausibly dealing with an infinity of propositions in both (all) camps, and none seemingly of a greater infinite cardinality than the other.

2.2. *Argument from negativity of antecedent*

In the case of CON, the antecedent can seemingly be confirmed in a simple way: one can ascertain the conceivability of P by *actually* conceiving P , thus inferring the conceivability from an actual instantiation. A subject x conceiving of P entails that P is conceivable. But in the case of INCON, this is not possible: from a subject x being unable to conceive of P , it does not follow that P is inconceivable. Perhaps x is simply too tired or inept to conceive of P such that P is conceivable by someone more able. In this respect, then, conceivability seems much better placed to guide possibility judgments, than inconceivability in guiding judgments of impossibility.

However, once ‘conceivability’ is qualified to a sense of conceivability that is possibility-entailing or probabilifying, it becomes at least as difficult to ascertain the antecedent of CON. Suppose (à la Gregory 2004, and in the spirit of Yablo 1993, Chalmers 2002, and Menzies 1998) that in order to be possibility-entailing, the conceivability of P must hold under the supposition of any actually true non-modal proposition. For instance, if John knows that Hesperus is Phosphorus (that both names refer to Venus), John cannot be able to conceive of a nonidentity between Hesperus and Phosphorus. If John claims to be able to so conceive, then it would not be possibility-entailing or probabilifying since John is confused about what he is conceiving of. P would then be *inconceivable* in the relevant sense, if there is *at least one* actually true non-modal proposition the supposition of which disables one from conceiving of P . Again, since knowledge that Hesperus is Phosphorus disables one of conceiving of the nonidentity, there is a non-modal proposition the supposition of which disables one from conceiving of Hesperus is not Phosphorus. If so, there is a respect in which it is the INCONs and not the CONs that can have the antecedent confirmed by instantiation, i.e., of a conceivability-disabling true supposition.

2.3. *Argument from lack of appearance*

When we are able to conceive of P being the case, P thereby *appears* possible. As Yablo says, “to conceive or imagine that p is *ipso facto* to have it seem or appear to you that possibly, p ” (1993, 4-5). This appearance lends a kind of *prima facie* support familiar from perception: when we perceive P , P appears true, thus lending *prima facie* justification to believing that P in a way strong enough for justified belief in the absence

of defeaters. But when we are *unable* to conceive of *P*, there is no positive imaginative appearance of *P* as *impossible* and, therefore, not the same *prima facie* evidence as when we are *able* to conceive of something. Nothing conceived of directly ‘appears’ impossible since what one cannot imagine does not directly appear imaginatively to us in any way at all. This might lead some to conclude that inconceivability is less useful as an epistemic guide than conceivability. But concluding this would presuppose that:

- (1) *prima facie* evidence from conceivability should be understood on the appearance model (as claimed by, e.g., Kung (2010) and Yablo (op.cit.));
- (2) *prima facie* evidence of impossibility provided by inconceivability should be understood *on the same model* as evidence provided by conceivability.

We will grant (1), although we do have reservations. But there is no reason to suppose that evidence from inconceivability should be understood in the same way as evidence provided by conceivability – in fact it seems plausible that it should *not*. Denying (2), there are several alternative possible models for understanding the *prima facie* evidence of impossibility from inconceivability that doesn’t involve an ‘appearance’ of impossibility. We shall consider three such models; not necessarily unrelated, not necessarily exhaustive. We suspect that the nature of the epistemic support from inconceivability to impossibility is going to be quite heterogeneous.

Before moving on to the models, however, we must note that it is not entirely clear that there should be no appearance of impossibility when finding something inconceivable. While it is certainly true that unlike the case of conceivability there is no positive version of inconceivability, i.e., there is no constructed scenario that one finds impossible (that appears impossible), it is not clear that there cannot be an appearance of impossibility nonetheless. Consider this case: when attempting to conceive of a scenario of which ‘ $1 + 1 = 3$ ’ is true, John finds he cannot do so – he cannot conceive of such a scenario save, perhaps, by altering the meaning of the terms. John is frustrated by this phenomenon. Every time he tries to conceive, the aimed at scenario is beyond him. Further, he is not simply hesitant to form a conception of the scenario, as when the colleagues tease him by saying that Barcelona will lose the football match tomorrow. The aimed at scenario

seems simply impossible to conceive of – it appears impossible to John. Note that there is only a scenario aimed at (the one described by the sentence), there is no scenario conceived of that appears impossible. Yet, there is an appearance of impossibility.¹⁷⁶

This line of reasoning is not unlike cases we consider in the three models, but we shall not pursue the appearance line. Even if there is no appearance of impossibility, the three models suggest ways in which one can justify beliefs about impossibility on the basis of inconceivability.

3. Three Models of the Evidential Role of Inconceivability

The three models we consider to offer *prima facie* cases for INCON / INCON-e are: (i) a model building on cases of knowledge from absence, in which absence of positive evidence for *P* indirectly supports not-*P*; (ii) a model based on the imaginative process according to which a process of attempting to imagine *P* bestows evidential support to one's inability to imagine *P*; and (iii) an abductive inference model according to which the best explanation for one's robust inability to conceive of *P* is that necessarily not-*P*. We consider the models in turn.

3.1. Model 1: Knowledge from absence

In many cases, the absence of positive evidence that *P* can be treated as indirect evidence that not-*P*. Hale (2003) offers a case in which an experienced detective searches a window for evidence of forced entry after a burglary. She finds none and concludes that the burglar did not enter through the window. That is, she is conducting a thorough search for evidence for *P*, finding no evidence for *P* she concludes that not-*P*. Hale notes that lack of evidence for *P* cannot in itself provide evidence for not-*P* – it can only do so in the context of a well-directed and thorough search for evidence in *P*'s favor.

This sort of inference can justify the conclusion on the assumptions that (a) had the burglar entered through the window, there would have been evidence of it; (b) had there been evidence of forced entry at the window, the detective would have found it.

¹⁷⁶ This account is similar to one proposed by Casullo (1979).

Hale extends the line of reasoning to the modal case: a subject x cannot infer the modal status of not- P based on lack of evidence for the modal status of P , but may be able to do so given a well-directed and thorough search of the modal status of one of them. Hale is concerned with the inference from not finding evidence of not- P being necessary after a well-directed and thorough search to inferring that P is possible. We are concerned with the inference in the opposite direction: from not finding evidence of P being possible after a well-directed and thorough search to inferring that P is impossible and, by the duality of possibility and necessity, not- P is necessary.

Cohnitz (2004) shows that Hale's line of reasoning is formally fallacious, if the notion of conceivability is ideal negative conceivability. That is, from ideal negative conceivability of P (P not being ruled out ideally), it does not follow that P is possible.¹⁷⁷ The problem, according to Cohnitz, is one of decidability not holding for a formal system that models the ideal reasoning of the ideal subject – the system is neither complete nor sound.¹⁷⁸

But a simpler argument might show Hale wrong: that the line of reasoning in the non-modal case should extend to the modal case is unclear in the direction that Hale considers for the non-ideal subject. In Hale's non-modal case, lack of evidence for P just *is* evidence for not- P (even if non-conclusive evidence). That is, there does not seem to be anything indirect about how the lack of evidence for P supports not- P . Compare with the following case: John is looking out his window and does not see a tree immediately outside of it. In other words, John lacks evidence that there is a tree immediately outside the window. At the same time, the lack of evidence is simply evidence that there is no tree immediately outside the window. It is unclear that this is the case in Hale's modal case: failure to find evidence for necessarily not- P after a thorough search is *not* simply evidence that P is possible: checking whether P contradicts necessities 1-110 does not provide any evidence that P should not contradict necessity no. 111 – perhaps a necessity we are not aware of since not-ideal subjects.

¹⁷⁷ According to Cohnitz, neither is it the case that every possibility is ideally negatively conceivable (the contrapositive of INCON on the negative conceivability thesis at hand). It is unclear whether this should bother us – particularly, it is unclear that it is problematic to the evidential inconceivability thesis (cf. 2.1. Argument from limits of imagination).

¹⁷⁸ One might wonder whether it matters for the non-ideal subject and whether a proponent of a positive notion of conceivability could simply celebrate the result.

In the opposite direction, however, searching for but finding no evidence that *P* is possible might provide evidence for necessarily not-*P*. Consider that a thorough search for the possibility of *P* might be a matter of attempting to conceive of a scenario of which *P* is true. Failure to find evidence for its possibility would then simply be a matter of not finding *P* conceivable and robustly so, given the thorough search. In other words, the subject conducting the search finds *P* robustly inconceivable. Robust inconceivability may differ from mere inconceivability in undermining some of the *prima facie* cases against inconceivability, e.g., the argument from limits of imagination. Given a well-directed and thorough search, the ineptitudes suggested as reasons for not being able to conceive of something, drugs, a moment of dullness, or confusion, seem not well-motivated. Given robust inconceivability affords evidence of impossibility, then, like in the non-modal case, lack of evidence for (possibly) *P* might simply be evidence for the opposite, not-(possibly) *P*.¹⁷⁹

We propose to extend the subjunctive proposal in the non-modal case to the modal case: *x* might reason from absence of ability to conceive of *P* to the impossibility of *P*, on the assumptions that (a*) had *P* been possible, *P* would have been conceivable; (b*) had *P* been conceivable, *x* would have been able to conceive of *P*. This line of reasoning does not require that inconceivability involves an ‘appearance’ of impossibility.

3.2. Model 2: Evidence from imaginative process

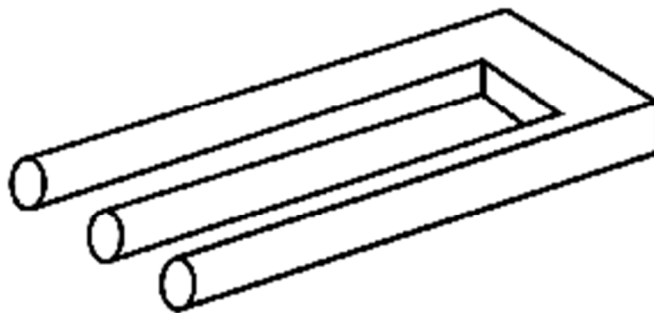
Aspects of the imaginative process one engages in when trying to conceive of *P* can sometimes bestow evidential power on one’s inability to conceive, even if there is no positive appearance of impossibility. There are presumably multifarious ways in which such processes can create evidence of impossibility; we will consider two simple cases involving imaginative composition and decomposition.¹⁸⁰

¹⁷⁹ Of course, there might still be problems. Yablo (1993) argues there is a third possibility for conceivability evidence: neither finding *P* conceivable nor inconceivable, in which case *P* is *undecidable* on the available conceivability evidence. If this is right, then lacking evidence that *P* is possible because not finding *P* conceivable is not enough to justify an inference to *P* being impossible. That would require, in addition, that *P* is found inconceivable. In other words, ‘not finding *P* conceivable’ does not equal ‘finding *P* inconceivable’; and ‘not finding *P* inconceivable’ does not equal ‘finding *P* conceivable’. If this is right, then knowledge from absence might be a trickier issue than sketched here, but not obviously far more problematic.

¹⁸⁰ We follow the usual definition of ‘conceive’ and consider imagining and conceiving in a narrow sense forms of conceiving in the broad sense (cf. the introduction to and by Gendler, Hawthorne 2002). However, our use will be lax, and we shall sometimes speak of the imagination or an imagination-disruptive truth. In these cases, imagination is an umbrella term equal to the broad sense of conceiving. In the context, we hope the intention is clear.

Process 1: If we cannot combine independently consistent imaginative representations into a consistent (and imaginable) complex representation, the inability to imagine can become evidence for impossibility, despite lack of positive appearance of impossibility. Consider John who imagines merging pictorial representations of a square and a circle to evaluate the possibility of the round square. In the process of doing so, John realizes that there is no consistent way of merging the two imaginative representations without destroying the imaginative representations of either the square or the circle. His failed imaginative attempts to merge independently imaginable representations qualify his inability to imagine of the combination as evidence for the impossibility of the round square.¹⁸¹

Process 2: If we cannot decompose a complex imaginative representation into consistent individual imaginative representations, the lack of ability to imagine can become evidence for impossibility of what the complex representation represents *in a certain sense*. For instance, John imagines the quasi-appearance of possibility such as this:



To determine whether the complex representation does indeed represent a possible object, John aims to decompose it into consistent imaginable representations. While the complex imaginative representation

¹⁸¹ Of course, there might be dissenters. Someone may consider a line a square circle seen from the side. A line is easily imaginable. What is not obvious is that the “square circle” in this case possesses the defining properties of the square or the circle. See Sorensen (2002) who argues that a line – or a dot – is *not* a depiction of impossibility. Sorensen attributes the “joke” line case to Tidman (1994).

seemingly has three rods, the imaginative decomposition reveals that the middle rod does not exist.¹⁸² So, again, John's failed imaginative attempt (to decompose the representation into imaginable parts) becomes evidence of the impossibility of the represented object in the sense that it cannot be composed of objects with one and two rods, respectively, and we can account for this without supposing that anything ever appears impossible to us.¹⁸³

3.3. Model 3: Abductive inference

In order to appreciate this model, consider Gregory's (2004) model of how conceivability can guide possibility judgments. Gregory starts from a metaphysical thesis, a version of CON:

- Each unshakeably imaginable (and accessible) non-modal proposition is possible.¹⁸⁴

Defining "unshakeably imaginable" by:

(UI) P is unshakeably imaginable iff P is imaginable and for every correct non-modal supposition about what is actually the case, we would be able to imagine P under that supposition.¹⁸⁵

¹⁸² John may have simply decomposed the image by cutting a single pixel away from the imagined object or, more daringly, by cutting it in two. In both cases this is possible. Let the decomposition he is attempting to do be the one described in the text: decomposing the complex object into objects with two and one rod, respectively.

¹⁸³ Someone may argue that we do have an appearance of impossibility here – that this appearance of impossibility is the whole point of the depiction: it provides an illusion of impossibility, while the depiction is clearly possible (since actual). One might wonder whether the illusion of impossibility is due to erroneously extending the appearance of impossibility of the depicted *as a worldly object* to the depiction itself. That is, that what is depicted is possible as a two-dimensional object, but impossible as a three dimensional object. However, it is not obvious that one could not build an object, in painted wood, say, such that viewed from a particular angle it would look like the depiction above. So, what is impossible about the image? Nothing? Well, the decomposition described in the text.

¹⁸⁴ Gregory's view of 'imagining' is one that comes close to the now standard definition of 'conceiving in its broad sense' (cf. note 180). Our use will be lax, and shall speak if 'imagining' and 'conceiving' interchangeably here.

¹⁸⁵ A paraphrase ignoring Gregory's "accessible" requirement.

An important assumption for Gregory is that suppositions restrict what can be imagined under them.¹⁸⁶ For instance, that a subject x can imagine that x is standing under the supposition that x is sitting, while x cannot imagine that water contains more salt than ionic compounds under the supposition that salts *are* ionic compounds. The thesis is motivated, albeit inconclusively, by surviving common counterexamples to CON: *a posteriori* impossibilities, e.g., that it is conceivable that Venus is Mars; and *a priori* but unobvious impossibilities, e.g., that some barber shaves precisely those barbers who are not self-shavers. The epistemic upshot is that if we can justifiably believe that some propositions are unshakeably imaginable, we can justifiably believe that they are possible.

Gregory proposes the following procedure for determining whether some P is unshakeably imaginable, and hence possible:

1. Identify a non-modal and relevant Q which might plausibly be true.
2. Suppose that Q is true, and try to imagine P under that supposition.
3. If imagining P is successful under that supposition, repeat for other relevant and plausibly true suppositions.
4. If P continues to be imaginable under sufficiently many such suppositions, *infer inductively* that P is unshakably imaginable.
5. Infer that P is possible.¹⁸⁷

There are two main sources of error when applying this procedure: false non-modal beliefs, and an overly optimistic inductive inference. If a subject x has false non-modal beliefs this can lead x to consider certain

¹⁸⁶ A supposition that might be questioned. See Roca-Royes (2011) and Kung (forthcoming).

¹⁸⁷ See also Yablo (1993, n. 66). Yablo's conceivability thesis is of the CON-e variety. We think you find a similar method described in Kroedel (2012): the "joint evaluation" of the counterfactual 'if P were the case, then Q would be the case'. The joint evaluation is a matter of "developing the supposition P ", judging P possible, given a contradiction is not arrived at by developing the supposition "for a while". Kroedel refers to Williamson (2007b, 141-165). Roca-Royes (op.cit.) presents a "non-standard" dilemma to the procedure, targeting both conceivability-based accounts (Yablo's, Gregory's, and Chalmers') and Williamson's counterfactual-based account. Specifically, she argues that the procedure, "the conceivability method", cannot be used to establish *de re* necessities without presupposing them prior to the procedure and that, thereby, conceivability is insensitive to *de re* necessities such that we can conceive of *de re* impossibilities. Consideration of her dilemma will be conducted elsewhere.

false propositions correct and thus relevant to UI, and consider certain true propositions incorrect and thus irrelevant to UI. However, it is difficult to fault a reasoning procedure for modal errors stemming from false non-modal beliefs. If a person x makes an overly optimistic inductive inference, the inference might be made on insufficient inductive grounds. As when John judges all swans white based on the local population of swans, while there are populations of black swans outside of the local environment.

So, what about knowledge of impossibilities? Gregory considers a procedure based on the observation that ‘each unshakeably imaginable (and accessible) non-modal proposition is possible’ is equivalent to ‘no impossible (and accessible) proposition is unshakeably imaginable’. That is, a version of the contraposition of CON which, given the definition of UI, yields:

- No impossible proposition is imaginable under the supposition of every correct non-modal proposition.

Gregory proposes the following procedure for determining whether some P , e.g., that Mars is Venus, is impossible:

1. Identify a non-modal and relevant Q , that Mars and Venus are actually distinct, say, that might plausibly be true.
2. Suppose that Q is true, and try to imagine P under that supposition.
3. If imagining P is unsuccessful under that supposition, *infer abductively by inference to the best explanation* that P is not unshakably imaginable *on account of being impossible*.
4. Infer that P is impossible.

Again, there are two main sources of error when applying this procedure: false non-modal beliefs, as before, and an incautious abductive inference. As to the first, it is once again difficult to fault a reasoning procedure for modal errors stemming from false non-modal beliefs. Matters become more opaque with the incautious abductive inference since, in many cases, our inability to conceive of some P is satisfactorily explicable in

terms of human limitations of imagination, rather than the impossibility of *P*. How are we to identify the correct explanation without begging the question? This worry leads Gregory to conclude that although this procedure is not completely useless, it is significantly less reliable than that for arriving at beliefs about possibility. We think, however, that this conclusion oversells the procedure for possibility-beliefs, and undersells the procedure for impossibility-beliefs.

To justify beliefs about *P*'s possibility, one must ensure that there are *no* correct non-modal propositions, the supposition of which would disable one from conceiving of *P*; while to justify beliefs about *P*'s impossibility, one must merely ensure that there *are* correct non-modal propositions, the supposition of which disables one from conceiving of *P*. The *existence* of disablers can be confirmed in a conclusive way, whereas their *inexistence* can only be confirmed in a non-conclusive way (cf. 2.2. *Argument from negativity of antecedent*). This is an advantage of the procedure for arriving at beliefs about impossibilities, and there is reason to think that it generalizes beyond the particulars of Gregory's approach, e.g., to that of Yablo: conceivability is indicative of possibility only in the absence of certain conceivability-disruptive truths. It is always an open question whether such truths exist. But when a suitable conceivability-disruptive truth is discovered, it becomes a settled question whether the inability to conceive is indicative of impossibility.

Furthermore, Gregory's procedure for justifying beliefs about possibility seems to presuppose the same kind of abductive step that made the procedure for beliefs about impossibilities vulnerable. In many cases, our ability to conceive of some *P* is satisfactorily explicable in terms of the human imagination being *overly permissive* rather than in terms of the *possibility* of *P*, given the supposition. How are we to identify the correct explanation without begging the question? Gregory's argument against this is part and parcel with his defense of the link between unshakeable imaginability and possibility. But if the inference from unimagability to impossibility depends on this form of inference to the best explanation, it is hard to see why the inference from UI to possibility is not.

Moreover, the abductive inference in the impossibility procedure seems to allow for 'experimental testing' in a sense less available to the possibility procedure: even after successfully imagining *P* under many suppositions, one does not have a test-case confirming the relevance of the suppositions for one's

imagination. But if one can imagine P under some suppositions but not under others, one has some confirmation that those latter suppositions were of relevance to one's inability to imagine P .

To sum up, CON (or CON-e) provides a procedure for justifying beliefs about impossible P 's on the basis of (suitable) inability to conceive of them. Because of certain structural features of the circumstances that must be in place to apply the procedure, it seems more reliable than it initially seems, and not obviously less reliable than the inference from UI to possibility.

4. Conclusions

The *prima facie* arguments against inconceivability as a guide to impossibility can be overcome. In §2, we considered the case against the inconceivability thesis. First, we considered a problem based on limits of imagination. We noted that possibilities that cannot be conceived of may not be a problem for certain special entailment relations one might consider governing INCON, but that the move to a weaker conditional alone did not solve the problem of counterexamples. The proponent of INCON must appeal to a Misdescription Model of Modal Error and extend it to all supposed counterexamples, arguing that subjects that claim possibilities inconceivable are confused somehow or simply unwilling. More importantly, an objection by inconceivable possibilities does not seem to target INCON-e, which is compatible with great number of inconceivable possibilities.

Second, we considered an objection based on the negativity of the antecedent of INCON and INCON-e, that P is inconceivable. However, that it should be difficult to show that something is inconceivable whereas easily showed that something is conceivable might simply be an erroneous intuition, given something, P , is conceivable in a possibility-entailing or possibility-probabilifying way only if there are no defeaters to P . If this is the case, it might as difficult or easier to show P inconceivable: namely, by finding a defeater to P .

Third, we considered an argument from the lack of appearance of impossibility when we are unable to conceive of P , unlike the appearance of possibility one gets from conceiving of P . We noted that there might be an appearance of impossibility even if there is no scenario held before one's mind, as there is when positively conceiving. More importantly, we claimed that the evidence one gets for the impossibility of P

from the inconceivability of P need not be understood on the same (appearance) model as that for conceivability-possibility evidence.

There are models according to which we can justify beliefs in possibility based on inconceivability even if there is no appearance of impossibility. In §3, we considered three such models. First, from lacking evidence for the possibility of P after a thorough search, one might infer that P is impossible and, by the duality of possibility and necessity, that not- P is necessary. Against Hale, we suggested the direction of inference from lack of evidence after a thorough search was better suited to cases of not finding evidence of possibly P and inferring not possibly P than to cases of not finding evidence of not possibly P and inferring possibly P .

Second, the imaginative process might bestow evidence on one's inability to imagine something, say, the failure to combine imagined representations into a complex imagined representation or the failure to decompose a complex imagined representation into consistently imagined representations. In both cases, one might expect the process of combination or decomposition of imagined representations to continue unhindered. The failure to continue the imaginative process bestows evidence on the inability to imagine as suggestive of the impossibility of what is attempted imagined.

Third, the procedure by which one establish something as robustly conceivable and possible, viz., by succeeding to conceive of P under supposition of non-modal and relevant Q s and inferring abductively that the best explanation for P 's robust conceivability is P 's possibility, reveals when something is inconceivable and impossible: P is abductively inferred to be impossible, if there is a non-modal and relevant Q under the supposition of which P is inconceivable. Gregory considers the latter procedure significantly less reliable than the former. We argue that this conclusion oversells the procedure for possibility-beliefs, and undersells the procedure for impossibility-beliefs. The existence of disablers can be confirmed in a conclusive way, whereas their inexistence can only be confirmed in a non-conclusive way. Gregory's procedure for justifying beliefs about possibility seems to presuppose the same kind of abductive step that made the procedure for beliefs about impossibilities vulnerable. And the abductive inference in the impossibility procedure seems to allow for 'experimental testing' in a sense less available to the possibility procedure.

Summing up, the offhand rejections of the inconceivability thesis and the assumptions according to which matters concerning conceivability apply *mutatis mutandis* to inconceivability do not hold under scrutiny. As such, the inconceivability thesis deserves further consideration than it has received, especially in light of the aged and ongoing debate on the conceivability thesis. We have offered three models according to which inconceivability may justify beliefs in impossibility. The three models can serve as starting points for such an inquiry

References

- ALMOG, J., 2002. *What am I? : Descartes and the mind-body problem*. New York: Oxford University Press.
- AZZOUNI, J., 2004. *Deflating Existential Consequence : A Case for Nominalism*. New York: Oxford University Press.
- BAILEY, A.R., 2007. *The Unsoundness of Arguments from Conceivability*.
- BATTY, C., 2009. *Stalnaker, Robert C.: Our Knowledge of the Internal World*. University of Notre Dame.
- BEALER, G., 2002. Modal Epistemology and the Rationalist Renaissance. In: T. GENDLER and J. HAWTHORNE, eds, *Conceivability and Possibility*. Oxford; New York: Clarendon Press ; Oxford University Press, pp. 71-125.
- BEALL, J.C., 2000. Minimalism, gaps, and the Holton conditional. *Analysis*, **60**(268), pp. 340-351.
- BENACERRAF, P., 1973. Mathematical Truth. *The Journal of Philosophy*, **70**(19), pp. 661-679.
- BERGLUND, A., 2005. *From conceivability to possibility: an essay in modal epistemology*. Umeå: Umeå University, Department of Philosophy and Linguistics.
- BEYER, C. and BURRI, A., eds, 2007. *Philosophical knowledge: its possibility and scope*. Amsterdam: Rodopi.
- BRUECKNER, A., 2001. Chalmers's conceivability argument for dualism. *Analysis*, **61**(3), pp. 187-193.
- BUENO, O. and SHALKOWSKI, S.A., 2015. Modalism and theoretical virtues: toward an epistemology of modality. *Philosophical Studies*, **172**(3), pp. 671-689.
- BUENO, O. and SHALKOWSKI, S.A., 2013. Logical Constants: A Modalist Approach. *Noûs*, **47**(1), pp. 1-24.
- BUENO, O. and SHALKOWSKI, S.A., 2009. Modalism and Logical Pluralism. *Mind*, **118**(470), pp. 295-321.
- BUENO, O. and SHALKOWSKI, S.A., 2004. Modal Realism and Modal Epistemology: a Huge Gap. In: E. WEBER and T. DE MEY, eds, *Modal Epistemology*. Brussels: Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten, pp. 93-106.
- BURGE, T., 1979. Individualism and the Mental. *Midwest Studies In Philosophy*, **4**(1), pp. 73-121.
- BURGESS, J.P., 2014. On a derivation of the necessity of identity. *Synthese*, **191**(7), pp. 1567-1585.
- CAMERON, R.P., 2010. Response to Dominic Gregory. In: B. HALE and A. HOFFMANN, eds, *Modality: Metaphysics, Logic, and Epistemology*. Oxford; New York: Oxford University Press, pp. 342-345.
- CASULLO, A., 2012. *Essays on a priori knowledge and justification*. New York: Oxford University Press.

- CASULLO, A., 1979. REID AND MILL ON HUME'S MAXIM OF CONCEIVABILITY. *Analysis*, **39**, pp. 212-219.
- CHALMERS, D.J., 2010. *The character of consciousness*. Oxford; New York: Oxford University Press.
- CHALMERS, D.J., 2004. Epistemic Two-Dimensional Semantics. *Philosophical Studies*, **118**(1-2), pp. 153-226.
- CHALMERS, D.J., 2002. Does Conceivability Entail Possibility? In: T. GENDLER and J. HAWTHORNE, eds, *Conceivability and Possibility*. Oxford; New York: Clarendon Press ; Oxford University Press, pp. 145-200.
- CHALMERS, D.J., 1996. *The conscious mind : in search of a fundamental theory*. New York: Oxford University Press.
- CHOMSKY, N., 2002. *Syntactic Structures*. 2nd Edition edn. Berlin: Mouton de Gruyter.
- COHNITZ, D., 2004. Why Consistentism Won't Work. In: E. WEBER and T. DE MEY, eds, *Modal Epistemology*. Brussels: Koninlijke Vlaamse Academie van Belgie voor Wetenschappen en Kunsten, pp. 33-51.
- CRANE, T., 2009. IS PERCEPTION A PROPOSITIONAL ATTITUDE? *The Philosophical Quarterly*, **59**(236), pp. 452-469.
- CUNNING, D., 2002. Descartes' Modal Metaphysics. In: E.N. ZALTA, ed, *The Stanford Encyclopedia of Philosophy*. Summer 2011 edn.
- DECKER, J., 2007. *Modality, Rationalism, and Conditionals*, Massachusetts Institute of Technology.
- DESCARTES, R., 1985. *The philosophical writings of Descartes*. Cambridge: Cambridge University Press.
- DESCARTES, R., 1984. *The philosophical writings of Descartes*. Cambridge: Cambridge University Press.
- DONNELLAN, K.S., 1966. Reference and Definite Descriptions. *The Philosophical Review*, **75**(3), pp. 281-304.
- DRAPEAU CONTIM, F. and MOTTA, S., eds, 2012. *Modal Matters*. Paris: Editions Kimé.
- EVNINE, S., 2008. Modal Epistemology: Our Knowledge of Necessity and Possibility. *Philosophy Compass*, **3**(4), pp. 664-684.
- FIELD, H., 2001. Stalnaker on Intentionality. *Truth and the Absence of Fact*. Oxford; New York;: Oxford University Press, pp. 83-103.
- FIOCCO, M.O., 2007. Conceivability, Imagination and Modal Knowledge. *Philosophy and Phenomenological Research*, **74**(2), pp. 364-380.
- FISCHER, R.W., forthcoming. Theory Selection in Modal Epistemology. *American Philosophical Quarterly*, , pp. 1-16.
- FISCHER, R.W., 2011. *Modal Knowledge, in Theory*, University of Illinois at Chicago.

- GARCÍA-CARPINTERO, M. and MACIÀ, J., eds, 2006. *Two-dimensional semantics*. Oxford; New York: Clarendon Press ; Oxford University Press.
- GEIRSSON, H., 2005. Conceivability and Defeasible Modal Justification. *Philosophical Studies*, **122**(3), pp. 279-304.
- GENDLER, T.S., 2011. Imagination. In: E.N. ZALTA, ed, *The Stanford Encyclopedia of Philosophy*. Fall 2011 Edition edn.
- GENDLER, T.S., 2000. The Puzzle of Imaginative Resistance. *Journal of Philosophy*, **97**(2), pp. 55-81.
- GENDLER, T.S. and HAWTHORNE, J., eds, 2002. *Conceivability and possibility*. Oxford; New York: Clarendon Press ; Oxford University Press.
- GREGORY, D., 2010. Conceivability and Apparent Possibility. In: B. HALE and A. HOFFMANN, eds, *Modality: Metaphysics, Logic, and Epistemology*. Oxford; New York: Oxford University Press, pp. 319-341.
- GREGORY, D., 2004. Imagining Possibilities. *Philosophy and Phenomenological Research*, **69**(2), pp. 327-348.
- HALE, B., 2003. Knowledge of Possibility and of Necessity. *Proceedings of the Aristotelian Society*, **103**(1), pp. 1-20.
- HALE, B. and HOFFMANN, A., eds, 2010. *Modality : metaphysics, logic, and epistemology*. Oxford; New York: Oxford University Press.
- HANRAHAN, R., 2007. IMAGINATION AND POSSIBILITY. *The Philosophical Forum*, **38**(2), pp. 125-146.
- HAWKE, P., 2011. Van Inwagen's modal skepticism. *Philosophical Studies*, **153**(3), pp. 351-364.
- HAWTHORNE, J. and MAGIDOR, O., 2010. Assertion and Epistemic Opacity. *Mind*, **119**(476), pp. 1087-1105.
- HAWTHORNE, J. and MAGIDOR, O., 2009. Assertion, Context, and Epistemic Accessibility. *Mind*, **118**(470), pp. 377-397.
- HOLTON, R., 2000. Minimalism and Truth-Value Gaps. *Philosophical Studies*, **97**(2), pp. 137-168.
- HUME, D., 2007. *A treatise of human nature: a critical edition*. Oxford: Clarendon press.
- JENKINS, C.S., 2010a. Concepts, Experience, and Modal Knowledge. *Nous-Supplement: Philosophical Perspectives*, **24**(1520-8583, 1520-8583), pp. 255-279.
- JENKINS, C.S., 2010b. Response to Scott Sturgeon. In: B. HALE and A. HOFFMANN, eds, *Modality: Metaphysics, Logic, and Epistemology*. Oxford; New York: Oxford University Press, pp. 310-317.
- KIND, A., 2013. The Heterogeneity of the Imagination. *Erkenntnis*, **78**(1), pp. 141-159.
- KRIPKE, S.A., 1980. *Naming and necessity*. Cambridge, Mass.: Harvard University Press.

- KRIPKE, S.A., 1972. Naming and Necessity. In: D. DAVIDSON and G. HARMAN, eds, *Semantics of Natural Language*. Second Edition edn. Dordrecht: D. Reidel Publishing Company, pp. 253-355.
- KROEDEL, T., 2012. Counterfactuals and the Epistemology of Modality. *Philosophers' Imprint*, **12**(12), pp. 1-14.
- KUNG, P., forthcoming. You Really Do Imagine It: Against Error Theories of Imagination. *Noûs*, , pp. 1-31.
- KUNG, P., 2010. Imagining as a Guide to Possibility. *Philosophy and Phenomenological Research*, **81**(3), pp. 620-663.
- LEGG, C., 2012. The Hardness of the Iconic Must: Can Peirce's Existential Graphs Assist Modal Epistemology? *Philosophia mathematica*, **20**(1), pp. 1-24.
- LEGG, C. and FRANKLIN, J., forthcoming. Perceiving Necessity. *Pacific Philosophical Quarterly*, , pp. 1-27.
- LEWIS, D., 1973. *Counterfactuals*. Oxford: Basil Blackwell Ltd.
- LEWIS, D., 1986. *On the plurality of worlds*. Oxford: Basil Blackwell.
- LIGHTNER, D., 1997. Hume on Conceivability and Inconceivability. *Hume Studies*, **23**(1), pp. 113-132.
- MAGIDOR, O., 2010. Robert Stalnaker, Our Knowledge of the Internal World. *Philosophical Review*, **119**(3), pp. 384-391.
- MCGINN, C., 2004. *Mindsight: Image, dream, meaning*. Cambridge, MA.: Harvard University Press.
- MCKINSEY, M., 1991. Anti-Individualism and Privileged Access. *Analysis*, **51**(1), pp. 9-16.
- MCLEOD, S.K., 2005. MODAL EPISTEMOLOGY. *Philosophical Books*, **46**(3), pp. 235-245.
- MENZEL, C., 2013. Possible Worlds. In: E.N. ZALTA, ed, *The Stanford Encyclopedia of Philosophy*. Spring 2015 Edition edn.
- MENZIES, P., 1998. Possibility and Conceivability: A Response-Dependent Account of Their Connections. In: R. CASATI and C. TAPPOLET, eds, *European review of philosophy. 3, Response-dependence*. Stanford, Calif.: CSLI Publications, pp. 255-277.
- MIZRAHI, M., forthcoming. An Argument for External World Skepticism From the Appearance/Reality Distinction. *International Journal for the Study of Skepticism*, .
- MORTON, A., 2013. *Emotion and imagination*. Cambridge: Polity.
- MURPHY, P., 2006. Reliability Connections Between Conceivability and Inconceivability. *Dialectica*, **60**(2), pp. 195-205.
- NATHAN, N.M.L. and VALBERG, J.J., 1982. Necessity, Inconceivability and the "A Priori". *Proceedings of the Aristotelian Society, Supplementary Volumes*, **56**, pp. 117-133+135-155.

- NEWMAN, L., 1997. Descartes' Epistemology. In: E.N. ZALTA, ed, *The Stanford Encyclopedia of Philosophy*. Winter 2014 Edition edn.
- NICHOLS, S., ed, 2006. *The architecture of the imagination : new essays on pretence, possibility, and fiction*. Oxford; New York: Clarendon Press ; Oxford University Press.
- NOZICK, R., 2001. *Invariances: the structure of the objective world*. Cambridge, Mass.: Belknap Press of Harvard University Press.
- PAPINEAU, D., 2007. KRIPKE'S PROOF IS AD HOMINEM NOT TWO-DIMENSIONAL. *Philosophical Perspectives*, **21**(1), pp. 475-494.
- PATTERSON, S., 2008. Clear and Distinct Perception. In: J. BROUGHTON and J. CARRIERO, eds, *A Companion to Descartes*. Blackwell Publishing Ltd, pp. 216-234.
- PEACOCKE, C., 1999. *Being known*. Oxford: Clarendon Press.
- PEACOCKE, C., 1985. Imagination, Possibility and Experience. In: J. FOSTER and H. ROBINSON, eds, *Essays on Berkeley: a tercentennial celebration*. Oxford: Clarendon, pp. 19-36.
- POWELL, L., 2013. How To Avoid Mis-Reading Hume's Maxim Of Conceivability. *The Philosophical Quarterly*, **63**(250), pp. 105-119.
- REID, T., 2002. Essay IV, Chap. III. Mistakes concerning conception. In: D.R. BROOKES and K. HAAKONSSON, eds, *Essays on the intellectual powers of man: a critical edition*. Edinburgh: Edinburgh University Press, pp. 325-333.
- ROCA-ROYES, S., 2011. Conceivability and De Re Modal Knowledge. *Noûs*, **45**(1), pp. 22-49.
- SIBAJIBAN, 1964. The Self-Contradictory and the Inconceivable. *Analysis*, **24**(Supplement 2), pp. 99-103.
- SIEVERT, D., 1979. Descartes' Criteria of Truth: Conception and Perception. *Modern Schoolman*, **56**(2), pp. 151-160.
- SOAMES, S., 2006. Understanding Assertion. In: J.J. THOMSON and A. BYRNE, eds, *Content and Modality : themes from the philosophy of Robert Stalnaker*. Oxford: Clarendon Press, pp. 222-250.
- SORENSEN, R.A., 2002. The Art of the Impossible. In: T. GENDLER and J. HAWTHORNE, eds, *Conceivability and Possibility*. Oxford; New York: Clarendon Press ; Oxford University Press, pp. 337-368.
- SORENSEN, R.A., 1992. *Thought Experiments*. New York: Oxford University Press.
- STALNAKER, R.C., 2010. Responses to Stanley and Schlenker. *Philosophical Studies*, **151**(1), pp. 143-157.
- STALNAKER, R.C., 2009a. On Hawthorne and Magidor on Assertion, Context, and Epistemic Accessibility. *Mind*, **118**(470), pp. 399-409.
- STALNAKER, R.C., 2009b. What is De Re Belief? In: J. ALMOG and P. LEONARDI, eds, *The Philosophy of David Kaplan*. New York: Oxford University Press, pp. 233-245.

- STALNAKER, R.C., 2008. *Our knowledge of the internal world*. Oxford; New York: Clarendon Press ; Oxford University Press.
- STALNAKER, R.C., 2006. Responses. In: J.J. THOMSON and A. BYRNE, eds, *Content and Modality : themes from the philosophy of Robert Stalnaker*. Oxford: Clarendon Press, pp. 251-295.
- STALNAKER, R.C., 2004. Assertion Revisited: On the Interpretation of Two-Dimensional Modal Semantics. *Philosophical Studies*, **118**(1-2), pp. 299-322.
- STALNAKER, R.C., 1999a. *Context and Content: essays on intentionality in speech and thought*. Oxford: Oxford University Press.
- STALNAKER, R.C., 1999b. Logical Omniscience, Problem of. In: R.A. WILSON and F.C. KEIL, eds, *The MIT Encyclopedia of the Cognitive Sciences*. First MIT paperback edition, 2001 edn. Cambridge, Mass.: MIT Press, pp. 489-490.
- STALNAKER, R.C., 1984. *Inquiry*. Paperback edition, 1987 edn. Cambridge, Mass.; London: MIT Press.
- STALNAKER, R.C., 1978. Assertion. *Context and Content: essays on intentionality in speech and thought*. 1999 edn. Oxford: Oxford University Press, pp. 78-95.
- STALNAKER, R.C., 1976. Possible Worlds. *Noûs*, , pp. 25-75.
- STALNAKER, R.C., 1968. A Theory of Conditionals. In: NICHOLAS RESCHER, ed, *Studies in Logical Theory*. Blackwell, pp. 98-112.
- STANLEY, J., 2010. "Assertion" and intentionality. *Philosophical Studies*, **151**(1), pp. 87-113.
- STOLJAR, D., 2006. *Ignorance and Imagination: The Epistemic Origin of the Problem of Consciousness*. New York, Oxford: Oxford University Press.
- STURGEON, S., 2010. Apriorism about Modality. In: B. HALE and A. HOFFMANN, eds, *Modality: Metaphysics, Logic, and Epistemology*. Oxford; New York: Oxford University Press, pp. 275-309.
- TAHKO, T.E., forthcoming. Natural Kind Essentialism Revisited. *Mind*, .
- THOMAS, N.J.T., 1997a. Imagery and the Coherence of Imagination: A Critique of White. *Journal of Philosophical Research*, **22**, pp. 95-127.
- THOMAS, N.J.T., 1997b. Mental Imagery. In: E.N. ZALTA, ed, *The Stanford Encyclopedia of Philosophy*. Winter 2011 edn.
- TIDMAN, P., 1994. Conceivability as a Test for Possibility. *American Philosophical Quarterly*, **31**(4), pp. 297-309.
- VAIDYA, A., 2007. The Epistemology of Modality. In: E.N. ZALTA, ed, *The Stanford Encyclopedia of Philosophy*. Winter 2011 Edition edn.
- VAIDYA, A.J., 2010. Understanding and Essence. *Philosophia*, **38**(4), pp. 811-833.

- VAN CLEVE, J., 1983. CONCEIVABILITY AND THE CARTESIAN ARGUMENT FOR DUALISM. *Pacific Philosophical Quarterly*, **64**, pp. 35-45.
- VAN INWAGEN, P., 1998. Modal Epistemology. *Philosophical Studies*, **92**(2), pp. 67-84.
- VAN WOUDEBERG, R., 2006. Conceivability and Modal Knowledge. *Metaphilosophy*, **37**(2), pp. 210-221.
- WEBER, E. and DE MEY, T., eds, 2004. *Modal Epistemology*. Brussels: Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten.
- WEINBERG, J.M. and MESKIN, A., 2006. Puzzling over the Imagination: Philosophical Problems, Architectural Solutions. In: S. NICHOLS, ed, *The architecture of the imagination : new essays on pretence, possibility, and fiction*. Oxford; New York: Clarendon Press ; Oxford University Press, pp. 175-202.
- WHITE, A.R., 1990. *The language of imagination*. Oxford: Basil Blackwell.
- WILLIAMSON, T., forthcoming. Knowing by Imagining. In: A. KIND and P. KUNG, eds, *Knowledge Through Imagination*. Oxford University Press, pp. 1-19.
- WILLIAMSON, T., 2011. Reply to Stalnaker. *Philosophy and Phenomenological Research*, **82**(2), pp. 515-523.
- WILLIAMSON, T., 2007a. Philosophical Knowledge and Knowledge of Counterfactuals. *Grazer philosophische Studien*, **74**, pp. 89-123.
- WILLIAMSON, T., 2007b. *The philosophy of philosophy*. Malden, MA: Blackwell Pub.
- WILLIAMSON, T., 2005. I*-ARMCHAIR PHILOSOPHY, METAPHYSICAL MODALITY AND COUNTERFACTUAL THINKING. *Proceedings of the Aristotelian Society*, **105**(1), pp. 1-23.
- WILSON, M.D., 1976. Descartes: The Epistemological Argument for Mind-Body Distinctness. *Noûs*, **10**(1), Symposium Papers to be Read at the Meeting of the Western Division of the American Philosophical Association in New Orleans, Louisiana, April 29-May 1, 1976), pp. 3-15.
- WITTGENSTEIN, L., 1998. *Preliminary studies for the "Philosophical investigations": Generally known as The blue and brown books*. Second Edition 1969 edn. Oxford: Blackwell Publishers Ltd.
- WITTGENSTEIN, L., 1922. *Tractatus Logico-Philosophicus*. Project Gutenberg's Tractatus Logico-Philosophicus edn. London: KEGAN PAUL, TRENCH, TRUBNER & CO., LTD.
- WORLEY, S., 2003. Conceivability, possibility and physicalism. *Analysis*, **63**(277), pp. 15-23.
- YABLO, S., 2006. No Fool's Cold: Notes on Illusions of Possibility. In: M. GARCÍA-CARPINTERO and J. MACIÀ, eds, *Two-dimensional semantics*. Oxford; New York: Clarendon Press ; Oxford University Press, pp. 327-345.
- YABLO, S., 2002. Coulda, Woulda, Shoulda. In: T. GENDLER and J. HAWTHORNE, eds, *Conceivability and Possibility*. Oxford; New York: Clarendon Press ; Oxford University Press, pp. 441-492.

YABLO, S., 2000. Textbook Kripkeanism and the open texture of concepts. *Pacific philosophical quarterly*, **81**(1), pp. 98-122.

YABLO, S., 1993. Is Conceivability a Guide to Possibility? *Philosophy and Phenomenological Research*, **53**(1), pp. 1-42.

YABLO, S., 1990. The Real Distinction between Mind and Body. *Canadian Journal of Philosophy*, **Supplementary Volume 16**, pp. 149-201.

YABLO, S., 1987. Identity, Essence, and Indiscernibility. *The Journal of Philosophy*, **84**(6), pp. 293-314.