

On the Nature and Normativity of Imagination

Alma Barner

A thesis submitted for the degree of Doctor of Philosophy

in Philosophy

of The Australian National University

July 2018

Committee:

Professor Daniel Stoljar, Chair

Professor David Chalmers

Professor Frank Jackson

Dr. Paolo Santorio

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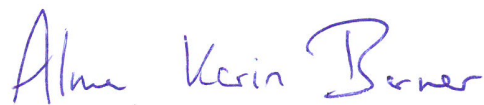
For my sister Lida

After war, there is peace. It has always been like this.

Statement

This thesis is solely the work of its author. No part of it has previously been submitted for any degree, or is currently being submitted for any other degree. To the best of my knowledge, any help received in preparing this thesis, and all sources used, have been duly acknowledged.

I acknowledge and celebrate the First Australians on whose traditional lands I have lived and worked while writing this thesis, on whose traditional lands the Australian National University is located, and whose cultures are among the oldest continuing cultures in human history.



Alma Karin Barner

July 2018

Acknowledgements

I thank Ray Briggs, David Chalmers, Jens Kipper, Wolfgang Schwarz and Daniel Stoljar for particularly valuable feedback on the contents of this dissertation. A special thank you goes to my primary supervisor Daniel Stoljar for his ongoing support.

Various sections of this thesis were presented at conferences, workshops and departmental seminars. For feedback I thank audiences at The Australian National University, University of Sydney, University of New South Wales, University of Konstanz, University of Otago, New York University, University of Wellington and the MCMP Munich.

I would like to thank my friends and colleagues within the Philosophy Program at ANU and NYU for their invaluable friendship and innumerable philosophical conversations. The following deserve mention in particular: Kyle Blumberg, Iván González Cabrera, Dylan Clements, Stephanie Collins, John Cusbert, Anya Farennikova, Jonathan Farrell, Daniel Gregory, Alan Hajek, Jesse Hambly, Frank Jackson, David Kalkman, Jo Lau, Andrew Lee, Gavin Leuzzi, Erick Llamas, Robert Long, Stephen Mann, Dan Marshall, Victoria McGeer, Hedda Hassel Morch, Daniel Nolan, Nathan Pensler, Al Prescott-Couch, Gabriel Rabin, Paolo Santorio, Lachlan Walmsley, John Zerilli. I sincerely apologize to those I forgot to mention.

A special thank you goes to Jens Kipper, Alan Hajek and Leon Leontyev. Without Jens, I might have never started a dissertation and without Al, I might have never completed this one. My brother Leon Leontyev was there for me every day.

Abstract

As a child, I often imagined that I was a space astronaut. Today I imagined what I could have for lunch and what I could wear for a concert. Pilots imagine performing water landings in an emergency. We might imagine full grown trees, while planting tree seeds. We use imagination to plan daily activities, prepare for important events, evaluate past choices and actions, predict other people's mental states, and many more cognitive tasks. We imagine trees, while planting tree seeds, because we want to plant in a way that will leave enough space between the trees. We imagine what we could wear for a concert on our way home from work so that we know whether to do laundry first.

The topic of this dissertation is the nature and normativity of imagination. While imagination plays a plethora of cognitive roles in reasoning, its nature and function is not very well understood. Moreover, it has received far less systematic attention from philosophers of mind than other mental states, such as beliefs, desires or perceptions. The dissertation aims to diminish this research gap. It has two parts, each of which contain two chapters. Part I focuses on the normativity of imagination, while Part II concerns the contents and phenomenology of imagination.

It is a popular assumption in philosophy that imagination puts us in touch with the possible. The epistemic thesis that imagination is a guide to possibility has received a fair amount of attention in recent years. The normative thesis that imagination aims at the possible, like belief aims at truth, has only been discussed in passing. In Chapter 1 I give in-depth arguments against the normative thesis. Yet imaginings can only play cognitive roles, if they are normatively constrained in some way. In chapter 2 I present my own

account of the normativity of imagination. On this view, imagination is not subject to intrinsic attitude-specific norms, but hypothetical norms, such as norms on intentions, and norms of instrumental rationality. I further argue that imagination shares semantic and normative properties with scientific models.

Various prominent definitions of the nature of imagination appeal to perception. In Chapter 3 I critically evaluate the appeal to perception in defining the nature of imagination. I argue that common definitions of imagination cannot do justice to the nature of the contents and phenomenology of imagination, as the analogy to perception is taken too far. In the final chapter 4 I bring together the findings of the previous chapters and apply them to the case of imagining perceptual experiences. Here I argue that imagining perceptual experiences requires conceptual stipulations. This is designed to further illustrate and corroborate the views advanced.

This dissertation highlights the uniqueness of imagination in many ways: Unlike beliefs, desires and perceptions, imagination is not subject to attitude-specific normativity (chapters 1 and 2). Imagination is akin to scientific model construction (chapter 2). Imagination is not always phenomenally similar to sense perception in important ways (chapter 3). Moreover, imagination contents involve conceptual stipulations, which further distinguishes them from perceptual states (chapters 3 and 4).

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PART I

Chapter 1. Imagination and the Possibility Norm

1. 1 Introduction

As I like to play cello, I sometimes imagine what it would be like to be a famous cellist. Today, on a Friday, I imagine what I could do on the weekend, if the sun is out. We commonly use imaginings in ordinary reasoning. We imagine how we will look ten years from now, and in which profession our children are likely to end up in. We imagine what somebody else might be thinking about us or how we could rectify a wrongdoing on our part. We imagine how things might have turned out instead. We imagine possible risks, before embarking on a risky maneuver. We imagine that which we believe is likely to happen.

Byrne (2005) and Williamson (2007) stress the role of imagination in everyday counterfactual thinking, in deliberations over so-called alternative pasts and future-related planning.¹ There is mounting evidence in cognitive biology and cognitive psychology that this ability even plays an evolutionary role.² And as diverse as the contents of these imaginings are, they have a common feature: they are about

¹ For empirical literature on the role of imagination in counterfactual reasoning see for example Baird, Smallwood and Schooler (2011), De Brigard (2014), Libby (2011), Kahneman and Tversky (1982), Roese and Olson (1993), (1995), Roese, Sanna and Galinsky (2005), Suddendorf and Corballis (2007).

² See Byrne (2005), Byrne (2007), Epstude and Roese (2008), Michaelian (2016) and Suddendorf and Corballis (2007). For more on this, see in particular the volume edited by Michealian, Klein and Szpunar (forthcoming). Suddendorf and Corballis (2007) argue, for example, that our ability to imagine is part of a general capacity for what they call ‘mental time travel’, which, they conjecture, evolved through natural selection.

possibilities. The thought that imagination puts us in touch with the possible is intuitively plausible.

Philosophers are particularly fond of the idea that the primary cognitive role of imagination is linked to representing possibilities. This idea plays a central part throughout the literature. White (1990) characterizes imagination as “thinking about the possible” (122). For McGinn (2004) “[i]magination is what brings a possibility to mind” (137). He adds that this is “of course (...) a very familiar idea: imagination is the faculty that puts us in touch with the non-actual” (ibid).³ Kind (2015) explains: “The difference between belief and perception on the one hand and imagination on the other is often put in slogan form: ‘Perception is to the actual as imagination is to the possible’” and “Imagining aims at the fictional⁴ as belief aims at the true.”⁵ McGinn (2004) believes that “modal belief [i.e. belief about what is possible or necessary]⁶ relates to imagination in very much the way that ordinary knowledge relates to perception” (138). According to Yablo (1993), imagining *p* is “to be in a state which (i) is veridically only if possibly *p*, and (ii) moves you to believe that *p* is possible” (4).⁷ Balcerak-Jackson

³ Unfortunately, McGinn does not provide any references for where in the literature this idea is voiced.

⁴ The term ‘fictional’ requires clarification. Typically, what is fictional is not considered to be identical with what is possible, for the reason that fictional scenarios can involve inconsistencies. Moreover, what is fictional is in an important sense created by us, but what is possible is not. Also, entities that are fictional are per definition non-existent, where this is not the case for entities that are possible. My focus lies on the relationship between imagination and possibility, and not on the relationship between imagination and the fictional.

⁵ Kind adds: “Something like the first slogan can be found in Hart 1988; the second comes from Walton 1990:41.” (2015: fn.4)

⁶ At this point, McGinn does not limit himself to what is metaphysically possible or necessary.

⁷ To be precise, in the quoted passage, Yablo is concerned with what it is to find conceivable instead of what it is to imagine. Nevertheless, it can be applied to imagination directly. In this paper he uses ‘conceivable’ and ‘imaginable’ interchangeably and argues further that they refer to the same ability.

(2016) argues that “just as perceptual experience aims at capturing the external world, imagination aims at capturing the character of possible experiences” (10).⁸

However, a closer look at the quotes reveals that they do not all state the same thing. Claims such as “imagination is the faculty that puts us in touch with the possible” or “perception is to the actual as imagination is to the possible” are vague. I assume the following three theses can be extracted from the quotes: A *descriptive* thesis that imaginings are commonly about possibilities, as a matter of fact. White’s statement and McGinn’s claim that imagining is what brings a possibility to mind can be interpreted as descriptive theses of this kind. An *epistemic* thesis that modal beliefs are epistemically justified based on imagination. For example, let’s say, I imagine a person who is a physical duplicate of myself but does not have consciousness and judge on the basis of my imagining that this is possible. This is how McGinn’s and Yablo’s statements on modal belief can be interpreted.⁹ A *normative* thesis that concerns the normativity of imagination. One version of this thesis is that imaginings aim at representing possibilities.¹⁰ Another is that imaginings aim at representing the fictional. Balcerak-Jackson’s claim that imaginings aim at capturing the character of possible experiences can be interpreted as a normative thesis. Such a thesis can be contrasted with a thesis about the normativity of belief, such as the view that beliefs aim at truth, for example.

⁸ On a weak reading, her view states that imaginings and possible experiences are alike in character, which does not involve imaginings being about possibilities. I discuss Balcerak-Jackson’s position further in Chapter 3, section 3. 2.

⁹ Yablo (1993) also defends an epistemic thesis. I discuss Yablo’s (1993) epistemic thesis briefly in section 1. 1. 6 and section 2. 4 in Chapter 2.

¹⁰ The notion of an aim requires further unpacking, which I leave to the clarification and explication of the normative thesis in section 1. 2. For the time being, think of it in terms of the function of imagination, in case you find the notion of a function more intuitive.

In this chapter and the next I am concerned with the normativity of imagination. In the current chapter I discuss whether imaginings aim at representing possibilities. In the next chapter I present my account of the normativity of imagination. My primary focus is not on the descriptive and epistemic theses, even though, as you will notice, I invoke both in places to critically examine the normative thesis.¹¹

The normative thesis is an interesting thesis that comes with certain advantages. For one thing, it may do justice to our admittedly vague intuitions about a tight relationship between imagination and possibility. Furthermore, the normative thesis has at least the following five virtues: First, it can provide the foundations for a theory on the normativity of imagination. The normativity of mental states, in particular beliefs and desires, but also intentions, perceptions and others, is by now widely discussed. The normativity of imagination has not been the focus of attention in philosophy so far.¹² Second, relatedly, the normative thesis provides hope for a unified theory of the normativity of mental states. Most philosophers endorse some version of the view that beliefs aim at truth.¹³ Many philosophers also believe that desires have an aim.¹⁴ Velleman (1992) argues that desires aim at the attainable, for example. The thesis that imagination aim at possibilities fits in seamlessly with these theses. The result is an account of the normativity of imaginings that is on a par with those of other attitudes.

¹¹ The normative thesis interacts with the epistemic thesis in that the truth of the normative thesis yields indirect evidence for the truth of the epistemic thesis. In sections 1. 5. 6 and 2. 4 I sketch some of the implications of my discussion for the epistemic thesis.

¹² A notable exception is Langland-Hassan (2015).

¹³ In the next section I clarify what the phrase ‘mind-to-world direction of fit’ means and how it relates to the claim that beliefs aim at truth. The phrase that beliefs aim at truth was coined by Williams (1973b). The view that beliefs have a mind-to-world direction of fit has been defended most recently in Engel (2004), Sha (2003), Velleman (2000), Walker (2001), Wedgwood (2002). Both theses have been discussed critically in recent years. In particular, the view that belief aims at truth has been contested and is rejected by Davidson (1984), Rorty (1986), (1995) and Rosenberg (2002). For critical discussion on this see for example Chan (2013), Chrisman (2010), Cote-Bouchard (2016), Steglich-Peterson (2006), (2009), (forthcoming), Whiting (2012), (2013).

¹⁴ For a recent defense, see Hazlett (forthcoming).

Third, the normative thesis promises to ground our philosophical practice of engaging in thought experiments. As Yablo (1993) observes, in many philosophical debates, “theoretical worries forgotten, conceivability evidence is accepted without qualm or question” (2).¹⁵ Imagining p (or conceiving p) is standardly considered evidence for p being possible, despite several theoretical arguments to the contrary. I believe that the normative thesis can indirectly justify the epistemic thesis, according to which imaginings are an epistemic guide to possibilities. The rough idea is that if imaginings aim to represent possibilities, modal belief can be justified based on imagination, as long as subjects imagine as they ought to. The normative thesis hence could yield an explanation as to why the epistemic thesis could also be true.

Fourth, if the normative thesis turns out to be true, we are one step closer towards understanding the cognitive roles imaginings play. It is plausible to assume that imaginings must be subject to norms to be able to play cognitive roles. Suppose, I deliberate over possible future career paths and use imagination in my deliberations. In such a case, some imaginings are better suited to the task than others. For example, I ought not imagine a scenario in which Barack Obama is walking his dog under the assumption that walking Obama’s dog is not a possibly future career for me. Examples like this suggest that there is a tight connection between the normativity of imagination and the cognitive roles imaginings play. Understanding the cognitive roles of imaginings consists in part in clarifying under which conditions subjects imagine as they ought to.

¹⁵ For criticisms of the epistemic link between imagination and possibility, see in particular Putnam (1975), (1990) and van Inwagen (1998), but also Kung (2010) and Dominic Gregory (2010) can be considered moderate modal skeptics.

There is one further reason as to why the normative thesis ought to be discussed. The question whether imagination is an epistemic guide to possibility has received a fair amount of attention in recent years, which is at least partially due to a revived critical interest in the methods of philosophy.¹⁶ Whether imagination aims at representing possibilities has, to my knowledge, so far only been discussed in passing. Those who are intuitively sympathetic to this thesis, such as McGinn (2004) and Yablo (1993), have not provided extensive arguments for it. Those who are intuitively skeptical of it, such as Langland-Hassan (2015) and Dorsch (2012), have not provided detailed arguments against it. In this chapter I have set my sights on closing this research gap. I side with the skeptics and give in-depth arguments against the normative thesis. Even though this task is primarily destructive, it is at the same time an important step towards providing a true account of the normativity of imagination.

The structure of the chapter is as follows. In section 1. 2 I introduce the normative thesis in more detail. I address the problematic nature of relevant terms, such as ‘direction of fit’ and ‘aim’ and suggest that the normativity of imagination is to be formulated in terms of ‘ought’ claims. In section 1. 3 I discuss an important preliminary matter: whether we can imagine, not possibilities, but impossibilities. As we will see, this topic affects the evaluation of the normative thesis. In section 1. 4 I argue against the normative thesis by counterexample. I then address objections to my line of reasoning in section 1. 5. First, I introduce three variations to the normative thesis and argue against them by counterexample (sections 1. 5. 1 to 1. 5. 3). Since the strategy of presenting counterexamples is limited, in section 1. 5. 4 I offer a principled reason to reject the normative thesis: imaginings fulfill an array of different cognitive functions

¹⁶ See Gendler and Hawthorne (2002), Hill (1997), van Inwagen (1998), Kung (2010), Williamson (2007), among others.

that are only in part linked to possibilities. In section 1. 6 I reject the claim that in imagining p , it necessarily phenomenally seems to me that p is possible. This claim is discussed in this chapter as it could, if true, provide indirect evidence for the normative thesis. This concludes my discussion. In the next chapter, in section 2. 4, I show that the findings in the current chapter have only minor ramifications for our understanding of the philosophical practice of thought-experimentation and do not put additional pressure on its reasonableness. There I also briefly explain why our intuitions about a tight relationship between imagination and possibility can nevertheless be correct, given that the normative thesis is false.

1. 2 The Normative Thesis

Here is our normative thesis on imagination:

(Poss-Ought) For any imagining, any proposition p and subject S , S ought to imagine p if and only if p is possible.¹⁷

In what follows I clarify this thesis and discuss how it relates to alternative formulations.

First, a note on imaginings. As I understand the term, imaginings are intentional mental states that necessarily involve mental imagery. An example is picturing an elephant sitting on a swing. Not all imaginings are phenomenally conscious. Yet brought to consciousness, a mental state that involves imagery typically has a specific

¹⁷ To be clear, this is not to be interpreted as a conceptual claim, as a claim derivable from the meaning of the term 'imagining'.

phenomenal character. A mental state has a phenomenal character if and only if there is something it is like for a subject to be in it. Typically, the phenomenal character of conscious imaginings differs from the phenomenal character of perceptions. What it is like for me to perceive *p* differs from what it is like for me to imagine *p*. Nevertheless, perceptions and imaginings are also phenomenally alike. Typically, we distinguish imaginings relative to modes, akin to how we distinguish different sensory modes in perception. Auditory imaginings differ from visual imaginings, and tactile from olfactory imaginings, and so on. Moreover, typically, what it is like to visualize *p* is similar to what it is like to see *p*; and what it is like to auditorily imagine *p* is similar to what it is like to hear *p*. Imaginings are sometimes also called ‘sensory’, because they share properties with sense perception, such as their mode-specific phenomenal similarity, while others prefer the term ‘quasi-sensory’ instead of ‘sensory’.¹⁸ Imaginings do not causally depend on sensory inputs in the way that perception does, for example. For the ease of readability, throughout this dissertation, I use the term ‘sensory imaginings’ instead of ‘quasi-sensory imaginings’.

A brief remark on the content of imaginings. The overall contents of imaginings typically outstrip their image contents. In other words, what imaginings are about is more than what images are about. As Sellars observes, “imagination is a ‘blend’ of imagery and conceptualization (1978, sect. 11)” (Currie and Ravenscroft (2002: 101, fn13). Here are some examples to illustrate this. I visually imagine an elephant sitting on a swing. In the imagined scenario, the elephant is my mother. But this is not represented visually, it is conceptually supplied. Here is another example: I visually

¹⁸ Furthermore, sense perceptions are typically more detailed, while imaginings can be faint. Whether these are categorical or gradual differences and which further differences exist is subject to much debate, but an answer to this question does not matter for current purposes.

imagine participating in a soccer game as the goal keeper. The game is on and I am standing in the goal, ready to block the ball. It is the FIFA World Cup finals, my team is Germany and it is July 13, 2014.¹⁹ That it is July 13 in 2014 is not represented visually, but it is still part of the overall imagination content. It is something that I stipulate in addition to what I picture. To borrow Peacocke's (1985) well-known example, suppose I imagine a cat that is occluded by a suitcase. My imagining involves a visual image of a suitcase, but it is also true in the scenario that there is a cat occluded by the suitcase.

In these examples, more things are the case in the imagined scenarios that can be or are represented in the image. This suggests that the overall contents of imaginings involve both mental imagery and conceptual contents. Some contents will be conceptually supplied, by stipulation, for example. That conceptual contents form an interplay with image contents seems to be a common feature of the contents of imagination. We can call this the two-fold view of the contents of imagination, since according to it imagination involves both imagery and conceptual contents. Versions of such a two-fold view of the contents of imaginings have been defended recently in Kung (2010), Langland-Hassan (2015), Martin (2002), Peacocke (1985) and Wollheim (1973b).²⁰

A few more remarks on the contents of imaginings. According to my view, the contents of imaginings can be modal. I can, for example, imagine that it is metaphysically possible that I travel back in time. Yet in the current context, and

¹⁹ Germany won the FIFA World Cup playing against Argentina in that game.

²⁰ It is not certain that Martin (2002) and Peacocke (1985) distinguish contents in this way. On Martin's (2002) view, sensory imaginings involve imagery and what he calls 'imaginative projects'. On Peacocke's (1985) view, sensory imaginings involve imagery and so-called S-imaginings, or Supposition-imaginings. It is open for debate whether 'imaginative projects' and 'S-imaginings' are conceptual contents. We leave these complications aside for now. For criticism of Martin's, Peacocke's and Kung's account of the contents of imaginings, see Wiltsher (2016) and my response (manuscript).

throughout this dissertation, ‘*p*’ is, for simplicity’s sake, confined to non-modal contents. Nevertheless, (*Poss-Ought*) if true, is true of all imaginings, i.e. also those with modal contents. For all subjects, *S*, and all propositions, *p*, if *S*’s imaginings that *p* comply with (*Poss-Ought*), then *S*’s imaginings that possibly *p* comply as well. If *S*’s imagining that *p* does not comply with the norm because *p* is impossible, then *S*’s imagining that possibly *p* also does not comply with the norm, since it is also impossible that *p* is possible.²¹

A clarification concerning the propositional nature of imagination. I am concerned with norms on propositional attitudes, i.e. attitudes that stand in relation to propositions. In line of this, (*Poss-Ought*) holds for imaginings that are related to propositions. Yet, how adequate is this for imagination? Some, in the wake of Yablo (1993), distinguish between propositional imagination and what is called ‘objectual imagination’.²² Objectual imagination does not stand in relation to a proposition but an object instead. An example of an objectual imagining is imagining a tiger, while an example of a propositional imagining is imagining that there is a tiger. While the propositional imagining that there is a tiger can be true or false (veridical or falsidical, respectively), an objectual imagining cannot be true or false, but refers or does not refer. Objectual and propositional imaginings seem to differ in their satisfaction conditions. The distinction between objectual and propositional imagining corresponds to a grammatical distinction in English, and other natural languages, such as German and French. Yet grammatical differences do not necessarily also correspond to differences in

²¹ In case of interest: This line of reasoning is supported by the modal logic system S5, that was suggested in Lewis and Langford (1932), popularized by Kripke and is widely accepted among philosophers. In S5, ‘necessarily possibly *p*’ follows from ‘possibly *p*’.

²² For more on propositional imaginings and how they differ from objectual imaginings, see Mulligan (1999); Currie and Ravenscroft (2002); McGinn (2004); Goldman (2006); Weinberg and Meskin (2006).

that which the sentences refer to. From a linguistic fact about attitude ascriptions one is not thereby always licensed to draw inferences concerning the nature of mental states. It is a plausible assumption, in my view, that whenever a sentence of the form ‘I imagine o’ is true, there is some sentence of the form ‘I imagine that p’ is true as well; moreover, the first is true because the second is. Consider the sentence ‘I imagine a tiger’ and ‘I imagine that there is a tiger’, for example. Each sentence, it seems is about there being a tiger in the imagined scenario. This suggests that the distinction between objectual and propositional imaginings does not concern the contents of the mental states. If that is so, (*Poss-Ought*) applies to all sensory imaginings. While I am inclined to endorse this view, I am aware that it requires a further in-depth defense, which I will not provide here. If it is false, (*Poss-Ought*) merely applies to a subset of sensory imaginings, namely the propositional ones. As there are infinitely many propositional imaginings, it remains a substantial and interesting thesis.

A brief remark on the difference between imagining and conceiving. I stipulate that the terms ‘imagining’ and ‘conceiving’ refer to slightly distinct kinds of mental attitudes. I distinguish them in virtue of whether imagery is essential to them as a kind or not. On my understanding, conceivings are intentional mental states that can represent in a ‘quasi-sensory’ way, just as imaginings do. Yet they do not need to do so in order for them to be conceivings. The difference between conceiving and imagining is that imagery is not in the nature of conceiving.²³ An example of a conceiving that is not also an imagining is conceiving of myself winning the FIFA World Cup without employing any mental imagery. The content of this mental state is that I win the FIFA

²³ You might wonder how we then distinguish conceivings from beliefs. I will not go into detail about this here. Suffice to say that conceivings are subject to the will in a way that beliefs are not. Moreover, conceivings are not subject to the norm of truth in the way that beliefs are.

World Cup. This content is conceptually supplied. As you can see, on my understanding, the difference between imagining and conceiving comes down to one property. Imagining anything entails imagining something sensorily, whereas conceiving anything does not entail this. What follows from this for our evaluation of (*Poss-Ought*)? (*Poss-Ought*) thereby is a thesis that can be applied to conceiving also. My analysis is of interest not only to philosophers of mind working on sensory imagination, but modal epistemologists as well.

A note on the nature of the ought-claim. According to (*Poss-Ought*), subjects ought to imagine p if and only if p is possible. Formulating norms on attitudes in terms of ought-claims comes with two main advantages. The first advantage is this. Talk of the normativity of attitudes, as it is common in the literature, involves the implicit assumption that attitudes themselves are subject to norms. Yet it is somewhat unclear what this means, if taken literally. This way of speaking obscures slightly who or what exactly the bearer of these norms is.²⁴ It occludes that, in the first instance, the bearers of the norms are subjects. For example, it is generally accepted that I can be held accountable if I primarily form false beliefs or do not act according to my desires. What subjects believe; which ways they behave; and what reasons they have for behaving as they do, are all connected to the accountability and blameworthiness of subjects. Formulations in terms of ought-claims have the crucial advantage that they explicitly expose the normative demands on the subject.

The second advantage is that formulations in terms of ought-claims are subject to fewer ambiguities than alternative terminologies. In the recent literature, norms on attitudes are commonly formulated in terms of a direction of fit, an aim or correctness

²⁴ This problem is briefly addressed in Frost (2014).

conditions of an attitude. Whichever terminology you prefer it comes with certain problems.

To illustrate, consider the ‘direction of fit’ terminology.²⁵ Philosophers standardly distinguish between two directions of fit mental states can have, a mind-to-world and a world-to-mind direction of fit. Most of those who endorse the directions of fit framework, believe that desires have a world-to-mind direction of fit and beliefs and perceptions a mind-to-world direction of fit. Other attitudes can also be classified in this way. Intending, hoping and wishing plausibly have a world-to-mind direction of fit; remembering plausibly has a mind-to-world direction of fit, for example. The normative thesis on imagination can be formulated as follows: Imagination has a mind-to-possible worlds direction of fit.

On the face of it, a direction of fit can loosely be understood as a relation between two relata: the content of a mental state and the world. There are two directions of the fitting, two sorts of that relation. In desiring something, I want the world to be a certain way. I desire certain facts to obtain. In the case of desires, the world ought to fit the mind.²⁶ This is one fitting relation. In the case of beliefs, if the world is a certain way, the content of my belief ought to be as the world is. The mind should fit the world. This is the other fitting relation. In the case of our normative thesis, the subject should change their mind to fit, not the world, but possibilities. The two relata are the content of a mental state and not the world, but possible states of affairs. Imaginings are directed at a fit between what they are about and what is possible. The direction of the

²⁵ The distinction between directions of fit was originally introduced by Anscombe (1957/2000) in the context of understanding practical knowledge and intentions, while the term ‘direction of fit’ first mentioned in Searle (1983). On the notion of direction of fit, see Anscombe (1957/2000), Gregory (2012), Humberstone (1992), Frost (2014), Platts (1979), Searle (1983), Sobel and Copp (2001), Velleman (1992), Velleman and Sha (2005), Zangwill (1998) and many others.

²⁶ To be clear, the world ought to fit the mind also in cases where my desires are perverse. This notion of ‘ought’ is not an objective, or moral ought.

fitting is the same as it is for beliefs, as the mind should fit possibilities and not the reverse.

I set aside this framework, despite its common usage, as it is unclear what exactly the notions that are involved mean. To illustrate: consider ‘world’. If we ask ourselves what ‘world’ exactly refers to, it transpires that there is no uniform answer.²⁷ In the case of beliefs and other mental states with the same direction of fit, the notion of a ‘world’ plausibly refers to facts. The contents of beliefs should fit facts. For desires this interpretation does not make much sense. It is not the case that whenever we desire something, facts should fit the content of a desire. A desire for facts to hold is a very peculiar kind of desire. Typically, we desire that which does not yet obtain. Arguably, for desires, ‘world’ refers to potential facts of some sort. In our normative thesis on imagination, ‘world’ is best interpreted as referring to sets of propositions. If the notion of ‘world’ referred to all facts, instead, as in the case of beliefs, then facts about possibilities would be part of the world, too. On my view, as the notion of a world is ambiguous, it obscures matters more than it can illuminate the normative difference between attitudes. The same applies, I believe, to the terms ‘fitting direction’, and ‘fit’, yet I do not intend to show this here. In recent years the framework has received substantive criticism.²⁸ Frost (2014) argues extensively that the very idea of a direction of fit should be abandoned.

Alternative conceptual frameworks do not fare better. At the beginning of this chapter I formulated the normative thesis in terms of an aim that imaginings have. Kind (2015) states that imaginings aim at representing the fictional. According to Balcerak-

²⁷ There are some well-known discussions of this problem. Ryle (1949) writes in *The Concept of Mind* that “[e]ven the solemn phrase ‘the physical world’ is as philosophically pointless as would be the phrase ‘the numismatic world’, ‘the haberdashery world’, or ‘the botanical world.’” (199).

²⁸ See Gregory (2012), Frost (2014) and Sobel and Copp (2001).

Jackson (2016), imaginings aim to capture the character of possible experiences. Many philosophers hold the view that beliefs aim at truth. It has been argued that desires aim at the good, or else, the attainable.²⁹ We can reformulate (*Poss-Ought*) as the claim that imaginings aim to represent possibilities. Philosophers usually accept that the notion of an aim is normative. It also is metaphorical.³⁰ It is archers and snipers that literally aim at objects. It is unclear in which sense mental states can have an aim in and of themselves, as they are not able to act intentionally. (*Poss-Ought*) has the advantage of making the subject the bearer of the norms in question.

It has been suggested to interpret the 'aim' as the function of a cognitive capacity, which can be defined in terms of natural selection.³¹ In that sense, the function of a capacity is that which the capacity was selected for. For example, our capacity to form beliefs has the function to form true beliefs as this is what the capacity was selected for. We can call this the biological function and speak of a teleological aim. But it is unclear how useful this explication is in understanding the normativity of attitudes. It is unclear whether beliefs, desires and imaginings have a biological function in that sense. Moreover, those who hold that beliefs aim at truth, think it is epistemically good that beliefs aim at truth, rather than good from the point of view of fitness in the biological sense. Truth is regarded as an epistemic norm, and not a biological norm. Yet how epistemic norms relate to biological functions is unclear. One would need a much

²⁹ The view that desires aim at the good is problematic as it requires us to identify the kind of good that is involved, which is not easy to pin down. Desires do not seem to aim at the morally good, for example. Furthermore, desires exist of which the satisfaction would be patently bad for you. One thought is that desire satisfaction is good for the subject merely in virtue of its being a satisfied desire. It can be argued that this is a primitive normative fact about desires. To flesh out this thought further, one could appeal to degrees of goodness. Satisfying a desire which has negative consequences for myself will nevertheless be good to a certain degree, only in virtue of being satisfied. For further discussion of this point, see Frost (2014).

³⁰ See for example Wedgwood (2002).

³¹ Millikan (2004) argues that the aim of a capacity should be understood in terms of its evolutionary function.

better grip on the evolution of minds than we currently have to claim with confidence that beliefs also have the biological function to be true.

Frost (2014) points out another difficulty in formulating the normativity of attitudes in terms of ‘aims’. The terminology is problematic because it obscures important differences between the normativity of belief and desire. While the claim that beliefs aim at truth expresses an epistemic norm, the same cannot be said for desires. It is not considered to be epistemically good to have attainable desires, for example. This suggests that the aim of belief and desires is not the same type of normative property.³²

Let us return to (*Poss-Ought*). I hope to have shown in the previous paragraphs that notion such as ‘direction of fit’ and ‘aim’ are more problematic than illuminating in fleshing out the normativity of attitudes. Nevertheless, (*Poss-Ought*) also gives rise to questions. In fact, some of my discussion suggests that ‘ought’ is a better concept to use, while other parts suggest it is no worse than others. Here are two concerns ought-claims yield:

First, ought-claims require an explanation of the kind of normativity involved: that is, given that there are many different varieties or flavors of ‘ought’, what does ‘ought’ mean? Are we concerned with a rationality norm, an epistemic norm, a biological norm, a teleological norm, ...? Second, it is unclear exactly what the truth-makers of these ought-claims are. (*Poss-Ought*) concerns norms on subjects which are plausibly grounded in properties of propositional attitudes. But which properties these are is unclear. In my view, both concerns affect all formulations on the normativity of attitudes, be that formulations in terms of ‘ought’, ‘aim’, ‘fit’ or ‘direction of fit’. To be

³² This problem is also addressed in Frost (2014).

clear, I will not solve these problems in what follows. I will however address the question which kind of normativity is involved in (*Poss-Ought*) when evaluating this thesis in some detail in section 1. 5.

A remark on the relationship between (*Poss-Ought*) and the normative theses that can be extrapolated from the quotes at the beginning of the chapter. Those who prefer the terminology of ‘direction of fit’ or ‘aim’ (*Poss-Ought*) can charitably translate (*Poss-Ought*). If you prefer, you can say that I discuss the view that imaginings have a mind-to-possibility direction of fit. *S* ought to change their mind to fit not the world, but possibilities.

Recall the view Yablo (1993) advocates. According to him, imagining *p* is “to be in a state which (i) is veridical only if possibly *p*, and (ii) moves you to believe that *p* is possible” (4). Statement (i) is of interest to us, as it involves a normative claim. Imagining *p* is to be in a state which is veridical only if possibly *p*. Let me clarify his view. First, a note on the nature of the conditional. Yablo endorses a necessity claim. For imagining *p* to be in a state which is veridical it is necessary that *p* is possible. (*Poss-Ought*) states a biconditional instead. According to (*Poss-Ought*), *S* ought to imagine *p* if and only if *p* is possible. Yablo’s position is significantly weaker than (*Poss-Ought*). Second, let me address his usage of the term ‘veridical’. I hold the view that mental states, such as beliefs or imaginings consist in relations to propositions. We can distinguish the mental state or attitude from its content or, what is the same, the proposition it relates us to. Typically, a mental state that *p* is veridical or true if and only if it represents *p* accurately or truthfully.³³ In that sense, the term ‘veridicality

³³ A clarificatory remark. For current purposes, the difference between truth and veridicality is negligible. It is a plausible assumption that the difference is related to differences between conceptual and image contents, but not to a difference in the kind of normative conditions itself.

conditions' is equivalent to 'truth conditions' and refers to normative conditions on the contents of a mental state. It does not refer to the normative conditions on the mental state or attitude. Yablo uses the term 'veridical' in a different sense. To him, 'veridical' refers to the normative conditions on the mental state or attitude. The attitude of imagining p is veridical only if p is possible. This normative condition on the mental state or attitude is called the correctness condition of the attitude in other places. Philosophers, such as Velleman (1992) for example have argued that beliefs are correct only if they are true.

Third, let me explain how his view relates to (*Poss-Ought*). We can reformulate Yablo as stating the view that the attitude of imagining p is correct only if p is possible. In what follows, throughout the dissertation, I reserve the term 'correctness condition' for the normativity of the attitude or mental state. 'Veridicality condition' refers to a condition on the content of mental states alone. All intentional mental states, such as perceptions, beliefs and imaginings, can be veridical or true, given that they have intentional contents. In Chapter Two I argue that imagination is not subject to attitude-specific normativity. As I reserve the term 'correctness conditions' for normative conditions on a propositional attitude, it follows from this that not all intentional mental states have correctness conditions.

Let us return to the content of Yablo's claim. In my view, we can charitably reformulate Yablo's view in terms of an ought-claim. As he formulates his thesis as a necessary condition, it is arguably equivalent to the necessity side of (*Poss-Ought*). (*Poss-Ought*) claims that S ought to imagine p if and only if p is possible. Yablo defends the view that for imagining p , there is a norm such that a subject S ought to imagine p only if p is possible. (*Poss-Ought*) can be formulated as the claim that

imagining p is correct if and only if p is possible. The biconditional claim is logically stronger than the necessity or the sufficiency claim and therefore the more interesting thesis. I proceed in evaluating (*Poss-Ought*) by critically discussing both in isolation in the next section, 1.4.

There is no consensus on how to individuate propositional attitudes in the literature, but it has been argued that an attitude can be defined or individuated in terms of its normativity.³⁴ Some philosophers argue that it is the nature or essence of beliefs to aim at truth. If (*Poss-Ought*) is true, I don't think it follows that imaginings can be defined or individuated in terms of it. (*Poss-Ought*), if true states a necessary property of imaginings, yet it does not state all there is to the nature of imaginings. On my view, it is a necessarily true biconditional, but not a definition of imagination. To put it in a slogan: it might be in their nature, but not their nature. In the literature on directions of fit and aims of attitudes, it is generally accepted that the normativity of an attitude is constitutive of it.³⁵ For example, Wedgwood (2002) argues that it is constitutive of beliefs that they aim at truth. (*Poss-Ought*), if true, refers to a constitutive property of imaginings. I believe that the normativity of an attitude is at least partly constitutive of it, but want to leave it open as to whether an attitude might have further constitutive properties.

To clarify, normative properties captured by claims such as (*Poss-Ought*) are intrinsic properties of any mental state token that belongs to the attitude of imagination. This implies that they cannot be determined by a context of usage, for example, or the

³⁴ For more on this see for example Chan (2013), Humberstone (1992) and Wedgwood (2002).

³⁵ The claim that attitudes have a constitutive aim is endorsed by many, see for example Christman (2010), Shah (2003), Velleman and Shah (2005).

overall cognitive state that a subject is in, or by an intention the subject has.³⁶ Moreover, (*Poss-Ought*) refers to attitude-specific normativity. Attitude-specific norms are norms that are specific to a propositional attitude. For a norm to be *specific* to an attitude it is a necessary property of the attitude that it is subject to the norm. It is nevertheless not an exclusive property of an attitude. Other propositional attitudes can be subject to the same norm.³⁷ The norm of truth and the norm of the good are attitude-specific norms in this sense. It is a necessary property of the attitude of belief that it is subject to the norm of truth and every token belief is subject to it. Many argue that desire is subject to the norm of the good. If this is right, then it is a necessary property of the attitude of desire and every token desire is subject to this norm.

In philosophy, some argue that the normativity of an attitude can in principle be reduced to its functional or dispositional profile.³⁸ To give an example, Michael Smith argues that a belief that *p* roughly is “a state that tends to go out of existence in the presence of a [veridical] perception that not *p*, whereas a desire that *p* is a state that tends to endure [in the presence of a veridical perception that not *p*], disposing a subject in that state to bring it about that *p*” (1987: 54). Such projects are exceptionally appealing to those who have set their sights on reducing the normative to the non-normative. Throughout this dissertation I leave open the question whether such reductionist programs are in principle able to succeed.³⁹ I endorse the weaker and less

³⁶ This point will be important in Chapter 2, when I introduce my proposal on the normativity of imagination.

³⁷ It is not an exclusive property of an attitude. Other propositional attitudes can be subject to the same norm. This understanding of specificity is compatible both with a broad and fine-grained carving up of norms and/or propositional attitudes. It is compatible with claiming that hoping and desiring are distinct propositional attitudes that are subject to specific norms each, such as the attitude-specific norm of the good, and the attitude-specific norm of the attainable. Or else, one can also argue that desiring and hoping are the same propositional attitude which is subject to the attitude-specific norm of the good.

³⁸ See for example Humberstone (1992), Smith (1988), Zangwill (1998).

³⁹ Sobel and Copp (2001) and Gregory (2012) argue against descriptive understandings of the normativity of attitudes. I agree with criticisms of Smith’s, Humberstone and Zangwill’s proposals as

controversial claim that the normativity of an attitude supervenes on (even if it might not be reducible to) the functional profile of a mental state. (*Poss-Ought*) if true, supervenes on the functional profile of imaginings.

Before we can discuss (*Poss-Ought*), we have to clarify the scope of possibility at issue. (*Poss-Ought*) states that for any imaging, any proposition p and subject S , S ought to imagine p if and only if p is possible. One central motivation for this thesis stems from observations on the cognitive roles that imaginings play in philosophical reasoning. In philosophy, we are sometimes interested in establishing or refuting what seem to be necessary truths. In doing so, we are interested in necessity in its broadest but nevertheless real sense – metaphysical necessity, or necessity *tout court* as it has been called. In philosophy, we present purported counterexamples to necessity claims by presenting state of affairs that are metaphysically possible or possible *tout court*. Metaphysical possibility can be defined in terms of unrestricted quantification over worlds. We can use a standard definition of possibility and necessity, and use an unrestricted quantifier over worlds to obtain metaphysical possibility and necessity, for example. We can use a popular image introduced by Kripke (1972/80) to illustrate metaphysical possibility. Consider God who created the world. Metaphysically possible is all that which God could have created. God could not have made it the case that 2 plus 2 equals 5. Mathematical truths and logical truths are metaphysically necessary. But she could have made it the case that there are no mammals on Earth, that the sun is closer to the Earth, that there is more heat, etc. God could have created a world in which my dog can travel faster than light. Metaphysical possibilities are hence broader than

they have been voiced in the literature, but rejecting proposals does not imply rejecting the project as a whole.

possibilities that are in line with the laws of physics or that will forever be technically possible for us.

How is it with ordinary reasoning? Byrne (2005) suggests that in ordinary counterfactual reasoning we sometimes “think about impossibilities that could never happen – for example [we] (...) can imagine that Martin Luther King was a European civil rights leader“ (2). That Martin Luther King was born in Europe and became a European civil rights leader also is a metaphysical possibility. God could have created a world like this. This observation suggests that in philosophical methodology and ordinary reasoning alike we are concerned with metaphysical possibilities. For this reason, I focus on the claim on metaphysical possibility in the next sections 1. 3 and 1. 4:

(Met-Ought) For any imaging, any proposition p and subject S , S ought to imagine p if and only if p is metaphysically possible.

To be clear, we are at times interested in theses that are only nomologically possible. For example, the computational theory of mind says that for many psychological states P , there is some computational or informational state I such that I is nomologically sufficient for P .⁴⁰ In section 1. 5 I briefly discuss a version of *(Poss-Ought)* that is concerned with nomological possibility.

Finally, we need to address a problem that concerns the current formulation of *(Met-Ought)*. The claim that a subject S ought to imagine p if and only if p is

⁴⁰ Tononi’s (2007) integrated information theory is an instance of this view. While the thesis is only nomologically necessary, it is still interesting from a philosophical point of view because it constrains what explanations in psychology will look like.

metaphysically possible implies that whenever p is metaphysically possible S ought to imagine p . According to the sufficiency side of (*Met-Ought*) it is sufficient for a subject S that they ought to imagine p that p is metaphysically possible. In other words, the sufficiency side of (*Met-Ought*) requires subjects to imagine everything that is metaphysically possible. For every metaphysically possible p , I ought to imagine it.⁴¹ For imaginings, this is an unwanted result. It is plausible that subjects sometimes ought to imagine p , in cases where p is metaphysically possible, but it is much less plausible that this holds in general. Consider the following example: Suppose it is possible that President Donald Trump is impeached before 2020. Does it follow from this that subjects ought to imagine that President Donald Trump is impeached before 2020? That seems false.

What I have in mind with (*Met-Ought*) is rather something along the following lines: Whenever subjects imagine something, they ought to imagine something that is metaphysically possible.⁴² We obtain this reading more easily by concentrating on the impermissibility claim that is logically equivalent to the ought-claim. Ought-claims, such as ‘ S ought to F ’ are interdefined with permissibility claims, such as ‘It is not permitted for S not to F ’. The claim that subject S ought to ϕ is logically equivalent to the claim that it is not permitted for subject S to not- ϕ . Here is the permissibility-claim that is equivalent to (*Met-Ought*), (*Met-Imp*) for short: For any imagining, any proposition p and subject S , it is not permitted for S to imagine p if and only if p is metaphysically impossible. Nevertheless, (*Met-Imp*) is somewhat jarring due to the negation it contains.

⁴¹ Analogously, the claim that a subject S ought to believe p if and only if p is true implies that whenever p is true, a subject ought to believe p .

⁴² Similarly, for beliefs, whenever subjects believe something, they ought to believe something true.

For this reason, for the ease of readability, I stick to the original formulation in (*Met-Ought*) throughout this dissertation.

This concludes my clarification of the normative thesis for imagination. I delineated my understanding of imaginings and how to distinguish them from conceivings. For simplicity's sake, I intend to exclude modal contents of imaginings in evaluating the thesis. On my view, imaginings stand in relations to propositions, or at least the thesis under discussion is confined to imaginings that do. In the literature on the normativity of attitudes different conceptual frameworks are used – directions of fit, correctness conditions or aims. Formulating the normative thesis on imagination in terms of ought-claims comes with advantages over these alternatives. I also situated my thesis next to the normative theses on imagination that can be extrapolated from the quotes at the beginning of the chapter. I explained my interpretation of the biconditional in (*Poss-Ought*). On my view, imaginings are not to be defined in terms of their normative properties, even though normative properties are necessary properties. I clarified that normative properties of attitudes as expressed in claims such as (*Poss-Ought*) are intrinsic and do not depend on contextual factors. The normative thesis arguably stands in an interesting relationship to the cognitive function of imaginings. While I do not believe that imaginings can be defined in terms of their functional profile I do believe the normativity of imaginings supervenes on it. I clarified the scope of possibility that is at issue in (*Poss-Ought*) and gave reasons to primarily focus on metaphysical possibilities. I will nevertheless also discuss nomological possibilities in sections 1. 5. 1. Finally, I addressed a problem concerning the current formulation of (*Met-Ought*). After this extended clarification, we are now ready to begin our discussion.

1. 3 Metaphysical Impossibilities

(Met-Ought)

For any imaging, any proposition p and subject S , S ought to imagine p if and only if p is metaphysically possible.

(Met-Ought) implies that it is not permitted for subject S to imagine p if and only if p is metaphysically impossible. It is not permitted, for example, to imagine a world in which two plus two equals five. Given our earlier characterisation, it is not permitted to imagine any world God could not have created.

In evaluating *(Met-Ought)* we are faced with an interesting obstacle. It is unclear whether subjects can fail to comply with this norm. It is beyond doubt that beliefs can be false and desires unsatisfied. Yet there is a substantial philosophical debate over whether we can imagine metaphysical impossibilities. Because this is unclear, we seem to be faced with a dilemma: Either we cannot imagine impossibilities and the norm that *(Met-Ought)* posits is trivially satisfied. But this seems to be a good reason to question *(Met-Ought)*. Or else, we can imagine metaphysical impossibilities. In this case, we can provide counterexamples to *(Met-Ought)*. Or so I argue in what follows.

In this section I focus on the first horn of the dilemma. I now motivate the idea that we cannot imagine metaphysical impossibilities. Different reasons in favor of it can be found in the literature. First, consider the phenomenon of imaginative resistance which is commonly discussed in the philosophy of imagination. Imaginative resistance refers

to resistance subjects robustly and consistently display when trying to imagine mathematical falsehoods being true or necessary moral claims being false, for example. Suppose, I ask you to imagine a world in which it is true that two plus two equals twenty-two. You might reply that you cannot do so. You might reply that you can merely imagine a world in which this seems to be true, but not one in which it is in fact true. After all, it is impossible that two plus two equals twenty-two. You experience imaginative resistance. Resistance is not considered to occur when we are asked to merely assume or suppose that a mathematical falsehood holds, rather than imagine it.⁴³ A standard explanation of imaginative resistance refers to an inability to imagine, instead of unwillingness. Subjects might be unable to imagine metaphysical impossibilities because it might be necessary in order for a mental state to be an imagining that it is about something possible.⁴⁴

Second, consider theories in philosophy of language and intentionality that provide unified accounts of intentionality and mental content. On Chalmers' (1996, 2002, 2004) version of Two-Dimensional Semantics, there are two dimensions of meaning: a 'primary' and a 'secondary intension'. Mental contents are what are called 'primary intensions'. For current purposes, what matters in understanding this view is that according to it our seeming ability to imagine metaphysical impossibilities can be explained away. Let me explain this a bit further. Let's say it is necessarily true that water is H₂O.⁴⁵ The concept 'water' and the concept 'H₂O' have a primary and a

⁴³ See for example Gendler (2000), Gendler and Liao (2016), Liao (2016) and Stock (2005).

⁴⁴ Recall the account of the contents of sensory imagination which I fleshed out in section 1. 2. Suppose I imagine that mathematicians announce that $2+2=22$. On my view, I can stipulate that this is true in the imagined scenario. Such a stipulation does not necessarily confront resistance. The standard explanation of imaginative resistance in the literature is in tension with my view on the contents of sensory imagination. I further elaborate on the nature of stipulations in chapter 4, section 4. 4.

⁴⁵ Simonian (2004) has, in my opinion correctly so, argued that this identity statement is false, but we can disregard this.

secondary intension. The primary intension of the concept ‘water’ might be something like ‘the clean, watery stuff that is drinkable and flows in our rivers, etc.’ Whenever we seem to imagine that water is not identical to H₂O, we in fact imagine that the clear, watery stuff that is drinkable and flows in our rivers is not identical to H₂O. The latter is a metaphysically possible scenario. Whenever we seem to imagine that a metaphysical impossibility holds, for example that water is not identical to H₂O, we merely misdescribe the contents of what we imagine. This explanatory strategy appeals to our inability to describe the contents correctly.⁴⁶ This view is not restricted to imaginings, but holds across all thought contents, and includes beliefs and conceivings. A central motivation for this approach in Two-Dimensional Semantics is to re-establish an a priori epistemic access from the mind (via mental content) to the realm of metaphysical possibilities.

I now present a third position that implies that we cannot imagine metaphysical impossibilities. This position is common among defenders of Possible Worlds Semantics in the philosophy of language. It holds that all thought contents are to be characterized by unstructured intensions.⁴⁷ Each content is equivalent to the set of possible worlds in which it holds.⁴⁸ This also is a typical feature of Two-Dimensional Semantics, which is one kind of Possible Worlds Semantics. The contents of thoughts about metaphysically impossible things are then equivalent to the empty set. Imagining metaphysical impossibilities is impossible, since metaphysical impossibilities do not

⁴⁶ See in particular Kripke (1980) and Chalmers (2002). See Yablo (2002), Bealer (2002), Byrne (2007) for further discussion of what has been called the Kripkean Theory of Modal Error.

⁴⁷ See for example Stalnaker (1984), (2003), etc. and also Lewis (1982), (1986). Stalnaker (1984) applies this idea also to imaginings. For criticisms see, for example, Jago (2014).

⁴⁸ Note that defenders of Possible Worlds Semantics do not need to deny that we can imagine impossibilities. As a way out, some appeal to structured intentions instead of unstructured ones. See for example, relatedly, Soames (1985, 1987) and Salmon (1986a, 1986b, 1989a, 1989b) for a defense of a neo-Russellian view of structured propositions. I briefly discuss this point further below.

correspond to any set of possible worlds. To be clear, in this framework, it is also impossible to believe or desire impossibilities. Imagining impossibilities is no more or less problematic than believing or desiring impossibilities.

I presented three positions from philosophy of mind and language according to which we cannot imagine metaphysical impossibilities. The literature on imaginative resistance describes a purported inability subjects experience when trying to imagine mathematical falsehoods, moral falsehoods, and the like. Two-Dimensional Semantics aims to vindicate an entailment relation between mental content and metaphysical possibilities. The third position, unstructured Possible World Semantics involves a constitutive link between mental content and possible worlds.

I now sketch what follows for (*Met-Ought*) under the assumption that it is impossible for us to imagine metaphysical impossibilities. In that case subjects necessarily imagine as they ought to. If subjects ought to imagine p if and only if p is metaphysically possible, then they necessarily comply with the norm on imaginings. This is so, as it is impossible for subjects to imagine metaphysical impossibilities. It is impossible for subjects to not comply with the norm. This view is problematic for three reasons, the first two of which are related.

The first problem is a general one. Intuitively, a norm that cannot be violated is redundant. Think of a law that states that it is forbidden to carry a square ball with you, or a campus regulation that states that no one is allowed to bring a *perpetuum mobile* to class. Such norms have the curious feature that everyone cannot help but comply with them. This feature seems to make them redundant. Arguably, a norm on imaginings is informative only if it can also be violated, in principle at least; only if it states a real

restriction. After all, such a norm is aimed to inform us about when we imagined correctly and when we imagined incorrectly. But (*Met-Ought*) now states no such restriction.

Second, a norm on attitudes that is trivially satisfied puts pressure on the idea that it is a norm in the first place. Let us focus on representation, as an analogy. It is a common assumption in some parts of philosophy that ‘mental representation’ is normative in the sense that it requires the possibility of misrepresentation, per definition.⁴⁹ In fact, many theories of representation struggle because they have problems explaining misrepresentation.⁵⁰ It is reasonable to say that a norm on attitudes must allow for cases in which the attitude does not comply with the norm in order for it to be a norm on attitudes in the first place.⁵¹ If it is impossible for us to imagine metaphysical impossibilities, (*Met-Ought*) is not a norm.

Third, reasons why imaginings of impossibilities are often considered to be impossible are unrelated to imaginings themselves. This suggests that the norm is trivially complied with for the wrong reasons. Recall the motivations for why we cannot imagine metaphysical impossibilities. It is extremely unclear for example how alluding to a property that all intensions have, can contribute to an explanation of why a specific attitude is correct or incorrect. When formulating (*Met-Ought*) in the first place we were interested in attitude-specific norms. If all mental contents are unstructured intensions or sets of possible worlds then not only imagining, but also believing and desiring impossibilities is impossible. However, beliefs and desires do not fail to satisfy their

⁴⁹ If knowledge is a representational mental state, it is a counterexample to this assumption. I discuss the case of knowledge further below.

⁵⁰ This holds for example for tracking theories of representation, defended by Dretske (1981), (1988), (1995), Fodor (1987), (1990), (1994) and Millikan (1984), (1989). For further discussion, see Mendelovici (2013).

⁵¹ Even if you do not agree with this general claim, you can grant me that it is nevertheless true for many mental attitudes.

attitude-specific norms merely by being attitudes that relate subjects to unstructured intensions or sets of possible worlds. Even if imaginings are necessarily about possibilities, it is unclear whether this should have any ramifications for what is the norm on the attitude of imagining. If (*Met-Ought*) is trivially complied with for the reasons indicated, it seems to not yield any information relevant to the question whether imaginings are subject to attitude-specific norms. It does not seem to capture anymore the sense of normativity we are interested in when we formulate theses like (*Met-Ought*) in the first place.⁵² I believe these are convincing reasons to reject the view that (*Met-Ought*) holds, if imagining impossibilities is impossible.

Let me address an objection to the line of reasoning I presented. It is directed against the view that a norm on attitudes that is uninformative or trivial is either unnecessary or not a norm. The objection goes as follows: Knowledge is a representational mental state and an attitude of its own.⁵³ Knowledge has correctness conditions that are necessarily fulfilled. The attitude of knowing *p* is correct only if *p* is justified true belief. That necessary condition is always met, so the norm is misguided. Yet from this it does not follow that knowledge does not have correctness conditions. Imaginings might be normatively constrained in exactly the same way. If that is the case, then the fact that the norm on imagining is necessarily fulfilled does not imply that it is to be abandoned.

In response to this objection, I point out two disanalogies between knowing and imagining. Because of them, we cannot draw an analogy between imagining and

⁵² If you believe that it is impossible to imagine impossibilities for reasons unrelated to normativity of the attitude, you can claim that only the necessity side of (*Met-Ought*) is true and nevertheless defend a substantive view on what the norms on imaginings are. Only the sufficiency claim, by virtue of which it is sufficient for subjects to imagine as they ought by imagining metaphysical possibilities, is incompatible with the thesis that imaginings are subject to a norm that is unrelated to possibilities.

⁵³ Williamson (2000) defends this view.

knowing in the way the objector does. First, I agree with others who have argued that knowing is not a *sui generis* mental state, which believing and imagining are.⁵⁴ Instead, knowing is best understood as a belief state with additional necessary properties. The reason why knowledge is not a *sui generis* mental state is that it is a kind of belief. As a result, one can argue that knowledge has no attitude-specific correctness conditions. Knowing is only necessarily correct in virtue of knowing being true belief and beliefs being correct if and only if true. The correctness condition on knowledge is therefore not specific to knowing. To be clear, this can hold, even if you believe that knowledge is a *sui generis* mental state or *sui generis* attitude. If you endorse this view, you can still hold that knowledge is only necessarily correct in virtue of it involving true belief.

Second, the analogy fails since imaginings do not have counterparts in the same way that knowledge has belief as its counterpart. Even if knowledge is a *sui generis* state, beliefs and knowledge are closely related. Belief is constitutive of knowledge, arguably. Furthermore, beliefs aim at truth and knowledge inherits this aim from beliefs. For the analogy between imaginings and knowledge to hold there has to be a distinct class of imaginings, let us call them imaginings*, that aim at the possible and from which imaginings inherit this aim. We could argue that there is a set of imaginings of impossibilities that aims to become imaginings of possibilities. It has become popular recently to argue against the view that beliefs aim at truth by arguing that beliefs aim to become knowledge instead. Williamson (2000) is a well-known defender of this view. Unfortunately, this line of reasoning is not available to us, since we stipulated from the outset that it is impossible to imagine impossibilities. In that sense, there are no imaginings that aim to be imaginings of possibilities since all are imaginings of

⁵⁴ See for example Nagel (2013), Leite (2005), Smith (forthcoming).

possibilities, already. Instead, we can say, to continue the analogy: As each episode of imagining necessarily fulfils its aim, it is like knowledge. Yet because imagining impossibilities is impossible, it is like knowledge without beliefs (that are not knowledge) ever having entered the picture. There is no distinct class of imaginings* that imaginings, that are necessarily of possibilities, inherit their correctness conditions from. The analogy therefore fails.

Note that my overall argument only partially rests on the point that norms that cannot be violated are not norms. I argued that there are three reasons why it is implausible to hold that subjects ought to imagine p if and only if p is possible under the assumption that it is impossible for us to imagine impossibilities. One reason was that a norm that cannot be violated seems redundant. Another one was that the reasons why imaginings are impossible are unrelated to imaginings themselves. Only one reason is that a norm that cannot be violated might not be a norm.

1. 4 Against (*Met-Ought*) with Examples

I presented a dilemma at the beginning of section 1. 3: According to the first horn of the dilemma we cannot imagine impossibilities and the norm that (*Met-Ought*) posits is trivially satisfied. This seems to be a good reason to reject (*Met-Ought*). According to the second horn of the dilemma, we can imagine metaphysical impossibilities. In this case, I argue, we can provide counterexamples to (*Met-Ought*). Let us focus on the second horn of the dilemma now. Suppose that we can imagine metaphysical impossibilities. Intuitively, it seems, I can imagine that water is not H₂O but some other chemical substance, or that the wooden table in front of me is made of metal.

Intuitively, it seems, I can imagine that in a very strange world gold has a very different atomic composition.

Let me briefly go into the reasons I pointed out in the previous sections as to why we cannot imagine metaphysical impossibilities. Many views in philosophy of mind and language allow for imaginings of metaphysical impossibilities. For example, defenders of Possible Worlds Semantics do not need to deny that we can imagine impossibilities. As a way out, many appeal to structured intensions instead of unstructured ones. Consider the example of imagining an object that is both square and a circle. According to the view that intensions are structured, we can nevertheless use the view that contents are sets of possible worlds to characterize the content of an imagining as follows: The content is structured into the intension of ‘circular’ and the intension of ‘square’. Each intension corresponds to a set of possible worlds. The overall content of an imagining then does not correspond to a set of possible worlds. This way we would not need to appeal to impossible worlds, for example, to characterize impossible contents. Structured intensions yield an explanation for how we can account for impossible content by preserving the claim that contents are sets of possible worlds.⁵⁵

Recall the phenomenon of imaginative resistance I alluded to before. It is in fact unclear how to properly interpret and explain this phenomenon. I explained earlier that

⁵⁵ A brief note on imagining metaphysical impossibilities in the framework of Two-Dimensional Semantics. I explained earlier that according to Two-Dimensional Semantics cases where we seem to imagine metaphysical impossibilities are to be explained away. This is the standard conception of Two-Dimensional Semantics, as it applies to thought contents. Strictly speaking though, and this is something I did not mention earlier, it is unclear whether this theory that is designed to capture thought contents also applies to sensory imaginings. This is because Chalmers and Jackson do not focus on imagination contents in particular. It is not obvious that Two-Dimensional Semantics specifies the nature of the content of a sensory imagining, because its focus lies on the nature of thought content. There might be a single mental state of imagining, when we imagine that the secondary intension or C-intension of ‘water’ does not refer to H₂O. This depends on how mental states of imagination are individuated, an issue Chalmers and Jackson do not discuss.

subjects seem to be unable to imagine impossibilities. Yet some philosophers explain imaginative resistance in terms of unwillingness to imagine instead of an inability.⁵⁶ We might merely be unwilling to imagine that a moral falsehood holds since we feel an irrational fear that imagining this might somehow negatively affect our moral beliefs, for example. The phenomenon of imaginative resistance is not yet well-enough understood to warrant the conclusion that we cannot imagine moral or mathematical falsehoods being true. I am inclined to believe that many cases of imaginative resistance can be explained away by appeal to psychological factors, but I will not argue for this view here. Moreover, according to what I believe to be the correct theory of the structure of the contents of sensory imaginings, we can explain how we can imagine metaphysical impossibilities. According to the two-fold view of the contents of imaginings, which I find attractive, one can appeal to the notion of a stipulation to give an explanation as to why we can imagine metaphysical impossibilities.⁵⁷ For example, I might be able to stipulate that in the imagined scenario a contradiction holds. This is then part of the overall imagination content.

I just listed several theoretical reasons why we can imagine impossibilities. For my discussion of (*Met-Ought*) it is irrelevant which of them are endorsed. Let us appeal to intuitively plausible examples. In my view, uncontroversial ones are visual imaginings of geometrical impossibilities. In the next section, when discussing (*Sufficiency*), I focus on a visual representation of the Penrose triangle, which is an example of a geometrical impossibility. If you do not like this example, let me clarify

⁵⁶ For defenses of this view, see Gendler (2000), (2006), (2010), Currie (2002), Stokes (2006), Todd (2009), for example. See Liao & Gendler (2016) for an overview of the literature.

⁵⁷ The plausibility of this view depends on a plausible account of what distinguishes successful from unsuccessful stipulations in imagination, an account I will not provide here. In chapter 4, section 4.4 I briefly address again how impossibilities can be imagined on the basis of stipulations.

that you merely need to grant me for the sake of the argument that we can in principle imagine metaphysical impossibilities. Now (*Met-Ought*) states a real restriction.

In what follows, in section 1.4.1 and 1.4.2, I provide intuitive examples against (*Met-Ought*). (*Met-Ought*) is a biconditional. I discuss its two sides separately. I first present two examples against its sufficiency side (1.4.1), then one against its necessity side (1.4.2). I evaluate the argumentative force of appealing to intuitive examples in more detail in sections 1.5.

1.4.1 Against (*Sufficiency*) with examples

(*Sufficiency*) For any imaging, any proposition p and subject S , S ought to imagine p if p is metaphysically possible.

(*Sufficiency*) claims that S ought to imagine p if p is metaphysically possible. For a subject to imagine as she ought to it is sufficient that p is metaphysically possible. In other words, it is not permitted for a subject S to imagine p only if p is metaphysically impossible. Counterexamples to (*Sufficiency*) are imaginings of metaphysical possibilities, which are not thereby, for that reason alone, permitted to be imagined. *Prima facie*, there are many such examples. Let me give you two.

Example 1: The chessboard dog

I just came back from the vet who confirmed what I had already been suspecting: My Samoyed dog is pregnant. My fluffy white dog mated with a brown Labrador. I wonder what the puppies will look like. Will they be brown like their dad but fluffy like their mum? I use imagination to help me in my speculation. I imagine a dog that is checkered like a chessboard, brown and white. Moreover, only the white squares are fluffy and the brown patches are smooth. It would look funny. What I have imagined is a metaphysical possibility. I imagine a possible world in which one of the puppies is patterned like a chessboard, with alternating fluffy and non-fluffy patches. According to (*Sufficiency*), the fact that I imagined a metaphysical possibility is sufficient for me having complied with the attitude-specific norm on imaginings. (*Sufficiency*) implies that if *S* imagines a metaphysical possibility, it is permitted to do so. More specifically, it is sufficient for *S* to imagine a metaphysical possibility, if they intend to imagine that which is permitted to imagine. In our example I have imagined as it is permitted for me to do. But it is unclear why exactly this permissibility claim should be true. Intuitively, I ought not imagine the chessboard dog.

On this occasion my imagining does not appear to be epistemically suited to the task. I am interested in what the puppies are likely to look like. It is extremely unlikely that one of them will look like a chessboard. For the purpose at hand, forming the belief that one might look like a chessboard based on my imagining would be foolish. What I ought to imagine are possibilities relevant to the question at hand. These are likely possibilities, worlds in which some puppies will look completely white, others completely brown, for example. A normative constraint in terms of metaphysical possibility supports the epistemic goal the subject has only weakly, in the sense that imaginings which are epistemically suited to the task also happen to be about

metaphysical possibilities. Yet, importantly, it is not sufficient for them to be about possibilities to play the cognitive role. For that reason, it is false to say that it is permissible for the subject to imagine something which only satisfies the requirement of being metaphysically possible. If imaginings are mostly embedded in cognitive projects, as in the example, then there will be many similar cases for which (*Sufficiency*) is false. I now provide you with a second example against (*Sufficiency*).

Example 2: Travelling in a banana-rice barrel

Suppose I wonder how to get home from a party. More specifically, my intention is to determine how to best get home safely and quickly. I use imagination in my deliberation. Let us say I imagine getting home by climbing into a barrel made out of banana peels and rice, held together by glue. One of my friends pushes the barrel down the hill. The norm that (*Sufficiency*) posits is satisfied. It is permissible to imagine this scenario, as it is metaphysically possible. Yet again, it is unclear in what sense exactly I imagined correctly. My imagining does not appear to be epistemically suited to the task. Arguably, what I ought to imagine are possibilities relevant to the question at hand. Arguably, only imagining such possibilities is permissible for me to imagine. These are possibilities that represent different options to act that are salient to me in the current situation, because they seem convenient, because they seem to get me home safely and quickly. I might imagine asking my friend Anaïs for a ride, calling a cab or getting an Uber.

We can generalize from the examples. (*Sufficiency*) states that *S* ought to imagine *p* if *p* is metaphysically possible. This is logically equivalent to the claim that

for an imagining of S to be permissible for S , it is sufficient that p is metaphysically possible. Yet it is usually not sufficient for an imagining to be of a metaphysical possibility in order to be useful in ordinary reasoning. Instead further constraints on the contents of imaginings are needed. Example 1 can be understood as a case of theoretical rationality, since it concerns belief formation based on imagining, together with other beliefs. Example 2 can be understood as a case of practical rationality, since it concerns choosing the right action based on imagining, together with other beliefs and desires.⁵⁸

Note that the examples given do not touch Yablo, who does not endorse (*Sufficiency*), but only defends the opposite direction, the necessity claim. According to the necessity claim, S ought to imagine p only if p is metaphysically possible. This is a weakness in Langland-Hassan's (2015) discussion: he raises counterexamples that are similar to the ones I just presented and concludes that (*Met-Ought*) is implausible as a result. Yet this conclusion is drawn too quickly, because the examples do not challenge the necessity claim. A second weakness of Langland-Hassan's (2015) discussion is that appeal to intuitive examples is insufficient for refuting either side of (*Met-Ought*). I address this problem further in section 1. 5. 4. Examples can nevertheless put pressure on (*Met-Ought*), and invite us to have a closer look at the evidence for or against it.⁵⁹

⁵⁸ To give you an idea, we can understand the difference between theoretical and practical rationality as follows: Practical rationality requires me to perform the act of maximum expected utility. There is an action (or a set of actions) that will be best given the desired outcome of being at home safe and in due course. Imagining various relevant action alternatives can help me to select this action or set of actions, against the backdrop of further beliefs. Theoretical rationality requires me to form beliefs in proportion to the amount of evidence available. I intend to form a belief about how the puppies are likely to look. I form the target belief by imagining close worlds in which my dog has already given birth. Theoretical rationality requires that all beliefs involved conform to the evidence available.

⁵⁹ To be clear, I assume Langland-Hassan would be happy to adopt the additional argumentation presented here.

1. 4. 2 Against (*Necessity*) with examples

Let me now present an example against the necessity claim.

(*Necessity*) For any imaging, any proposition p and subject S , S ought to imagine p only if p is metaphysically possible.

(*Necessity*) claims that a subject S ought to imagine p only if p is metaphysically possible. For S to imagine as she ought to it is necessary that p is metaphysically possible. In other words, it is not permitted for S to imagine p if p is metaphysically impossible. A prominent adherent of (*Necessity*) is Yablo (1993):

Just as to perceive that p is to be in a state that (i) is veridical only if p , and that (ii) moves you to believe that p , to find p conceivable [to imagine p]⁶⁰ is to be in a state which (i) is veridical only if possibly p , and (ii) moves you to believe that p is possible. (4)

Yablo makes two distinct claims: (i) to find p conceivable [to imagine p] is to be in a state which is veridical only if possibly p , and (ii) to find p conceivable [to imagine p] moves you to believe that p is possible. In my terminology, Yablo claims that a subject

⁶⁰ As already mentioned in footnote 7 earlier, Yablo (1993) uses ‘conceivability’ and ‘imaginability’ interchangeably. Also, the expression ‘to find p conceivable’ can be substituted by ‘ p is conceived’ or ‘ p is imagined’.

S ought to imagine *p* only if *p* is possible. For the most part this chapter deals with versions of (i). I return to (ii) in section 1. 6 of this chapter.⁶¹

Counterexamples to (*Necessity*) are imaginings that are about metaphysical impossibilities but not thereby impermissible to be imagined. For reasons discussed above, there are no uncontroversial examples of imaginings of metaphysical impossibilities. Here is what I believe is a less controversial one, the Penrose triangle:

Example 3: The Penrose triangle and the ball

I imagine a little ball rolling along one of the sides of a triangle. It is the Penrose triangle, a seemingly three-dimensional, yet in fact geometrically impossible object. We grant for the sake of argument that I can imagine it. In my imagination, the little ball rolls from point A on one side of the triangle over to point B on another side. I wonder whether it can do so by staying on its course, without crossing any edges of the triangle. I try to imagine the trajectory of the ball. I am fascinated by the question whether the ball can roll from point A to B. I also wonder whether there are ways of building an object out of paper which from a certain angle looks like Penrose's triangle. I wonder whether I can design it such that a ball can look as if it easily rolled from A to B. Is there anything not permissible about my imagining? Intuitively, there doesn't seem to be. I intended to imagine an impossible object. Moreover, to answer these questions accurately, I ought to imagine a metaphysical impossibility. I believe most resistance to

⁶¹ Note that Yablo defends a biconditional in this quote. He claims that the following two conditions are individually necessary and jointly sufficient for a mental state to be an imagining of *p*: First, to imagine *p* is to be in a state which is veridical only if possibly *p* and second, to imagine *p* is to be in a state that moves you to believe that *p* is possible. In section 1. 6 of this chapter, I address the second necessary condition.

this example comes from our intuition that we cannot imagine it. It does not come from an intuition that this imagining is incorrect or wrong.⁶²

I presented two intuitive examples against (*Sufficiency*) and one against (*Necessity*). In my view, many examples of this kind can be generated. This puts significant pressure on (*Met-Ought*). Nevertheless, appealing to counterexamples is not sufficient as a strategy to conclusively refute (*Met-Ought*). This problem will be elaborated on in section 1. 5. 4. Before I proceed in arguing further against (*Met-Ought*). I will now, in sections 1. 5. 1 to 1. 5. 3, briefly introduce and discuss three theses in the vicinity of (*Met-Ought*). The upcoming discussion is framed in terms of objections to the line of reasoning so far. In section 1. 5. 4 I provide a principled argument against all four theses. In section 1. 6 I present and respond to one final objection to my line of reasoning.

1. 5 Objections

1. 5. 1 Nomological Possibilities

Someone might object that I misclassified the scope of possibility. In deliberating over counterfactual conditionals, salient alternatives, possible futures, unlikely events etc., we imagine possibilities. But, so the objector, a plausible version of this view is not concerned with metaphysical modality. As Williamson (2007) observes:

⁶² Note also that to answer the question, I do not need to imagine the Penrose triangle. I only need to imagine something possible that looks exactly like it. This is not in conflict with my argument. You only need to grant me, for the sake of argument, that these questions can be answered by imagining the Penrose triangle. Note also that some resistance might also come from denying that we can make modal claims about impossible objects – an issue which I can safely disregard in the current context.

In ordinary life, we care whether someone could have done otherwise, whether disaster could have been averted, but the kind of possibility at issue there is far more narrowly circumscribed than metaphysical possibility. (135)

We reason that “[h]e could not have done otherwise because he was in chains, even though it was metaphysically contingent that he was in chains.” (ibid)⁶³ In ordinary thought, we are concerned with more restricted possibilities. Let us call them nomological possibilities. I define them as possibilities which are in agreement with the laws of physics, as they actually are. I use the term ‘nomological possibility’ here in addition as a place-holder for whichever restricted kind of possibility is best suited for ordinary reasoning, which is narrower than metaphysical possibility and in agreement with the laws of physics. This is the thesis of interest:

(Nom-Ought) For any imaging, any proposition p and subject S , S ought to imagine p only if p is nomologically possible.

Imagined alternative options to act, possible futures, unlikely events, etc. are nomologically possible under the plausible assumption that the laws of physics are necessary.

⁶³ Williamson (2007) even states that “thought about metaphysical modality is the exclusive preserve of philosophers.” (135). This claim is too strong, as other disciplines (such as linguistics, computer science or mathematics, for example) are typically also interested in what are *de facto* metaphysical possibilities. But whether Williamson’s point is too strong is not relevant in the current context.

I now briefly provide intuitive counterexamples to the sufficiency and necessity side of (*Nom-Ought*). I revisit this thesis in more detail in section 1. 5. 4. (*Sufficiency*) claims that *S* ought to imagine *p* if *p* is nomologically possible. For a subject to imagine as she ought to it is sufficient that *p* is nomologically possible. In other words, it is not permissible for a subject *S* to imagine *p* only if *p* is nomologically impossible. Counterexamples to (*Sufficiency*) are imaginings of nomological possibilities which are not thereby, for that reason alone, permitted to be imagined. If the examples of imaginings presented in part 1. 4. 1 are counterexamples to the sufficiency side of (*Met-Ought*), they are also counterexamples to the sufficiency side of (*Nom-Ought*). It is a nomological possibility that my Samoyed puppies look checkered like a chess board. For the cognitive goals to be achieved in the examples, it is not sufficient to imagine nomological possibilities. Imaginings of nomological possibilities are not restricted enough to play the cognitive roles in question. In the examples, subjects ought to imagine salient alternatives or likely possibilities. Arguably, usually when imaginings are used in reasoning they are under tighter normative constraints.

(*Necessity*) claims that *S* ought to imagine *p* only if *p* is nomologically possible. For *S* to imagine as she ought to it is necessary that *p* is nomologically possible. In other words, it is not permitted for a subject *S* to imagine *p* if *p* is nomologically impossible. Counterexamples to (*Necessity*) are imaginings of *p* where *p* is nomologically impossible but not thereby not permissible to be imagined. Many nomological impossibilities are nevertheless metaphysical possibilities, such as traveling faster than light, for example. In ordinary counterfactual reasoning, many possibilities that are being considered are nomologically impossible in that sense. I might wonder what would have happened to my education if I had been born a century earlier, into a family

of farmers. I might wonder whether my dad would be happier now if I had met him when he was a teenager and convinced him to study art history instead of law. Since I know my dad very well, I would have been exceptionally good at convincing him, so the thought. This imagined scenario can make me believe more strongly that his choice to study law was in fact the better alternative for him, even though he might regret this choice at the present moment. These examples suggest that, at least at times, imaginings of nomological impossibilities are well suited to aid us in drawing conclusions about the real world. It is unclear which motivation exactly there is to claim that it is incorrect or wrong to imagine nomological impossibilities in these cases.

1. 5. 2 Possible vs. Actual

Let me introduce a second alternative thesis. Someone might object that both (*Met-Ought*) and (*Nom-Ought*) misconstrue the intuitions expressed in the quotes earlier. Arguably, whenever philosophers claim that imagination puts us in touch with the possible, they have in mind *mere* possibility. Mere possibility is possibility that is not actual or, what is the same, not realized. Whatever is actual is possible, but not merely possible. Perception and belief arguably put us in touch with actuality. They thereby also put us in touch with possibility, namely actual possibilities. The worry is that the philosophers I quoted in the beginning cannot have in mind that imagination puts us in touch with the possibilities that perception and belief already put us in touch with. The claim has to be that imagination puts us in touch with mere possibility. (*Met-Ought*) and (*Nom-Ought*) properly understood claims that imaginings are directed at what is *merely*

possible, at *merely* possible worlds. This leads to the following alternative thesis, for example:

(Met-Ought)* For any imaging, any proposition p and subject S , S ought to imagine p if and only if p is *merely* metaphysically possible.

In other words, it is not permitted for S to imagine p if and only if p is either metaphysically impossible or true. It seems obvious that most of the problems that *(Met-Ought)* faces apply to *(Met*-Ought)* in the same way. Nevertheless, *(Met*-Ought)* differs from *(Met-Ought)* in one important respect: According to *(Met*-Ought)* there is something fundamentally wrong about imagining veridically. This leads us to an interesting, closely related thesis that is worth discussing. It might be that imagination aims at non-veridicality, so to speak. It might be that the primary function of imagination is to put us in touch with the nonfactual while perception and belief put us in touch with the factual. Consider:

(False-Ought) For any imaging, any proposition p and subject S , S ought to imagine p if and only if p is false (or falsidical).

According to *(False-Ought)* it is not permitted for a subject S to imagine p if and only if p is true or veridical. Before I discuss it, let me clarify which kinds of imaginings might be subject to this, if it is true. There are true propositions about my future, about metaphysical possibilities and about that which is likely to happen. You might say that if I accurately imagine how the puppies of my pregnant Samoyed dog are likely to look,

I veridically imagine something that is likely to happen. Such propositions are not the objects of imaginings in (*False-Ought*). This is because if they were, (*False-Ought*) would be obviously false. A plausible version of (*False-Ought*) is restricted and allows for certain veridical imaginings. Consider for example the usage of imaginings in thought experiments. There modal propositions are imagined, and imagined veridically. If they were not veridical, there would be no sound inferences from imagination to possibility. Arguably, (*False-Ought*) is most plausible if what is not permitted are truths of the following kind: truths about my immediate perceivable surrounds and truths about current perceivable facts. In the spirit of the thesis, ‘p’ is confined to propositions typically provided by veridical perception. Let us call this thesis (*False*-Ought*).

(*False*-Ought*) For any imaging, any proposition *p* and subject *S*, *S* ought to imagine *p* if and only if *p* is false (or falsidical) and moreover, not about her immediate perceivable surrounds or about current perceivable events.⁶⁴

In other words, it is not permitted for a subject *S* to imagine *p* if and only if *p* is true or veridical and, moreover, about her immediate perceivable surrounds or current perceivable events. On the face of it the constraint that (*False*-Ought*) imposes has some plausibility. Throughout this chapter I presented examples of imaginings used in ordinary thought. We imagined what my puppies would look like and we imagined how to best get home from a party. We imagine metaphysical impossibilities, or likely possible futures or alternative options to act. We imagine counterfactual situations and

⁶⁴ Or something along these lines.

metaphysically possible yet nomologically impossible situations. These examples have in common that they are about the non-actual understood in the very narrow perceptual sense of actual that I just fleshed out.

In addition, *prima facie* it is unclear in which context veridical imaginings of my immediate perceptual surrounds could be cognitively useful. For example, suppose that while sitting at my desk in my office I veridically visualize sitting at my desk in the office. If I do this because I intend to gather information about my immediate surrounds, veridical perceptions are obviously better suited than veridical imaginings. They are better suited because we can tell a plausible story of how veridical perceptions are causally linked to the world, which we fail to be able to provide in the case of veridical imaginings. In addition, a veridical perceptual experience is most likely richer and contains more information and is likely to be, for that reason alone, more cognitively useful. I believe that, despite its intuitive appeal, (*False*-Ought*) is to be rejected. Consider the sufficiency side:

(*Sufficiency-False**) For any imaging, any proposition p and subject S , S ought to imagine p if p is false (or falsidical) and moreover, not about her immediate perceivable surrounds or about current perceivable events.⁶⁵

The thesis states that for S to imagine as she ought to it is sufficient that p is false or falsidical and not about her immediate perceivable surrounds or about current perceivable events. Counterexamples to (*Sufficiency-False**) are imaginings of p where

⁶⁵ Or something along these lines.

p is not veridical and about my immediate perceivable surrounds or current perceivable events, yet imagining p is nevertheless not permissible to be imagined. The examples I provided against (*Met-Ought*) and (*Nom-Ought*) are of that kind. To illustrate, consider again the example of imagining that I travel home from a party in a barrel made out of banana peels and rice. This imagining is falsidical and also not about my immediate surrounds. The latter is the case in particular when I am imagining this while inside the house where the party is, for example. In that case, my immediate perceivable surrounds might be a living room filled with people. Yet given that my intention is to determine how to best get home safely and quickly, my imagining is not epistemically suited to the task. For this reason alone, I shouldn't or ought not form this imagining. It is therefore a counterexample to the sufficiency side of (*False*-Ought*). Let us move on to discuss the necessity side of (*False*-Ought*). Here it is:

(*Necessity-False**) For any imagining, any proposition p and subject S , S ought to imagine p only if p is false (or falsidical) and moreover, not about her immediate perceivable surrounds or about current perceivable events.⁶⁶

The thesis states that for S to imagine as she ought to it is necessary that p is false or falsidical and not about her immediate perceivable surrounds or about current perceivable events. In other words, it is not permitted for subject S to imagine p if p is veridical and about her immediate perceivable surrounds or about current perceivable events. This is the more interesting claim. Counterexamples to (*Necessity-False**) are

⁶⁶ Or something along these lines.

imaginings of p where p is veridical and about the subject's immediate perceivable surrounds, yet at the same time it is permitted to imagine them. Let me give you two such examples.

Example 4: Crying under the table

I am sitting at the dinner table and see my one-and-a-half year old crawling around on the floor, on the other side of the table. Now she disappears under the table. I assume she is crawling in my direction. Then she suddenly starts to cry. Based on what I hear and what I have just seen, I imagine the location at which she is sitting and reach out to her to lift her up. Veridically imagining the direction she crawled in and her location enables me to find her quickly. According to (*Necessity-False**) such an imagining is insufficient in an important sense because it is veridical and about my immediate perceivable surrounds. Nevertheless, it seems, for the task at hand it is better suited than a falsidical one or one about metaphysical possibilities. In this example, it is highly unclear in what sense exactly the imagining would not be permissible to imagine.

Example 5: My sister in Haifa

Suppose I imagine that my sister is walking through Haifa at this very moment. I talked to her earlier, she is living in Haifa and I know that she likes walks in the evening. It is evening now and I wonder what she is up to. Unbeknownst to me she is walking through Haifa currently. My imagining happens to be veridical. To be fair, the imagining is not about my immediate perceivable surrounds, as I am not in Haifa

myself. But it is about current facts and events that are in principle perceivable. Recall that I introduced (*False*-Ought*) as the view that is concerned with imaginings that are about my immediate perceivable surrounds and/or about current perceivable facts and events. This is why I discuss Example 5 as an additional separate counterexample to (*False*-Ought*). Yet again, in the case of this example also, there does not seem to be anything incorrect about my imagining. Instead one might say that I did a good job, succeeding in imagining what she is up to. After all, I know her quite well.

Such examples can be generalized. Veridical imaginings of my immediate perceivable surrounds and current in principle perceivable facts and occurring events can be cognitively useful. Generally speaking, the quasi-sensory nature of imaginings allows for veridical representations of perceptual experiences. It also allows for quasi-sensory veridical representations of perceivable objects and states of affairs. Imaginings thereby enable us to represent other people's veridical perceptual experiences and more generally veridical perceptual experiences at locations that differ from the imaginers' location. Imaginings enable us to veridically represent objects and states of affairs at locations which the imaginer is not currently at, but which she would have perceived if she had been at this location. Representations of this kind are arguably cognitively useful in a way that goes beyond what perception can offer. This suggests that veridical imaginings might play important cognitive roles, which casts doubt on all versions of (*False-Ought*).

1. 5. 3 Possible Experiences

At the beginning of the chapter I briefly introduced positions that advocate a strong link between imagination and possibility. I mentioned Balcerak-Jackson (2016), who claims that, “just as perceptual experience aims at capturing the external world, imagination aims at capturing the character of possible experiences” (51). It’s natural to interpret her view as a version of the normative thesis.⁶⁷ In my terminology, she endorses the view that whenever subjects imagine, their imaginings ought to capture the character of possible experiences:

(Bal-Ought) For any imaging, any proposition p and subject S , S ought to imagine p if and only if p captures the character of possible experiences.

To be clear, while in ordinary English the term ‘experience’ refers to events that play some striking role in our lives, such as a wedding for example, in the current context, ‘experience’ refers to mental states of perceptual experiences. The phrase ‘capturing the character of possible experiences’ is vague. Balcerak-Jackson’s (2016) view is not sufficiently developed enough for us to be able to determine which interpretation she has in mind.⁶⁸ Here are three plausible explications: On interpretation A, we are concerned with capturing the character of possible experiences in terms of their phenomenal character. In philosophy of mind, the term ‘character’ typically refers to ‘phenomenal character’. According to this interpretation, the claim is that imaginings ought to capture the phenomenal character of possible experiences. They ought to be

⁶⁷ On a deflationary reading, Balcerak-Jackson (2016) does not defend a normative thesis at all. Her claim can also be interpreted as merely stating that imaginings (possibly necessarily so) represent possible experiences. We disregard this in what follows.

⁶⁸ In chapter 3, section 3.3 I briefly focus on the constitutive version of her normative thesis.

like possible experiences in their phenomenal character. On interpretation B, we are concerned with capturing the character of possible experiences in terms of their contents. According to this interpretation, she defends the normative thesis that imaginings ought to be about that which possible perceptual experiences are about:

(Bal-Ought-B) For any imaging, any proposition p and subject S , S ought to imagine p if and only if p is about what possible experiences are about.

On interpretation C, we are concerned with capturing the character of possible experiences in terms of imaginings being about possible experiences. According to this interpretation, she defends the normative thesis that imaginings ought to be about possible experiences:

(Bal-Ought-C) For any imaging, any proposition p and subject S , S ought to imagine p if and only if p is a possible experience.

Since we are concerned with imagining possibilities in this chapter, our focus is not on phenomenal character but on interpretation B and C. Interestingly, in the cited paper, Balcerak-Jackson argues in addition for the view that our capacity to imagine is to be defined in terms of the capacity to imagine perceptual experiences. It seems that on her view, all instances of imagining p are necessarily instances of imagining experiencing p . This suggests that instead of interpretation B, the focus is interpretation C. Let's assume Balcerak-Jackson defends *(Bal-Ought-C)*.

Balcerak-Jackson claims that all instances of imagining p are necessarily instances of imagining experiencing p and at the same time (*Bal-Ought-C*) holds. In my opinion, for this reason, we can stipulate that the normative focus of (*Bal-Ought-C*) lies on imagining possibilities instead of impossibilities. If all imaginings are imaginings of experiences, it would at least be peculiar to claim that imaginings aim at being imaginings of experiences. Instead, we can interpret (*Bal-Ought-C*) as the view that of all the experiences we can imagine, we ought to imagine the possible ones. This view is a version of our normative thesis. Yet it is a version I have not discussed so far. I discuss its necessity and sufficiency side separately. Here is (*Necessity-Bal*):

(*Necessity-Bal*) For any imaging, any proposition p and subject S , S ought to imagine p only if p is a possible experience.

According to (*Necessity-Bal*) for a subject to imagine as she ought to it is necessary that p is a possible experience. In other words, it is not permitted for a subject S to imagine p , if p is an impossible experience. Counterexamples to (*Necessity-Bal*) are imaginings that are about impossible experiences, but permissible to be imagined.

In our discussion of (*Bal-Ought-C*) we encounter an obstacle that is similar to the one we encountered in discussion (*Met-Ought*) and related theses. Recall that (*Met-Ought*) only states a real restriction if we *can* imagine metaphysical impossibilities in the first place. As Balcerak-Jackson holds the view that imaginings necessarily are imaginings of experiences, a claim according to which imaginings aim to represent

experiences states a norm that is necessarily fulfilled.⁶⁹ In my discussion of (*Met-Ought*) I gave reasons why we can imagine metaphysical impossibilities. I do not proceed analogously here, since for Balcerak-Jackson we cannot imagine anything without thereby imagining a perceptual experience. I just suggested to focus on the claim that imaginings aim to represent possible experiences instead of impossible ones. Counterexamples to (*Necessity-Bal*) are impossible experiences that are permissible to be imagined. Let me give you two examples of imagining impossible experiences, which are permissible to be imagined.

David Lewis, in discussing the nature of colors, refers to the case of what he calls the yellow killer. The yellow killer is a predator that kills by disrupting “the colour vision of anyone who sets eyes on it; and it disrupts all other brain processes as well, thereby causing instant death.” (Lewis 1997b: 333). This predator’s color is a “special shade of yellow, ‘killer yellow’, [which] is fatal. (...) This colour does not typically cause colour experiences. It never does, and never could so long as we retain our vulnerability to it” (ibid).⁷⁰ As a result, it is impossible for anyone to ever perceive anything in this color, as killer-yellow is a color that instantly kills you, if you perceive it. Nevertheless, suppose that you can imagine a killer yellow banana. This special shade of yellow disrupts color vision, but is not fatal or disruptive if it is imagined instead. Suppose the yellow killer is a creature that roams freely in forests close to you. You wonder what additional features the yellow killer has, because you would like to be optimally protected against it. Is it a predator that can also run exceptionally fast? To aid your deliberations, you picture the yellow killer and simulate its natural movements.

⁶⁹ The view that imaginings are necessarily imaginings of perceptual experiences and related views are the subject of discussion in Chapter 3.

⁷⁰ To be clear, David Lewis attributes the example of killer-yellow to Saul Kripke, who, as Lewis recalls, mentioned it in lectures.

You picture the yellow killer in killer yellow, in fact. This is an example of an imagining of an impossible experience, which is not impermissible to be imagined, given the current purpose the imagining is meant to fulfil. It is therefore a counterexample to (*Necessity-Bal*).

Here is another example. Consider the example I introduced in our discussion of imagining metaphysical impossibilities: I intend to imagine Penrose' triangle, a geometrically impossible object, because I wonder whether I could build a (possible) three-dimensional structure, that, from a certain angle, looks like Penrose's triangle. It can also be argued that in this case, as I intend to imagine an impossible object, I intend to imagine something that cannot be experienced.

Let us move on to discussing the converse to (*Necessity-Bal*), the sufficiency claim.

Here it is:

(*Sufficiency-Bal*) For any imaging, any proposition p and subject S , S ought to imagine p if p is a possible experience.

According to (*Sufficiency-Bal*) it is sufficient for a subject to imagine as she ought to that she imagined a possible experience. In other words, it is not permitted for her to imagine p , only if she imagines an impossible experience. Counterexamples to (*Sufficiency-Bal*) are imaginings of possible perceptual experiences, which are not permissible to be imagined.

Let me give you one counterexample. Recall the example against (*Necessity-Bal*) which involves imagining killer yellow. Suppose again the yellow killer is a

creature that roams freely in forests close to you. You wonder which additional features the yellow killer has, because you would like to be optimally protected against it. Is it a predator that can also run exceptionally fast? To aid your deliberations, you picture the yellow killer and simulate its natural movements. As before, you also picture the yellow killer as colored in killer yellow. You imagine an impossible experience. Arguably, for the purpose at hand, it is not permissible to imagine a possible experience instead. If you imagined a possible experience of a different creature, one that doesn't kill you in the way that the yellow killer does, you might not draw the correct conclusions about how to protect yourself best against the yellow killer. For example, protecting yourself against the yellow killer might involve protective headgear such that you do not accidentally look at it, while protecting yourself against the creature you can experience will not require this. In sum, counterexamples to both the sufficiency side and the necessity side of (*Bal-Ought-C*) can be provided, which casts significant doubt on it.

1. 5. 4 Function vs. Cognitive Roles

In this chapter I have discussed the normative thesis that a subject *S* ought to imagine *p* if and only if *p* is possible. I introduced several versions of this thesis and argued against them by appeal to counterexample. I distinguished (*Met-Ought*), according to which the normativity of imaginings is linked to metaphysical possibilities, from (*Nom-Ought*), according to which it is linked to nomological possibilities. (*False-Ought*) and (*False*-Ought*) are concerned with truth, and/or veridical representations of your immediate perceivable surrounds. (*Bal-Ought-C*) links imagination to the representation of possible experiences. All theses are formulated as biconditionals. I discussed their

necessity and sufficiency claims in separation and provided at least one counterexample to them each.

I now present an objection to my line of reasoning. Let us assume the following two claims are true: First, the normativity of an attitude is constitutively linked to its cognitive function. This might be a grounding relation, i.e. the attitude-specific norm might be grounded in the function of the attitude. Second, an attitude can be cognitively useful while not being used in accordance with its primary cognitive function. If these claims are true, the following might also be true: The counterexamples I provided to refute (*Met-Ought*), (*Nom-Imp*), and (*False*-Ought*) are examples of what the second claim describes. They are examples of when the attitude of imagining is cognitive useful to us, but used not in accordance with its primary function. Therefore, they are not counterexamples to the normative theses on imagination. They can be explained away.⁷¹

The objection relies on the assumption that the normativity of an attitude is constitutively linked to its primary cognitive function, which is widely held. Support for it comes from philosophers of biology, functionalists, and philosophers of mind alike. Yet there is disagreement on how to properly flesh out the notion of a primary cognitive function. Some philosophers of biology, such as Millikan (2004) for example, believe that the normativity of an attitude is to be understood in terms of the evolutionary function of the attitude. Functionalists, such as Smith (1987) for example, believe that

⁷¹ Note that this is a worry precisely because we are not concerned with conceptual claims here. Gettier's example provides a refutation of the standard conceptual analysis of knowledge in terms of justified, true belief. The counterexamples to (*Met-Ought*) and related claims cannot provide such refutations.

the normativity of an attitude can be reduced to the functional profile of it.⁷² Yet Millikan (2004) and Smith (1987) mean something different when they talk of ‘function’. We can distinguish different kinds of normativity and cognitive functions. For example, while many believe that the primary function of belief is epistemic, it is at the same time unclear how epistemic norms on beliefs relate to their biological function.⁷³

Each normative thesis previously discussed can be subjected to a version of the objection I just sketched. Consider (*Met-Ought*) first. One important motivation for (*Met-Ought*) is the idea that it is the function of imagination to represent metaphysical possibilities, because this can explain how we acquire modal beliefs through imagination. Yablo’s (1993) and McGinn’s (2004) motivation for (*Met-Ought*) stems from an interest in the role of imagination in philosophical thought experiments. McGinn is sympathetic to the following picture: Perception is the capacity that reliably puts us in touch with reality through the senses. Its function is to represent the world around us. Imagination is the capacity that reliably puts us in touch with the possible. Its function is to represent possible worlds. Perception justifies perceptual beliefs about our surrounds. Imagination justifies beliefs about metaphysical possibilities. If imaginings have the function of justifying modal beliefs or if they otherwise systematically aid in the formation of modal beliefs, we are arguably concerned with epistemic normativity in the case of (*Met-Ought*). Even though representing metaphysical possibilities is not an epistemic norm like truth, it is indirectly conducive to truth, or else valuable for epistemic reasons.

⁷² While Graham (2014), for example, argues that it is the biological function of perception to represent accurately, most philosophers of perception are not concerned with the biological function of perception.

⁷³ This point was raised previously, in section 1. 2, when discussing the terminology of attitudes having an aim.

A defender of this picture can then deflect the counterexamples as follows: In the examples against (*Sufficiency*) our capacity to imagine is used in accordance with its function, as they are imaginings of metaphysical possibilities. But it is not used correctly, since it is not the function of imaginings to justify beliefs about likelihoods or how to best get home from a party. It is the function of imagination to justify beliefs about metaphysical possibility instead of likelihoods. In the examples against (*Necessity*) our capacity to imagine is not executed in accordance with its function, as the imaginings are imaginings of metaphysical impossibilities. But they are also used incorrectly, since it is not the function of imaginings to justify beliefs about how to build seemingly impossible objects, for example.⁷⁴

Let us have a look at (*Nom-Ought*), the thesis that a subject ought to imagine *p* if and only if *p* is nomologically possible. If (*Nom-Ought*) is true, it is grounded in it being the function of imaginings to represent nomological possibilities. Arguably, the primary motivation for (*Nom-Ought*) stems less from an interest in securing our philosophical methodology. Millikan (2004) for example is interested in an account of the biological function of our cognitive capacities, regardless of whether doing philosophy is part of the biological function of them. She argues that whichever norms on beliefs or desires are in place, they supervene on the evolutionary function that beliefs and desires play and the cognitive role they were naturally selected for. This implies that beliefs and desires were naturally selected for to play specific cognitive roles – an assumption, which can also be contested.

⁷⁴ To be clear, the case the objector can make in defense of (*Necessity*) is stronger than for (*Sufficiency*). This is so, since imaginings about how to best get home from a party are nevertheless imaginings of metaphysical possibilities, and beliefs about how to best get home from a party are nevertheless beliefs about metaphysical possibilities, also.

But if Millikan is correct, (*Nom-Ought*) can be motivated by telling an evolutionary story of the role of imaginings. (*Nom-Ought*) can be interpreted in terms of natural selection accounts of teleological normativity: Imaginings of nomological possibilities were selected for over imaginings of nomological impossibilities to systematically increase fitness and survival of the individual or species. This yields a different interpretation of the kind of normativity involved. A plausible version of this view will not restrict the function of imaginings to epistemic roles. The capacity to imagine possibilities was selected for in virtue of playing a range of cognitive roles not restricted to belief-formation. For example, imaginings cause motivational states. Picturing the goal I have set myself will make me more motivated than if I had not pictured it. This is an example of a non-epistemic cognitive role imaginings play. The additional assumption is that imaginings of this kind, imaginings that motivate, increase fitness and survival of the individual or species.

Here is how the objection to my line of reasoning goes, if you endorse this picture:⁷⁵ In the examples against (*Sufficiency*) I previously presented, imaginings of nomological possibilities are considered which are not thereby permissible to be imagined. For imaginings to play the cognitive roles they play in the examples, they are required to be more constrained. We can say that such examples cannot show that (*Nom-Ought*) is false, since we can maintain that the imaginings are used in accordance with their function and argue instead that they were not selected for to play the cognitive roles they play in the examples. In the examples against (*Necessity*) I presented earlier, imaginings of nomological impossibilities are considered which are thereby permissible to be imagined. Those also cannot show that (*Nom-Ought*) is false,

⁷⁵ It is somewhat harder to deflect the counterexamples against (*Nom-Ought*) if you endorse this picture.

since we can maintain that the imaginings are not used in accordance with their function. It is harder to deflect the counterexamples to (*Sufficiency*) than (*Necessity*), since it is easier to argue that our ability to deliberate over how to best get home from a party or how our dog's offspring are likely to look is evolutionarily advantageous to us.⁷⁶

Let us briefly consider (*False*-Ought*). If (*False*-Ought*) is true, it is grounded in it being the function of imaginings to represent that which is neither veridical nor about my immediate surrounds nor both at the same time. A defender of (*False*-Ought*) can deflect the counterexamples as follows. She argues that veridical imaginings of your immediate perceivable surrounds can be cognitively useful, but the use they are put to is not related to the cognitive function of imagination. Accurately imagining the location of my child crawling under the table is a cognitively useful imagining, but it is not the primary cognitive function to imagine veridically.

1. 5. 5 Empirical data

My argumentation in section 1. 4 leaves defenses open of the kind I just sketched. One ought to argue *directly* against the claim that it is the function of imaginings to represent metaphysical possibilities, nomological possibilities or the nonfactual, without appeal to counterexamples.

⁷⁶ To be clear, if you endorse (*Nom-Ought*) in the way outlined in this paragraph, you might not want to explain the counterexamples away. You might be more likely to reject my stipulative interpretation of (*Nom-Ought*) in terms of nomological possibilities. (*Nom-Ought*) correctly understood, you might say, claims that subjects ought not imagine *p* if and only if *p* is not suitably possible, where suitable possibilities are exactly those which if imagined are conducive to fitness and survival of the species. These need not always be nomological possibilities. You might further claim that the counterexamples I presented are cases in which imaginings are correctly used to enhance our fitness and survival. I leave this alternative proposal aside.

A direct strategy is to appeal to empirical evidence on the function of imagination and use this in an inference to the best explanation. Views on the function of imagination should at least be consistent with the findings of cognitive psychology and biology, if not supported by them. Admittedly, I cannot provide conclusive evidence on the basis of empirical evidence alone, yet a close-up empirical studies is illuminating.⁷⁷

Consider Suddendorf and Corballis's (2007) position according to which imagination is part of a "more general faculty of mental time travel that allows us not only to go back in time, but also to foresee, plan, and shape virtually any specific future event" (1). Episodic memory and imaginings, as understood here, belong to this faculty. It enables us to represent that which does not exist, never existed, existed in the past, or will exist in the future. Suddendorf and Corballis argue that "mechanisms allowing prediction of future situations can provide a selective advantage" (1). For the prediction of future situations, representations of the past are at times required. For example, I might remember how much I dislike baby-sitting and therefore form the belief that I would not be satisfied if I became a part-time baby-sitter. While the evidence currently underdetermines whether there is such a 'more general faculty of mental time travel' the findings nevertheless provide a new view on the function of imagination. First, imagination is not distinct in function from episodic memory and anticipation, and second, it has the function to represent a variety of possible scenarios for specific purposes.

⁷⁷ On the extensive empirical literature on imagination see, for example, Baird et al. (2011); Blouin-Hudon et al. (2015); Byrne (2005); Diekhof et al. (2011); Klein (2013); Klinger (2013); Lewis et al. (2013); Libby et al. (2014); Libby et al. (2009); Magid et al. (2015); Marques and Holland (2009); Michaelian, Klein, Szpunar (forthcoming); Prasko et al. (2015); Nigmatullina et al. (2015); Panagioti (2012); Richards and Sanderson (1999); Schacter et al. (2012); Shaeffer et al. (2015); Stawarczyk et al. (2011); Suddendorf and Corballis (2007); Szpunar (2010); Wong et al. (2013).

Millikan (2004) has suggested that we use imaginings for epistemic purposes during what is called trial-and-error perceptual planning. She considers such perceptual planning to be a common skill among mammals (see Millikan (2004)). Here is an example of trial-and-error perceptual planning: I intend to cross a river by stepping on stones. I look at the stones and form imagistic representations of paths I could reasonably take. I imaginatively go through various paths and based on this, form a belief about which path is best. I do form a belief about which paths are possible, but instead which path I should take.

Recent psychological studies on shifts of point of view in episodic memory and imagination provide evidence that we tend to imagine only certain events from our own perspective, while others from a perspective that is not our own.⁷⁸ Furthermore, it is suggested that systematically distinct cognitive roles are associated with each kind of imagining. We tend to imagine ourselves from a perspective that is not our own in contexts in which we are being evaluated by others: contexts in which we are concerned about our physical appearance, our performance, the precise execution of our movements, for example. Moreover, such imaginings tend to cause a positive self-image, when personal successes are imagined, and a negative self-image, when personal failures are imagined. Imagining the same state of affairs from your own perspective does not lead to these effects. The studies further suggest that we tend to imagine performing those acts from our own perspective that are in line with our self-image, while we tend to imagine performing acts that are not in line with our self-image from a perspective that is not our own. For example, let's say I consider myself to be a person

⁷⁸ For this, see in particular Libby and Eibach (2002), Libby and Eibach (2007), Libby and Eibach (2011), Libby, Eibach and Gilovich (2005), Valenti, Libby and Eibach (2011).

who is generally not interested in knitting. When asked to imagine performing the action of knitting, I will imagine myself knitting from a perspective that is not my own.

Findings from cognitive psychology indicate that imaginings, moreover, play a role in eliciting emotions and in motivating us to act. Imagining scenarios of what you could desire helps you understand what you in fact desire. Mentally simulating movements tends to increase reaction times. Mentally simulating an emotionally challenging event tends to increase our ability to stay in control during the event.

In sum, empirical findings on imagination put significant additional pressure on the idea that it is the function of imaginings to represent metaphysical possibilities. While possibilities are commonly represented in imagination, our ability to imagine was not designed to represent them. Instead, imagination has the function to enable trial-and-error perceptual planning, counterfactual thinking, predicting the future, evaluating the past and eliciting emotions. And for example, the majority of metaphysical possibilities is not part of subjects' past and futures. Imaginings further motivate us, enable us to distance ourselves emotionally from traumatic events, to prepare us for challenging tasks. Empirical findings should make us at least highly skeptical of the idea that the attitude-specific norm on imaginings is linked to possibilities. Relatedly, so far, there is no evidence for there being a process or mechanism that is constitutive of our capacity of imagination which reliably produces imaginings of possibilities.⁷⁹

Empirical findings also suggest that functions of imaginings are neither confined to the epistemic domain nor are they primarily epistemic. While imaginings can be used to justify modal beliefs, and at times are used for this purpose, it is not their primary function. Our capacity to imagine was not, it seems, designed to play a single cognitive

⁷⁹ This has been raised as a worry by philosophers, such as for example Yablo (1993).

function. If this is true, then any of the discussed theses, be that (False*-Ought), (*Nom-Imp*), (*Bal-Ought-C*) or (*Met-Ought*) are false, as they all assume that imagination has a single primary function. In the next chapter I argue in line with this that imagination is not subject to any single attitude-specific norm. There I present a sketch of what I believe is the correct account of the normativity of imagination.

1. 5. 6 Seeming of Possibility

In this section, I discuss a general objection. According to the objection, imaginings have a property that I overlooked which is indirect evidence for the normative thesis. The idea is that every conscious imagining of p instantiates a phenomenal property which suggests to us that p is possible. We can capture this as follows:

(*Seem*) Whenever subject S imagines p , it phenomenally seems to S that p is possible.

(*Seem*) can be understood as an imagination-specific version of claims that Jonathan Cohen (1992) endorses for belief and desire. Cohen (1992) argues that conscious believing involves “feeling it true that p ” (1) and conscious desiring involves “feeling it good that p ” (ibid.). Nevertheless, the ‘feel’-terminology is slightly obscure.⁸⁰ I focus on

⁸⁰ Cohen (1992) does not claim that the feel he is referring to is a phenomenal feel, although it plausibly is.

(*Seem*) interpreted as a thesis that concerns a phenomenal property, a ‘phenomenal feel’, the phenomenal feel that it is possible that *p*. Let me briefly clarify (*Seem*) further.⁸¹

(*Seem*) claims that whenever a subject imagines *p*, it phenomenally seems to the subject that *p* is possible. Imaginings instantiate a specific phenomenally salient property, namely the property of it seeming to the subject that *p* is possible. For the purpose of discussion, we therefore focus on phenomenally conscious imaginings only. We stipulate that imagining *p* is a phenomenally conscious mental state. Whenever a subject imagines *p*, there is something it is like to be in that state for the subject. For those who believe that not all imaginings are phenomenally conscious mental states, (*Seem*) is restricted to a subset of imaginings.

(*Seem*) has two theoretical virtues. First, the thesis, if true, is evidence for the normativity of imagination being linked to possibility. (*Seem*) is evidence for our normative thesis. The thought is that phenomenological properties can be an indicator for the cognitive function of the attitude. Some philosophers of perception argue that perception involves so-called presentational phenomenology (see in particular Chudnoff (2012) and Chudnuff (forthcoming)). In perception, things are phenomenally presented

⁸¹ A caveat. (*Seem*) can be interpreted as a claim that is analogous to one that is often defended in the literature on the normativity of belief, yet which does not involve a feel in Cohen’s sense. It has been argued that the following phenomenon appears in doxastic deliberation: Intuitively, whenever we ask ourselves whether to believe *p* “must one immediately recognize that this question is settled by, and only by, answering the question whether *p* is true” (Shah 2003: 1). If you ask yourself whether to believe *p*, this is settled by answering the question whether it seems to you that *p* is true. In answering this question, your attention is directed towards *p* itself and not the belief state. The belief state itself is ‘transparent’, as it is sometimes called.

Similarly, (*Seem*) can be interpreted as the claim that whenever you ask yourself whether you should imagine *p* or not, your attention is immediately directed at the question whether *p* is possible. The fact that in the belief case you are directed towards the question whether *p* is true is often considered evidence for the normativity of belief, namely that beliefs aim at truth. Similarly, one can argue that, if a related phenomenon exists for imaginings, the fact that your attention is directed towards whether *p* is possible can be considered evidence for the normativity of imaginings, namely that imaginings aim at the possible. This interpretation of (*Seem*) is not plausible for the reason that it is not empirically adequate. Whenever I wonder whether to imagine *p*, this question is not settled by the question whether or not *p* is possible. Intuitively, whether to imagine *p* is determined by other factors, such as whether it is useful for me to imagine *p*. I therefore do not discuss this interpretation of (*Seem*) in what follows.

as being the case. This is so, they claim, as it is the function of perception to represent veridically. Appeal to presentational phenomenology can at times be used to justify the epistemic claim that we are at least *prima facie* justified in believing *p* on the basis of perceiving *p*. Many believe that perception provides non-inferential defeasible justification.⁸² If perception has presentational phenomenology, perceiving that *p* could non-inferentially and directly justify us in believing that *p* is the case because *p* is phenomenally presented to us as being the case.

We can interpret (*Seem*) in analogy to this view in philosophy of perception. Sensorily imagining *p* has a phenomenal ‘feel’ which indicates the function of imagination. That a subject imagines *p* and it phenomenally seems to the subject that *p* is possible indicates that it is the function of imagination to represent possibilities.⁸³ In analogy, we can argue that on the basis of this phenomenal property in imagination we are non-inferentially and defeasibly justified in believing that *p* is possible, whenever we imagine *p*. (*Seem*) taken together with this epistemological claim is an attractive package deal.

In addition, this picture complements Yablo’s (1993) position on imagination. Recall that Yablo suggests two necessary conditions for a mental state to be an imagining which are jointly sufficient. First, he claims that imagining *p* is veridical only if possibly *p*. This is one necessary condition. I argued against this view in the previous sections. Second, Yablo claims that imagining *p* usually moves me to believe that *p* is

⁸² It is defeasible since it can be overridden by evidence to the contrary. Non-inferential justification justifies beliefs directly without the aid of additional beliefs. See for example Johnston (2006), Moore (1953) or Silins (2011).

⁸³ I stated earlier that I am interested in the weaker interpretation of (*Seem*) according to which it is the case that typically, but not necessarily so, when a subject imagines *p*, it phenomenally seems to her that *p* is possible. Only the weaker claim is compatible with the view that the phenomenal property robustly indicates the function of imagination, in my view, since imaginings can fail to fulfill their function.

possible. This is the second necessary condition. One interpretation of Yablo's view is that the second claim provides indirect evidence for the first, because in imagining p , p phenomenally seems possible to me. This way, the second claim fits in neatly with the interpretation of (*Seem*) I just suggested. Imagining p usually moves me to believe that p is possible precisely because whenever I imagine p , p phenomenally presents itself as being possible.

The second theoretical virtue of (*Seem*) is that it enables a unified picture of the normativity of propositional attitudes and their relationship to phenomenology. Recall Jonathan Cohen's view that conscious believing involves "feeling it true that p " (1) and conscious desiring involves "feeling it good that p " (ibid.). I just pointed out that philosophers of perception argue that consciously perceiving p involves the presentational phenomenology that p is the case. If (*Seem*) is true, we are thereby one step closer to a unified picture of the normativity of propositional attitudes.

In the next sections I present two arguments against (*Seem*). According to the first, (*Seem*) misconstrues the nature of the phenomenal property that is associated with imagining p . According to the second, (*Seem*) misconstrues the relationship between the phenomenology and the content of imaginings. After I present the arguments, I discuss and deflect an objection to my line of reasoning in the second argument.

I argue now that (*Seem*) is false, as it misconstrues the nature of the phenomenal property that is associated with imagining p . Let us focus on analyzing the phenomenal 'feel' specific to imagining p . In what follows, I have a brief look at the literature on the phenomenology of imagination to evaluate whether it yields support for or against (*Seem*).

Husserl (1913/1982), Kriegel (2015) and Sartre (1940/2004), among others, argue that imagination has attitude-individuating phenomenology.⁸⁴ They argue that what it is like to imagine *p* is necessarily phenomenally distinct from holding any other attitude towards *p*. (*Seem*) claims something weaker. (*Seem*) claims that whenever we imagine *p*, a specific phenomenal property is instantiated according to which it phenomenally seems to me that *p* is possible. It gives me the impression that *p* is possible, so to speak. This stronger claim is usually not defended by supporters of attitude-individuating phenomenology. To defend (*Seem*) one does not need to defend the view that imagination has attitude-specific phenomenology in the way that, for example, Kriegel does. One can defend the view that the phenomenal feel of imagining *p* is gradually distinct from perceiving *p*, but they are nevertheless different in that (*Seem*) only holds for imaginings and not perceptions. Only imaginings typically involve the phenomenal seeming that *p* is possible. But this is not a necessary property of imaginings and perceivings can also have it.⁸⁵

In what follows let me have a closer look at an account of the phenomenology of imagination that has been advanced in the literature. On Sartre's account, which is the most developed, there are four ways in which things are presented in imagination. Imagination can "posit the object as non-existent, or as absent, or as existing elsewhere: it can also 'neutralize itself', which is to say not posit its object as existent." (1940/2004: 12) The notion of 'positing an object' is unclear and requires explication. Here is Kriegel's (2015) interpretation of the verb 'posit' as it is used in this passage:

⁸⁴ For more on Sartre's view on this, see Sartre (1936/1983), Sartre (1938), Sartre (1939), Sartre (1940) and Sartre (2012).

⁸⁵ It is a matter of dispute whether the phenomenal feel of imagining *p* is gradually or categorically distinct from the phenomenal feel of perceiving *p*. In my view, the difference is gradual; I reject Kriegel's position. For more on this question see the discussion in Husserl (1913/1982), Kriegel (2015), Sartre (1940/2004), Thomas (2014), for example.

“in this terminology, we would say that belief ‘posits’” its content as true while desire ‘posits’ it as good – without truth and goodness needing to enter the actual content of belief and desire.” Positing a rabbit as non-existent then does not imply that a rabbit is imagined as non-existent in the sense that this is part of the content of the imagining that the rabbit is non-existent.

To be clear, Kriegel’s interpretation is open as to whether Sartre is concerned with phenomenological properties. On the face of it, positing a rabbit as non-existent need not be manifest in the phenomenology of the imagining. Nevertheless, as Sartre defends the method of phenomenology at length in passages preceding the quote, it is reasonable to interpret him as referring to phenomenological properties: In imagining a rabbit, it phenomenally seems to me that the rabbit is non-existent, absent or existing elsewhere. How are we to carve out the notion of ‘not positing an object as existent’ in terms of a phenomenal property? Cases where imagination does not posit its object as existent could be understood such that they lack the phenomenal property of being posited as existent.

If my explication of Sartre’s view is correct, the following can be inferred for the purposes of evaluating (*Seem*): First, according to Sartre, there is no unique phenomenal property necessarily associated with imagining a rabbit. Instead, an imagined rabbit can seem absent or non-existent or existing elsewhere. Second, and more importantly, none of the phenomenal properties that come with imagining a rabbit are of the kind assumed by (*Seem*). According to Sartre, whenever we imagine p , it is not the case that it phenomenally seems to us that p is possible. According to the interpretation of Sartre I propose, he does not believe that imagination posits the object

as possible. He rejects (*Seem*). In sum, Sartre does not provide evidence for the existence of a phenomenal feel of possibility.

How are we to evaluate his positive proposal of the phenomenology of imagination (if he indeed is concerned with phenomenal properties), independently of whether it supports (*Seem*)? In my view, Sartre's view is likely to be false. Let us focus again on imagining a rabbit. Is it the case, as Sartre suggests, that the rabbit phenomenally seems to us to be absent, or non-existent? This is not correct. When imagining a rabbit, the rabbit does not typically seem absent or non-existent to me. Is it the case that the rabbit either seems to me to be absent, non-existent, or existing elsewhere? To me, it seems that I imagine rabbits without it seeming to me that they are either absent, non-existent, or existing elsewhere. My imaginings instead typically stay silent in such matters. While Sartre and I both reject (*Seem*), we differ in our accounts of the phenomenology of imagination.

As Sartre does not seem to be of much help in evaluating (*Seem*), let's return to views in philosophy of perception according to which perception has a specific phenomenology. We can flesh out the nature of the phenomenal property of imaginings by appeal to 'presentational phenomenology'. Let me first explain this notion. I mentioned earlier that philosophers of perception at times argue that perception comes with presentational phenomenology.⁸⁶ Let's stipulate that a mental state that p has presentational phenomenology, if and only if it instantiates a phenomenal property according to which p is presented, presented as existing here and now, presented as being the case.

⁸⁶ Again, see in particular Chudnoff (2012) and Chudnoff (forthcoming).

Whenever I perceptually experience p , p phenomenally presents itself to me as being the case.

It might be that sensorily imagining p , if it has a phenomenal feel to it of the kind we are interested in, has a phenomenal feel which is similar to the one that perception has. It might be that if perception has presentational phenomenology, then sensory imagination also has presentational phenomenology. This thought finds some support in the popular assumption that imagination and perception are phenomenally similar in important ways. Those who claim that perception has presentational phenomenology can argue further that imagination inherits aspects of its presentational phenomenology. This yields an elegant explanation of why imagination has the phenomenal feel it does.

It might be that whenever I imagine p , p phenomenally seems possible to me and the phenomenal property is of a presentational nature in the sense that it presents what is imagined as possible. Whenever I imagine p , p phenomenally presents itself as being possible. This interpretation I call the presentational phenomenology interpretation of (*Seem*). In my view, the presentational phenomenology interpretation of (*Seem*) is false as it misconstrues the nature of the phenomenal property that is associated with imagining p . First, we can ask whether imaginings have presentational phenomenology, and second, we can ask whether imaginings have the presentational phenomenology of p being possible.

Let us grant for the sake of argument that imagination involves some kind of presentational phenomenology and that the presentational phenomenology of imagination is typically distinct from the presentational phenomenology of perception. (*Seem*) is then false because the presentational phenomenology of imagination is not

related to possibility. Consider an example. Suppose I visualize a rabbit. Intuitively, it seems to me not as if merely a picture of a rabbit is presented to me, or a hologram, or a possible rabbit or a rabbit-illusion. Instead the rabbit, even if just imagined, is presented as a rabbit, a real rabbit in imagination. We can say that if imagination has presentational phenomenology, the rabbit is phenomenally presented as existing in imagination.

Let us have a closer look at how the rabbit is presented to us. Typically, whenever we visualize a rabbit, the rabbit is not presented to us as existing here and now. The rabbit is not presented to me as being present. The presentational phenomenology in imagination therefore differs from the presentational phenomenology of perception. Whenever I have a perceptual experience of a rabbit, it also seems to me that the rabbit is a real rabbit and not a hologram. It is also presented as existing. Yet furthermore it is presented to me as present, existing here and now. This is an important phenomenal difference between imagination and perception. Typically, whenever we visualize a rabbit, the rabbit is not presented to us as existing here and now. It is presented to us as existing in imagination.

In evaluating the presentational phenomenology interpretation of (*Seem*), the question to answer is whether in imagination the rabbit is also presented as possible. This is typically not the case. Whenever I imagine a rabbit it does not phenomenally appear to me that the rabbit is possible. I do not imagine a rabbit as possible. Whenever I imagine that there is a rabbit in the scenario, it does not phenomenally appear to me that the rabbit is here now in front of me, as in perception, and it also does not appear to me that the rabbit is possible.

On my view, under the assumption that there is presentational phenomenology in imagination, when I imagine a rabbit, it phenomenally seems to me that there is a real rabbit in the imagined scenario. Furthermore, this is all there is to the presentational phenomenology of imagination. The phenomenal property associated with imagining p is the property of p seeming to be the case in the imagined scenario, so to speak. It is unclear whether this should still be called ‘presentational’ phenomenology strictly speaking. What matters is that it is not the case that in imagination objects are presented in the way that they are presented in perception.

I claim that whenever we imagine a rabbit, the rabbit is presented to us as existing in imagination, as imagined. But I have not explained what it is for something to be presented in imagination. Therefore, you might object that I have merely shifted the problem, instead of solving it. I claim that whenever I imagine p , p phenomenally seems to me to be the case in the imagined scenario. The notion of p being the case in the scenario, outside the context of phenomenology, is nothing more than a slightly technical way of saying that the content of the imagining is p . The statement that we imagine p by imagining that p is the case in the scenario which we imagine is then true by definition. If the phenomenology of imagination suggests that p is the case in the scenario, then the phenomenology of imagination suggests that p is what is being imagined, instead of an experience of p , or a hologram or a picture of p .

Let’s consider a proposal that Byrne makes to understand the phenomenology involved. Byrne (2010) discusses the specific nature of the phenomenology of imagination in more detail. He claims that imagination involves the appearance of actuality: “If sensuous imagination involves the appearance of anything, it’s the appearance of actuality, not possibility. What ‘appears to be so’, when one imagines a

purple polar bear is that purple polar bears exist, not (merely) that they could have existed” (14).⁸⁷ This view allows for several interpretations. According to one interpretation what appears to be so when one imagines a purple polar bear in front of you is that purple polar bears are in fact in front of you. The ‘presentational’ nature of imagination is the same as in perception. I just suggested that this is not the correct view of the phenomenology of imagination. I argued that while in sensory imagination things are phenomenally presented as being the case in the scenario at the time of imagining, they are not presented as being the case here and now, as in perception.

A natural interpretation of Byrne’s view is that imagining *p* phenomenally presents *p* as being actually the case in the imagined scenario. In my view, an account along those lines yields the correct analysis of the nature of the phenomenology of imagination. On this interpretation, Byrne supports my position. Whenever I visualize a rabbit, the phenomenology suggests that the rabbit is real in the scenario that is being imagined. But it stays silent on whether or not this scenario is possible. The phenomenology does not suggest that the scenario is possible. The phenomenology leaves open the option that the scenario does not correspond to any possibility.

This concludes my first argument against (*Seem*) in which I claim that (*Seem*) gets the nature of the phenomenal property of imaginings wrong. I now move on to my second argument against (*Seem*). I now argue that (*Seem*) gets the relationship between phenomenology and content wrong.

In what follows I evaluate (*Seem*) by addressing the relationship between phenomenology and content. Philosophers disagree on the precise nature of the

⁸⁷ Consider for comparison the case of when you tell a story about a purple polar bear. You are telling a story about a purple polar bear that exists, not about one that could exist.

relationship between the phenomenology of a mental state and its content, but tend to agree that there is a tight relationship between them. According to a common view in philosophy there is (at least) a supervenience relation between a mental state's having content and its phenomenology. According to intentionalism, roughly speaking, the phenomenal character of a mental state is determined by (or supervenes on) its content (see for example Crane (1998)). Intentionalism is a commonly endorsed thesis for perception. Roughly speaking, it claims that necessarily, whenever there is a difference in what is perceived, there also is a difference in what it is like to perceive.

Interestingly, intentionalism cannot straightforwardly be applied to sensory imagination. In section 1. 2 I also explained that the overall contents of imaginings often outstrip their image contents. For example, in imagining that my mother is a three-year old elephant sitting on a swing, the fact that the elephant is my mother and three years old is not part of the image, but conceptually supplied. Typically, the phenomenal character of an imagining is determined by the image and not the conceptual content. It is plausible to assume that, if imagination has a specific phenomenal feel to it, it is tied to its image content. It is less clear, whether imaginings also have cognitive phenomenology, i.e. phenomenology that is tied to their conceptual contents.

If this observation is correct, the claim I introduced above does not hold for imagination. It is false that, necessarily, whenever there is a difference in what is imagined, there also is a difference in what it is like to imagine. Let's say I once again picture an elephant on a swing. If I stipulate that in addition this elephant is three years old and my mother, it is unclear whether the phenomenology of the imagining changes. This is because the image content does not change. If this is the correct analysis of the example, the phenomenology of the imagining does not supervene on the content of the

imagining. Nevertheless, a restricted supervenience thesis holds which applies to imagery and its phenomenology. Here is the restricted supervenience thesis that holds, if intentionalism is true:

(Intentionalism-Image) Necessarily, if mental state of imagining I_1 and mental state of imagining I_2 differ in image content, they also differ in phenomenal character.

I claimed earlier, that typically, whenever a subject imagines p , it phenomenally seems to her, that it is the case in the scenario. If *(Intentionalism-Image)* holds, this formulation is imprecise. Here is the suitably restricted version of *(Seem)*:

(Seem-Image) Whenever I form a mental image of p in imagination, it phenomenally seems to me that p is possible.

An appropriately refined version of the thesis that I argued for in the previous paragraphs, against *(Seem)*, reads: Whenever I form a mental image of p , it phenomenally seems to me that p is the case in the scenario. This claim is, in my view, well-suited to go hand in hand with *(Intentionalism)*. Our refined version of *(Seem)*, *(Seem-Image)*, on the other hand is less well-suited. Let me explain this.

According to *(Seem-Image)* whenever I form a mental image of p , a phenomenal property is instantiated according to which p is possible. Moreover, if content determines phenomenology, the phenomenal seeming-property of p being possible affects the image contents of an imagining. The thought behind *(Seem-Image)* is that

whenever it phenomenally seems to me that p is possible in imagination, p is also represented as possible; it is part of the image content of the imagining. In other words, whenever I form an image of a red apple, I imagine that the red apple is possible. It is part of the visual image content that the apple is possible. But this is an unwanted result. The view that in forming an image of p , I thereby always imagine possibly p , is implausible. How can an image alone convey that what is represented is possible? How can modal properties be represented imagistically? (*Seem-Image*) gets the nature of image contents of imaginings wrong. This casts serious doubt on (*Seem-Image*).

I just argued that a defender of (*Seem*) who also endorses a version of the independently plausible intentionalism, is likely to favor the restricted (*Seem-Image*) instead of (*Seem*). Yet (*Seem-Image*) is highly implausible. This puts significant pressure on defenders of this view. Alternatively, one can endorse (*Seem*) and reject the view that there is such a tight relationship between phenomenology and content. One can claim that whenever I imagine p , it phenomenally seems to me that p , but that it is possible is not in the content of the imagining. If that is the case, then it becomes harder to explain how the phenomenal property of possibility and the content are related, or at least requires a different explanation.⁸⁸ One different explanation appeals to distinct mental states. The thought is that (*Seem*) is a statement concerning a mental state of imagining and a separate mental state of seeming. This proposal is the topic of the next paragraphs.

I argued that (*Seem*) either requires that image content involve representations of possibility, or that the supervenience relation between content and phenomenology is to

⁸⁸ This view is compatible with views according to which there are intrinsically non-representational phenomenal properties of conscious mental states, i.e. qualitative states which do not supervene on their contents. For defenders of such views and further discussion see for example Block (1990), Sundstroem (2014) and Tye (2017).

be rejected. There is a third option. Let us distinguish the content of the imagining from the content of the seeming. A defender of (*Seem*) can argue that (*Seem*) properly understood does not claim that in visualizing a red apple, I visualize that the red apple is possible. Instead, whenever I visualize a red apple, I am in a mental state of it seeming to me that the visualized red apple is possible, which is a mental state distinct from the imagining. The mental state of it seeming to me that p is possible is a different kind of state than the state of imagining that p is. Let us call this thesis (*Seem-Belief*). I now argue against (*Seem-Belief*). One advantage of (*Seem-Belief*) is that possibility is not part of the content of the imagining. We interpret the mental state of it seeming to me that p is possible as a belief state. That it seems to me that p is possible is merely a different way of saying that I have some credence in p being possible. According to (*Seem-Belief*) imagining p does not involve a phenomenal seeming of p being possible.

Let us evaluate this proposal. It is an interesting question in which ways the belief-like seeming that p is possible relates to imagining that p . (*Seem-Belief*) states a conditional: whenever I imagine something, it seems to me that p is possible. Whenever I imagine p , I thereby have some credence in p being possible. Yet this conditional seems to be false. Consider the following: I imagine Penrose's triangle, which is a geometrically impossible object. I also have a high credence that Penrose's triangle is a geometrically impossible object. Does the fact that I imagine it make me have some credence in it being possible, despite my credence in the opposite? I assume it might, but not necessarily so. In my case at least, imagining this triangle does not increase my credence in it being possible. In addition, (*Seem-Belief*) does not have the theoretical virtues our phenomenal interpretation of (*Seem*) has. One virtue of (*Seem*) is that it yields evidence for the normative thesis. But the view that whenever I imagine p , I

thereby have some credence in p being possible, does not involve an account of how this belief is epistemically linked to the imagining. Furthermore, (*Seem-Belief*) does not appeal to phenomenal properties. For this reason, we cannot infer anything from it about the function of imagination. (*Seem-Belief*) requires a separate account of whether and if so, why the belief I formed is justified. Moreover, (*Seem-Belief*) does not provide a view on the normativity of imagination that is in line with existing views on the normativity of attitudes and their phenomenology.

I presented two arguments against (*Seem*). Furthermore, I tried to defend (*Seem*) against my second argument by re-interpreting the phenomenal property in terms of a belief state. Yet (*Seem-Belief*) is subject to counterexamples, and does not have the theoretical virtues (*Seem*) has. For these reasons, (*Seem-Belief*) is not plausible. Let us consider (*Seem*) rejected. What follows for the normative thesis, if (*Seem*) is false? Recall our initial motivation for discussing (*Seem*): (*Seem*), if true, provides evidence for the claim that the normativity of imagination is linked to possibility. I suggested an alternative to (*Seem*) according to which imagination of p typically involves the phenomenology of p being the case in the scenario.

First, let us consider whether the alternative yields evidence for a view on the normativity of imagination. In my opinion, it does not do so. *Prima facie*, the phenomenal appearance of p being the case in the scenario gives us no reason to believe p . Imagining a rabbit gives me no reason to believe that a rabbit exists. Nevertheless, in analogy to perception, the following might be true: Whenever in imagining p , p involves the phenomenology of p being the case in the scenario, imagining p directly and non-inferentially and defeasibly justifies me in believing that p is the case in the

imagined scenario. This is so, since the following holds: if presentational phenomenology in perception moves us to directly and non-inferentially believe that what we perceive exists, and the phenomenology of imagination and perception are sufficiently similar, the phenomenology in imagination also moves us to directly and non-inferentially believe that what we imagine exists in the scenario.⁸⁹

If what I just said is correct, does anything follow from this for the normativity of imagination? What does it mean for a subject to have direct and non-inferential defeasible justification for the belief that p is the case in the imagined scenario? In my view, it does not yield evidence for the theses on the normativity of imagination discussed in this chapter. Moreover, it is unclear which evidence it could yield in the first place. Whenever we imagine p , it is true per definition that p is the case in the imagined scenario. Defeasible justification for the belief that p is the case in the imagined scenario is redundant. In this respect, perception and imagination differ.

Here is an objection to the overall line of reasoning I presented: I overlooked the fact that we tend to have the intuition that in imagining p , p is possible. Intuitively, often when we imagine p , p thereby seems possible to us. According to the objection, my view cannot explain this fact. In response to this objection I can either reject that we often tend to have this intuition or I need to explain why it is not evidence for (*Seem*). I will proceed in terms of the latter and provide an explanation why this intuition is not evidence for (*Seem*). I hope that this also further raises the plausibility of my view.

⁸⁹ To be clear, we can imagine rabbits without any presentational phenomenology and still believe them to be real in the imagined scenario. Presentational phenomenology is not necessary for being moved to believe that what is imagined is real in the scenario. It is sufficient.

Let us grant that whenever we imagine p , we often also have the intuition that p is possible. Arguably, whenever I imagine a rabbit sitting on a swing, this often makes me intuit that it is possible for a rabbit to sit on a swing. I grant you this, but I deny that the intuition is based on the phenomenology of the imagining. Imagining p does not involve a phenomenal property that suggests that p is possible. Yet my view is compatible with the claim that imagining p moves us to believe that p is possible in virtue of something outside of phenomenology. Moreover, to appease the objector, let me now give, what I believe to be, a psychological explanation of how the intuition arises that in imagining p , p seems possible to us.

Recall that according to my view, in imagining p sensorily, p is phenomenally presented to us as existing in the imagined scenario. I argued that we are non-inferentially defeasibly justified in believing that p is the case in the scenario, whenever we imagine that p . When I imagine p , I am justified, based on this, to form the belief that p is the case in the imagined scenario. Now we tend to also believe in addition that since p is the case in the scenario, intuitively it is possible or likely to be possible. We believe this, independently of whether we are justified in doing so.⁹⁰ It is a descriptive thesis about humans. Here is a speculative psychological explanation for why we tend to have this intuition. We have this intuition because whatever it is that we represent via imagery thereby looks real to us in the scenario. We have the intuition, that in fact, it looks so real, so ‘vivid’, so ‘concrete’, that it must clearly be possible. In addition, we might reason that at the same time what we imagine does not seem to be present before us, as it would be in perception. Imagery, as it represents things as real but not as present, intuitively seems like a ‘window to the possible’. This is a psychological

⁹⁰ It might in addition explain why at times we should not believe that p is possible in virtue of imagining p .

explanation as to why we might be inclined to believe that things are presented as possible in imagination in virtue of the phenomenological properties that imaginings have according to my alternative to (*Seem*). This psychological explanation also shows that the intuitions do not yield evidence for things being in fact possible. They are misleading in this respect.

Two clarifications. First, according to the explanation I provided, imagining p can only *inferentially* move us to believe that p is possible, namely on the basis of the further belief that p is the case in imagination. If we are moved to believe that p is possible in virtue of imagining p , this has to be based on an inference. The psychological explanation denies that imagining p directly and non-inferentially moves us to believe that p is possible. One can speculate that initial support for (*Seem*) might stem from the fact that we mistake our inferential reasoning for non-inferential reasoning.

Second, relatedly, being moved to believe that p is possible does not imply that we are directly and non-inferentially justified in believing that p is possible. Imagining p does not by itself provide non-inferential, direct, defeasible justification for the belief that p is possible. We might nevertheless be inferentially justified in believing that p is possible. This depends on whether the belief is justified that the scenario as a whole is possible. Most often these beliefs are not justified. The conditional if p is the case in the scenario, it is thereby likely to be possible, is arguably false. According to the picture I outlined, we do justice to the intuition that p is possible, yet without it providing evidence for (*Seem*). We can reject (*Seem*) but the more general claim that imagining p moves us to believe that p is possible can still be true.

In sum, whenever imagining p moves me to believe that p is possible, this is not evidence for the normative thesis. It is not an indication for imagining p being correct only if p is possible. Importantly, the truth of Yablo's second claim is now no evidence for the truth of his first claim. Recall his position. He believes that first, imagining p is correct only if p possibly p , and second, that imagining p moves us to believe that p is possible. I argued that it can be true that imagining p moves us to believe that p is possible without this being evidence for the function of imagination. This is a satisfactory result. It is satisfactory because in this chapter we are interested both in (*Seem*) and Yablo's second claim only in so far as they are considered to provide evidence for the normativity of imagination. I hope to have shown that (*Seem*) is false and that endorsing a version of Yablo's second claim does not provide evidence for the normativity of imagination being linked to possibility.

1.6 Concluding remarks

This concludes my discussion of the view that a subject S ought to imagine p if and only if p is possible. I distinguished two versions of this view: (*Met-Ought*) for metaphysical possibilities and (*Nom-Ought*) for nomological possibilities. I discussed a third view that states that S ought to imagine p if and only if p is false or falsidical and, moreover, not about S 's immediate perceptual surrounds, etc. I reject the three theses. First I argued that believing that it is impossible to imagine metaphysical impossibilities makes (*Met-Ought*) trivially true and therefore uninformative with regards to the question whether there are norms on imagination. Then I provided intuitive counterexamples to all theses. The argumentative strategy of providing counterexamples to normative theses

is problematic, as any mental attitude can play cognitive roles outside their normative function. I further presented general evidence against the normative theses, which stems from current empirical research on the function of imagination and the cognitive use it tends to be put to. An inference to the best explanation allows us to reject the normative thesis. In the final section, I discussed the claim that imagination has a phenomenal feel of possibility to it. I argued against this view and gave an explanation why we can nevertheless maintain the claim that imagining p at times psychologically moves us to believe that p is possible in virtue of its phenomenology.

I started this chapter with intuitive quotes that express a tight relationship between imagination and possibility. Before I close, I want to make clear that what I have argued for is not necessarily in conflict with what is stated in these quotes. When philosophers say that imagination puts us in touch with the possible, they arguably do not always have in mind (*Met-Ought*) or the related claims I discussed. Arguably imagination is tied to possibility in a much broader sense than metaphysical or nomological possibility. As already indicated, there is a tight relationship between imagination and the descriptive thesis that imaginings are about possibilities. This is widely supported by empirical research. In addition, the word ‘possible’ is ambiguous in ordinary language. Let me give two examples. Intuitive claims about a tight connection between imagination and possibility can highlight that in imagination we can represent in ways that are unconstrained by reality. For example, this is the case when I imagine that an elephant on a swing is my mother. Or, someone might say that in imagination we represent that which is possible for us in the sense of that which is feasible for us, that which is doable given our capacities, etc. I can imagine going to the beach on the weekend or getting a law degree on the side. I say to myself that this is

clearly possible for me to do. These are just two examples of how the quotes in the beginning can reasonably be understood. Such interpretations do not commit to the view that the normativity of imagination as an attitude is tied to possibility. In the next chapter I explain how the normativity of imagination is to be understood instead.

Chapter 2. The Normativity of Imagination

2. 1 Introduction

Imaginings play important cognitive roles in reasoning. In deciding what to do on the weekend, I imagine various ways my days could unfold. On Saturday morning, I could drive down to the beach close to my house and go for a swim. If it rains, I might visit a friend instead. I suspect she would be happy to see me. When engaging in hypothetical and counterfactual reasoning we typically employ imagination. In the process of deliberation, I might picture the beach and my friend greeting me at the front door. The image of my friend can motivate me to visit her. Imagining driving to the beach can bring to mind that I need to get gas first or that it is convenient to get groceries on the way back. We use imagination to plan daily activities, prepare for important events, evaluate past choices and actions, predict other people's mental states, form beliefs about what we desire, and many more cognitive tasks. A substantial body of empirical research supports this assumption.⁹¹

Arguably, imaginings can only play cognitive roles if they are normatively constrained in some way. In deliberating about whether I would like to go to the beach, an accurate imagining of the beach is better suited to this task than other imaginings. After all, my imagining should help me make a decision about this beach, and not any

⁹¹ See for example Cowley (2001), Cowley and Byrne (2004), Byrne (2005), Harris (2000), Meehan and Byrne (2004), Schaeken, Johnson-Laird and d'Ydewalle (1996), Ward (1994), Wells and Gavanski (1989).

other beach. Similarly, an accurate representation of my route to the beach is better than an inaccurate one. If I am living in a small town on the East Coast of the US, imagining Sydney's Bondi Beach or waiting in traffic in Manhattan on the way to the beach will not be appropriate. Such imaginings do not, it seems, provide the correct kind of mental state in the context of planning a trip to the beach close to my house.

In the previous chapter I argued against views according to which the attitude of imagining is subject to an attitude-specific possibility norm. In the current chapter, in the first part (sections 2. 2), I argue that imaginings are neither subject to a norm of truth or a norm of the good. In section 2. 2. 1. 2 I present an argument for the view that imaginings are not subject to a norm of truth, unlike beliefs, which are commonly considered to be subject to such a norm. My argument appeals to the relationship between the norm of truth and the norm of consistency. I argue that imaginings are not subject to a norm of consistency and that mental states that are not subject to this norm are not subject to a norm of truth. In section 2. 2. 2, I focus on the norm of the good. I explain why an analogous argument cannot be given for the norm of the good. The second part of the chapter (section 2. 3) are dedicated to my own positive proposal on the normative constraints on imaginings. On this view view, imaginings are not subject to norms that are specific to the attitude of imagining. I argue that the normativity of imagination can be explained by appeal to norms on intentions and other attitudes, on norms derived from goals, and norms of instrumental rationality. The view that imaginings are not subject to attitude-specific norms has received criticism because of its apparent inability to properly connect the attitude of imagining to its cognitive roles

in reasoning.⁹² If imaginings can be neither correct nor incorrect, it is hard to see how they could justify beliefs about the world or motivate us to act, so the thought goes. Alternatively, some endorse the view that imaginings are not subject to norms and in response deny that imaginings play important cognitive roles.⁹³ The view that imaginings are not subject to attitude-specific norms fails to properly connect the attitude of imagining to its cognitive roles. However, the premise that imaginings are not subject to attitude-specific norms does not imply that imaginings are not subject to any norms. In this part of the chapter I argue further that the normativity of imaginings is akin to the normativity of scientific models. In the final parts, sections 2. 4 and 2. 5, I discuss two important objections to my view in the hope that this further clarifies the position advocated.

2. 2 Against the Norm of Truth and the Norm of the Good

2. 2. 1 The Norm of Truth

2. 2. 1. 1 Intuitive considerations

Most philosophers working on imagination intuitively believe that imaginings are neither subject to the norm of truth, nor to a norm of the good. According to Langland-Hassan (2015), van Leeuwen (2014) and Kriegel (2015) it is a claim that can be accepted without need for argumentation.⁹⁴ Let me briefly recapitulate intuitive reasons

⁹² This is a worry that at least goes back to Wittgenstein (1953). It's most recent formulation can be found in Langland-Hassan (2015).

⁹³ In the recent literature Dorsch (2012) defends such a view.

⁹⁴ A notable exception are defenders of reductionism for imagination. According to this view, all existing mental states can be reduced to either beliefs or desires. If imaginings are either beliefs or desires, they are subject to whichever are the norms on beliefs or desires. Nevertheless, as this form of

for it. I first focus on the norm of truth, and then norms of the good. Recall our discussion of (*False-Ought*) in the previous chapter, in section 1. 5. 2. The claim that the norm of truth holds for imagination is the converse of (*False-Ought*).⁹⁵ Here it is:

(*Truth*) For any imagining, any proposition p and subject S , S ought to imagine p if and only if p is true (or veridical).

Beliefs are commonly considered to be subject to such a norm.⁹⁶ Yet for imaginings, (*Truth*) seems to be false. It is not the case that in imagining p , a subject S ought not imagine p if and only if p is true. In typical instances of imagining p , p is false, but intuitively it is permissible to imagine p . I imagine that my Samoyed dog gives birth to puppies that look like a chessboard. I picture an elephant sitting on a swing and imagine that it is my mother. I imagine Germany winning WWII. I imagine how my life would have unfolded if I had moved to the Middle East for an academic position. I imagine my wife, who is Argentine, being from Hawaii. In imagining falsehoods, we are typically not imagining incorrectly. Moreover, imaginings of falsehoods are cognitively useful to us. For example, I imagine Germany winning WWII because I would like to understand the causal structure of our actual history and for that reason, I imagine an alternative history unfolding. I imagine how my life would have unfolded, if I had moved to the Middle East, because I would like to know whether I made the right decision in keeping my current job. Often we use imaginings to represent and/or evaluate counterfactuals. I imagine that if I had accepted an academic position at a university in the Middle East, I

reductionism currently finds very little support if at all and is considered outdated by many, it will not be of concern to us here.

⁹⁵ According to (*False-Ought*), it is not permitted for a subject S to imagine p if and only if p is true or veridical.

⁹⁶ With notable exceptions such as Williamson (2002).

would be able to speak Arabic by now. Intuitively, I represent the antecedent in imagination. I represent the counterfactual that I would be able to speak Arabic by now, if I had accepted this position, in imagination. As a result of imagining this, I might realize that, for example, I tend to adjust well to foreign cultures. Let me give you another example. I imagine what would have happened, if I had not eaten this pie right before lunch. I imagine that I would be much hungrier now. Again, intuitively, I represent this counterfactual imaginatively. As a result, I decide that I will not eat a pie on my way to lunch with my colleagues the next time. Again, intuitively speaking, the antecedent of the counterfactual conditional, which is a falsehood, is represented in imagination. Such examples clearly indicate that (*Truth*) is implausible.

Recall the objection I raised in section 1. 5. 4 to the strategy of providing counterexamples to refute normative claims, such as the view that one ought to imagine *p* if and only if *p* is about metaphysical possibilities. The same objection can be raised against (*Truth*). Arguing that imaginings of falsehoods are cognitively useful to us cannot conclusively refute (*Truth*), as mental states can be cognitively useful outside their function. Consider again, to illustrate, the example of beliefs. For believing *p*, it is commonly accepted that a subject ought to believe *p* if and only if *p* is true. Yet many false beliefs are cognitively useful to us. From this it does not follow that beliefs do not aim at truth. Analogously, if in certain contexts imaginings of falsehoods play important cognitive roles, this cannot conclusively refute the view that imaginings are subject to an attitude-specific norm of truth. Counterexamples to (*Truth*) can at best provide defeasible evidence against it.

To further argue against (*Truth*) and to establish that it is not the function of imagination to represent truths, we take into account intuitive examples like the ones I

just mentioned together with further empirical and non-empirical evidence on their cognitive roles. In section 1. 5. 5 I presented recent empirical findings on the function of imagination. For example, Suddendorf and Corballis (2007) argue that our ability to imagine evolved to represent alternative pasts and possible futures. According to Byrne (2005) it is a function of imagination to represent and/or evaluate counterfactuals.⁹⁷ This further suggests that (*Truth*) is false.

In chapter 1, section 1. 6, I discussed the view whether in imagining *p*, it necessarily seems to us that *p* is possible. I argued that in imagining *p*, it can seem to us that *p* is the case in imagination. Some use the phrase ‘true in imagination’ or ‘true in the imaged scenario’ to refer to that which is the case in imagination. To clarify, the thesis that I argued for in section 1. 6 yields no evidence for (*Truth*). This is so, because the concept of something being true in imagination is not related to the concept of truth, as it is typically understood.

2. 2. 1. 2 An Argument by Appeal to Norms of Consistency

Here is another argument against (*Truth*). It appeals to the norm of consistency:

P1 If an attitude is subject to the norm of truth, the norm of consistency holds for it.

P2 The norm of consistency does not hold for imaginings.

C Imaginings are not subject to the norm of truth.

⁹⁷ To clarify, many claim that the counterfactual conditional, *If I had accepted an academic position in the Middle East, I would be able to speak Arabic by now*, is true. Furthermore, it can be argued that it is represented in imagination. From this it does not follow that (*Truth*) is true. From this, it could only follow that a highly restricted version of (*Truth*) is true: Only in cases where ‘p’ refers to a counterfactual conditional, (*Truth*) is true. Given my view on the normativity of imagination which I present in section 2. 3 in this chapter, the restricted version of (*Truth*) might be true, even though (*Truth*) is false.

In the context of imagination, we can distinguish two consistency relations: First, two imaginings can be consistent. Here consistency is a relational property between two mental states of imagining. This is the standard notion of consistency: Consistency is a relational property of two or more sentences, propositions, or mental attitudes. Second, the content of a single imagining can be consistent. Here consistency is a relational property between two parts of the content of a single state of imagining. We can call this a special case of consistency. It is arguably more commonly referred to by the term ‘contradictory’ or ‘non-contradictory’ contents.

In what follows I first focus on the first consistency relation and then briefly on the second. I argue that the argument is sound for both consistency relations. Here is our first norm, (*Consistency*) for short, according to which consistency is a relation between two mental attitudes:

(*Consistency*) It is rationally impermissible for *S* to bear propositional attitude *A* to *p* at *t₁* and to bear propositional attitude *A* to not-*p* at *t₁*.

Loosely speaking, it states that a subject is rational only if they do not bear the same attitude to *p* and not-*p* at the same time. It is not attitude-specific, as it holds for different attitudes. It is an intra-attitudinal norm, as it concerns a relationship between two mental state tokens of the same attitude.

Note the focus on what is *rationally* impermissible for the subject to do, instead of what is merely impermissible for her. Consistency norms are typically understood to be rationality norms. Here we are concerned with epistemic normativity, and not

teleological or biological normativity, for example. Yet, adhering to (*Consistency*) can at best be necessary, but not sufficient for a subject to be rational.

I now evaluate the argument above, with (*Consistency*) being our norm of consistency. First, a few clarifications. An attitude A is subject to an attitude-specific norm of truth if and only if there is a norm such that if a subject S holds attitude A towards p , p ought to be true, necessarily for every instance of attitude A . According to (*Consistency*), it is rationally impermissible for S to bear propositional attitude A to p at t_1 and to bear propositional attitude A to not- p at t_1 . P1 in the argument above states that if an attitude is subject to the norm of truth, (*Consistency*) holds for it. In other words, for the norm of consistency to hold for a propositional attitude A , it is sufficient that A is subject to the norm of truth.

I now argue for the truth of P1. P1 can be established by appeal to the law of non-contradiction. According to the law of non-contradiction, p and not- p cannot both be true at the same time. This law is generally accepted and for the purpose of my argument I do not defend it further.⁹⁸ From the truth of the law of non-contradiction it follows that if I am in the overall belief state of believing p and believing not- p at the same time, according to my overall belief state I believe something that is not possibly true. As beliefs are subject to a norm of truth, it is impermissible for a subject to believe p if and only if p is false. The norm of truth is not an intra-attitudinal norm. It is a norm on the contents of belief, it is not a norm on the relation between beliefs. The norm merely states that I ought not believe something that is false. But if the law of non-

⁹⁸ For support see for example Priest (1998), Tahko (2009). For critical discussion of the status of this law see Arnold and Shapiro (2007), Priest, Beall and Armour-Garb (2004), as well as the literature on paraconsistent logic, dialethism or standard views in Buddhist philosophy, among others.

contradiction holds, we can derive an intra-attitudinal norm from it together with the norm of truth. From the law of non-contradiction, it follows that if I believe p and I believe $non-p$ at the same time, I necessarily believe something false. From the norm of truth, it follows that it is impermissible for a subject to believe something false. Therefore, it is also impermissible for a subject to believe p and also believe $not-p$ at the same time. But this is a version of (*Consistency*). Recall that according to (*Consistency*), it is rationally impermissible for subject S to bear propositional attitude A to p at t_1 and to bear the same propositional attitude to $not-p$ at t_1 .

I have now shown that (*Consistency*) holds for beliefs, given that the norm of truth holds for beliefs and the law of non-contradiction holds. This line of reasoning applies to any attitude that is subject to the norm of truth. For any attitude A that is subject to the norm of truth, it is rationally impermissible for a subject S to bear attitude A towards p and to bear attitude A towards $not-p$ at time t_1 .⁹⁹ Therefore P1 is true. The truth of P1 entails that if (*Consistency*) does not hold for an attitude, the attitude is not subject to the norm of truth. If (*Consistency*) does not hold for imaginings, imaginings are not subject to the norm of truth.

Let us now focus on P2. P2 states that (*Consistency*) does not hold for imaginings. (*Consistency*) applied to imaginings claims that it is rationally impermissible for S to imagine p at t_1 , and to imagine $not-p$ at t_1 . Before we can evaluate P2, we need to clarify whether subjects can in principle violate (*Consistency*). In my view, subjects are in principle able to imagine p at t_1 , and to imagine $not-p$ at t_1 . Let me explain this. Recall my initial characterization of imaginings in Chapter 1, in section 1.

⁹⁹ This is strictly speaking false, as attitudes can be subject to not only the norm of truth, (*Consistency**) and (*Consistency*), but further norms and requirements of rationality, which can make it the case that any requirements for consistency are overridden. I disregard such unusual cases.

2. My characterization of imaginings does not require them to be phenomenally conscious mental states, although they have a disposition to have a specific phenomenal character when brought to consciousness. Imaginings can be phenomenally conscious or unconscious. Moreover, I am open to the view that both occurrent and dispositional imaginings are possible to be had simultaneously. Nevertheless, one might worry that it is impossible for a subject to be in two distinct mental states of phenomenally conscious imaginings at the same time. If that was true, (*Consistency*) as applied to phenomenally conscious imaginings only would be impossible to violate in the first place. If we cannot consciously imagine p and consciously imagine $not-p$ simultaneously, the rationality norm that (*Consistency*) posits is trivially satisfied. This seems to give us a reason to reject (*Consistency*) and endorse P2. Let me now deflect this worry.

First, I motivate the idea that it is impossible to consciously imagine p and also consciously imagine $not-p$ at the same time. One common assumption is that when we say that a subject imagines p , ' p ' refers to the content of the overall phenomenally conscious state of imagining. If this is so, it might be impossible for phenomenally conscious imaginings to violate (*Consistency*), for reasons related to how we defined what a mental state of imagining is. When a subject consciously imagines that there is an apple on the table and simultaneously consciously imagines that there is no apple on the table, she is in fact in a single mental state of imagining. According to this mental state, both p and $not-p$ are true in the imagined scenario. In other words, her imagining has contradictory contents. But this is not a case according to which the subject is in two distinct mental states of imagining. This is required for (*Consistency*) to apply in the first place.

In my view, two distinct phenomenally conscious imaginings can occur simultaneously. Suppose I picture an apple lying on a table. Arguably, when I introspect on the image, I notice that the apple is presented to me as lying in a specific location in my quasi-visual field. I now picture a dog. Again, when I introspect on the image, I notice that the dog is presented to me at a specific different location in my quasi-visual field. Let's say I hold both mental images in my mind simultaneously. But I do not thereby imagine one scenario in which there is both a dog and also an apple lying on a table. This is so, as I do not picture the dog standing in any relation to the apple or the table. Each is imagined in isolation and as isolated from the other, but nevertheless imagined simultaneously. Intuitively, I picture two distinct scenarios simultaneously. I do not imagine p and q , but instead, I imagine p and I also imagine q . As each imagining is a distinct mental state, in a framework of Possible Worlds Semantics, each content is (equivalent to) a distinct set of possible worlds.

If you do not find this example convincing, consider the following instead: A camera is wired to my brain which I use to see in addition to my eyes. Suppose I see something with my eyes and in addition my camera vision is active. My camera vision produces images like a film does. My brain does not merge the two images that are being produced. In this case, I am arguably in two mental states with visual or quasi-visual contents. Now we consider a related example in which it is not a camera that is wired to my brain but a device that enables me to sensorily imagine in addition to my ordinary ability to imagine. Again, my brain does not merge the two images that are being produced into one. Again, in this case I am arguably in two mental states of imagining or quasi-imagining at the same time. Such scenarios are, even if science

fiction, not inconsistent. If such cases are possible, then we can consciously imagine p and consciously imagine $\text{not-}p$ simultaneously.

I just established that subjects can in principle violate (*Consistency*). They are in principle able to imagine p at t_1 , and to imagine $\text{not-}p$ at t_1 . We are now ready to evaluate P2. I will argue that P2 is true. (*Consistency*) does not hold for imaginings. It is rationally permissible for subjects to imagine p and imagine $\text{not-}p$ simultaneously. We can provide counterexamples to (*Consistency*) holding for imaginings.

First, it is rationally permissible to do so, if it is what I intend to imagine, for a specific purpose. But this can be said to also apply to other mental states, such as beliefs, for example. If I intend to at the same time believe that p and believe that $\text{not-}p$, for a specific purpose, it is rationally permissible to do so, merely because I thereby complete this intention successfully. Second, it is rationally permissible for subjects to imagine p and imagine $\text{not-}p$ for specific purposes in typical cases of imagining. The same cannot be said for beliefs. Imaginings typically play an important role in counterfactual reasoning. In counterfactual reasoning, imagining p and imagining $\text{not-}p$ can be beneficial for the purpose of evaluating counterfactual and future-related claims. Consider the following case: I plan my vacation and it is uncertain whether it will rain. Arguably, to plan best I ought to both imagine what I could do on the island if it rains all week and also imagine what I could do on the island if it does not rain. It can be argued that in cases where there is uncertainty about whether p or $\text{not-}p$ will obtain, both p and $\text{not-}p$ ought to be imagined as antecedents in a conditional. These are counterexamples to (*Consistency*). Further counterexamples can be generated that have a similar structure. Reasoning about the future and reasoning about the past typically involve comparing and evaluating alternatives. Let's say I had an important job

interview last week and did not get the position. I now use imagination to evaluate this event to better understand the reasons why I did not get the job. I first imagine that I did not answer the questions in the way I actually did, but answered them differently. I simulate in imagination what most likely would have happened as a result. I realized that it probably would not have made much of a difference. I then imagine that I did answer the questions in the way I actually did, but in the imagined scenario I alter who my competitors are. I realize that this probably would have made a difference to me getting this job. This is an example where I imagine *not-p* and then I imagine *p*. Furthermore, I arguably ought to, rationally speaking, imagine both *p* and *not-p*, given the goal of better understanding the reasons why I did not get the job. Moreover, as such examples can be generalized, we have strong evidence that (*Consistency*) does not hold for imaginings.

Here are two objections to this line of reasoning. The first objection concerns simultaneity. (*Consistency*) states that it is not permissible for me to simultaneously imagine *p* and imagine *not-p*. Yet in the examples I presented I do not imagine *p* and *not-p* simultaneously. Typically, I imagine one scenario after another. First, I imagine answering the interview questions differently, then I imagine answering them in the same way I actually did. For this reason, so the objection goes, the examples are not counterexamples to (*Consistency*). I would need to provide examples where I imagine *p* and imagine *not-p* simultaneously.

This is my response. Counterexamples to (*Consistency*) are cases where it is rationally permissible to imagine *p* and *not-p* simultaneously, not cases where it is rationally required to imagine *p* and *not-p* simultaneously. In the examples I gave it is rationally permissible to imagine both scenarios simultaneously, even though it is not

typically done so. *Simultaneously* imagining both p and not- p is rationally permissible as it is at least as epistemically good for the purpose of evaluating counterfactual and future-related claims as imagining them in succession is. It might even be instrumentally more rational to simultaneously imagine them instead of imagining them in succession, since that saves time. But this feature is not a necessary feature of a counterexample to (*Consistency*). I do not need to argue that it is a requirement of rationality that p and not- p are imagined simultaneously. Therefore, the examples I provided are genuine counterexamples.

I now address the second objection. According to this objection, we can provide examples where rationality requires that two imaginings are consistent. This, so the objection goes, casts doubt on the truth of P2. On my view, it is true that many times rationality requires of us that we do not imagine p and also imagine not- p simultaneously.¹⁰⁰ Let me give you two examples. Suppose I would like to know whether the couch I ordered fits through the doorway. I picture the doorway and the couch and rotate the couch in my mind. In my imagination, the couch fits through.¹⁰¹ It can be argued that it would be irrational to simultaneously also imagine that the couch does not fit through the doorway. That it would be irrational arguably depends on the purpose of my imagining. Consider another example. Suppose I read John Steinbeck's *Of Mice and Men* and imaginatively engage with the novel. I picture Lennie caressing his dead dog, as this is what happens in the story, according to the text. If I now, while reading, simultaneously imagine that Lennie does not caress his dead dog, I have not imagined what happens in the novel. Arguably, I have not imagined in the way I ought

¹⁰⁰ Such cases are possible only if it is denied that it is impossible to both imagine p and not- p simultaneously.

¹⁰¹ This example is taken from Langland-Hassan (2015). Related example imaginings are commonly discussed in the philosophical literature on the cognitive roles of imagination. See for example the examples in Kind (2013) or Gendler (2010).

to imagine. It is a plausible claim that engaging with fiction requires of us that we imagine only in a way that is consistent with the text of the fiction.

Examples where imagining p and $\text{not-}p$ at the same time is not rationally permissible are not evidence that (*Consistency*) holds. (*Consistency*), if it holds for imagination, holds for all token imaginings, regardless of the contexts they are embedded in. Such norms hold in virtue of the intrinsic properties of the relevant attitude. In certain contexts, it can be irrational to imagine both p and $\text{not-}p$ simultaneously due to a specific cognitive goal which the imagining is meant to fulfil in the context. In these cases, the fact that imaginings ought to be consistent is to be explained by appeal to features extrinsic to the attitude, namely the context and the cognitive goal. Therefore, the fact alone that in certain contexts, imaginings ought to be consistent is not indicative of (*Consistency*) being true. I elaborate on norms extrinsic to the attitude in section 2.3 of this chapter.

This concludes my critical discussion of (*Consistency*). At the beginning of this section I introduced two consistency norms. Standardly, consistency refers to a relation between two propositions, sentences or mental states. There is a second, more restricted notion of consistency that refers to a relation between parts of the content of mental attitudes. Let's briefly consider whether imaginings are subject to a consistency norm in this restricted sense. Here it is:

(*Consistency**) It is rationally impermissible for S to bear propositional attitude A to $\langle p$ and $\text{not-}p \rangle$ at t_1 .

Loosely speaking, (*Consistency**) states that a subject is rational only if they do not bear a propositional attitude to both *p* and *not-p*. ‘<*p* and *not-p*>’ refers to the content of a single mental state. This norm is not intra-attitudinal, as it does not concern a relationship between two mental state tokens of the same attitude, but instead a property of the contents of a single attitude. (*Consistency**), like (*Consistency*), is not attitude-specific, as it holds for different attitudes.

Is it rationally impermissible for subjects to imagine that *p* and *not-p*? Recall our discussion in section 1. 4. 2. There I presented an example of an imagining which was about a metaphysical impossibility, but which it was rationally permitted to be imagined, given the purpose at hand. Similar examples can be given to argue against (*Consistency**). Consider the following: I imagine a cat which is both alive and not alive. I form a mental image of the cat and that it is both alive and not alive is part of the conceptual content of the imagining. Under the assumption that this is possible to imagine it, is unclear why exactly it should be impermissible. Resistance to such examples seems to stem more from the worry that this is impossible to imagine than from the assumption that it would be impermissible to do so.

Let’s assume that (*Consistency**) does not hold for imaginings. Here is our argument from the beginning, but applied to (*Consistency**):

- P1 If an attitude is subject to the norm of truth, (*Consistency**) holds for it.
- P2 (*Consistency**) does not hold for imaginings.
- C Imaginings are not subject to the norm of truth.

Assume that P2 is true. What about P1? Can it also be established by appeal to the law of non-contradiction? It can. According to the law of non-contradiction, p and $\text{not-}p$ cannot both be true at the same time. From the truth of the law of non-contradiction it follows that if I form the belief that p and $\text{not-}p$, I believe something that is not possibly true. As beliefs are subject to a norm of truth, a subject ought not believe p if and only if p is false. If I believe that p and $\text{not-}p$ hold, I believe a falsehood. According to the norm of truth, then, a subject ought not believe p and $\text{not-}p$ at the same time. If I believe p and $\text{not-}p$, I believe something I ought not believe. It is rational for subjects to adhere to the norm of truth in the case of beliefs. We can also say that rationality requires of me that I do not believe that p and $\text{not-}p$ hold. But this is a version of (*Consistency**). Recall that according to (*Consistency**), it is rationally impermissible for S to bear propositional attitude A to $\langle p$ and $\text{not-}p \rangle$ at t_1 . Again, in my view, this line of reasoning applies to any attitude that is subject to the norm of truth. For any attitude A that is subject to the norm of truth, it is rationally impermissible for a subject S to bear attitude A towards p and $\text{not-}p$ at time t_1 .¹⁰² Therefore P1 is true.

Let me sum up what I have done in this section so far. I focused on the norm of consistency, a norm that is often considered to hold for a large class of attitudes, such as beliefs, desires and intentions.¹⁰³ I distinguished two consistency norms. I argued that, in both cases, if the norm of consistency does not hold for imaginings, then imaginings are not subject to an attitude-specific norm of truth, unlike beliefs, for example. I addressed the question whether these norms hold for imaginings. To answer this question, I argued that it is possible for imaginings to be inconsistent in the first place. I also gave reasons

¹⁰² This is strictly speaking false, as attitudes can be subject to not only the norm of truth, (*Consistency**) and (*Consistency*), but further norms and requirements of rationality, which can make it the case that any requirements for consistency are overridden. I disregard this concern here.

¹⁰³ See for example Setiya (2015) on this.

why the norms of consistency do not hold for imaginings and defended my line of reasoning against several objections.

The arguments presented are additional arguments for the view that imaginings are not subject to the norm of truth. In my view, the line of reasoning presented has at least the following three virtues: First, it is a philosophical argument. It provides evidence that goes beyond empirical evidence. Second, it elucidates an interesting relationship between the norm of truth and the norm of consistency. Third, it is transferrable. Arguably, an analogous argument can be given for attitudes that are commonly referred to in English as conceiving, entertaining a thought, assuming, supposing, considering, and the like, but I will not go into further detail about this here. If the norm of consistency does not hold for imaginings, arguably, the same holds for related attitudes. We can then conclude that such attitudes also are not subject to the norm of truth.

2. 2. 1. 3 Velleman's View: Imagining p is regarding p as true

Interestingly, Velleman (1992) and Velleman and Shah (2003) defend the view that beliefs and imaginings share a direction of fit. I now briefly discuss Velleman's thesis on imagination. I argue that the phenomenon he addresses, even though it is labeled 'direction of fit', does not indicate that imaginings have the same direction of fit as beliefs, or indeed any direction of fit in the normative sense we are concerned with.

According to Velleman, imaginings and fantasies are examples of "cognitive attitudes other than belief, attitudes that have the same direction of fit" (1992:12). They are cognitive attitudes as they are attitudes „in which p is regarded, not as a

representation of what is to be brought about, but rather as a representation of what is” (ibid.) For Velleman imagining that *p*, believing that *p*, assuming that *p*, fantasizing that *p*, etc. “involve regarding *p* as true—or, as we shall call it, accepting *p*” (2003:1). Both when we imagine and when we believe we regard the propositional objects of imagination and belief as true, though this is not the case when we desire, hope or intend. When we desire, hope or intend, we do not regard the propositional objects as true. Desires, hopes and intentions are mental attitudes which involve regarding *p* “as a representation of that what is to be brought about” (ibid.). On Velleman’s view, desires, for instance, involve regarding certain propositional objects as good, or attainable. Velleman (1992) takes “expressions like ‘regarding as true’ and ‘regarding ... as good’ [to] describe attitudes in a way that elucidates the difference in their directions of fit” (8). This way Velleman points out an important difference between imaginings, beliefs, fantasies and hypotheses on the one hand and desires, hopes and intentions on the other. He paraphrases this difference as follows:

My point is [...] that what distinguishes belief from desired [sic] distinguishes assumption, hypothesis, and imagination from desire, too – namely, that they treat their propositional objects as reflecting antecedently fixed conditions rather than as dictating conditions to be achieved, as *facta* rather than *facienda*. (11)

On this view, imaginings ‘treat their propositional objects as reflecting antecedently fixed conditions’. Velleman does not explain the metaphor of an attitude treating propositional objects in a certain way. Let me give an example. I imagine going into the

philosophy department for a meeting tomorrow afternoon. By imagining this, I regard it as true in the imagined world that I am going into the philosophy department for a meeting tomorrow afternoon. Whenever I imagine p , p is thereby regarded as a fact in the scenario, a fact about the imagined world. Whenever I believe p , I regard p to be a fact about the actual world. According to Velleman, in both cases, we regard a proposition as true. The central difference is that one proposition is regarded as true in the imagined world while the other is regarded as true in the actual world. Regarding p as true is not the same as regarding p as true in the imagined world. How are we to characterize this precisely? Velleman acknowledges that beliefs and imaginings differ in the following respect: beliefs have a justificatory force which imaginings lack. According to him, this can be explained by appeal to differences in the ways that beliefs and imaginings regard a proposition as true. Only beliefs regard propositions as *really* true, as Velleman says. When hypothesing that p , we regard things as hypothetically true. In imagining p , we regard p as true in the imagined world. The fact that beliefs regard properties as *really* true is what gives beliefs their justificatory force, according to Velleman. Regarding a proposition as hypothetically true or true in the imagined scenario does not provide an attitude with the justificatory force that beliefs have. Desiring p , intending p or hoping for p also does not involve such a justificatory force, but for a different reason. In desiring, intending, hoping, etc. we do not consider the propositions as being true in the first place, either in an imagined or in the actual world.

In fleshing out Velleman's position just now I used both the locution of a subject regarding a proposition as true and the attitude itself regarding a proposition as true. Velleman's usage of this terminology is idiosyncratic. Let me go through what I believe are the three most natural interpretations of Velleman's view.

Thesis 1: Whenever a subject *S* imagines *p*, necessarily, *S* regards *p* as true in the imagined scenario.

The claim that in imagining *p*, *S* regards *p* as true has two readings. In Chapter 1, section 5, I discussed a phenomenal reading of *S* regarding *p* as possible. In imagining *p*, it necessarily phenomenally seems to *S* that *p* is true in the imagined scenario. As Velleman does not explicitly discuss phenomenal properties of attitudes, it is unlikely that this is the correct reading. Moreover, a necessary phenomenal property can provide, at most, some evidence for the existence of a direction of fit or, in my terminology, for the truth of an ought-claim that captures the normativity of the attitude. But it does not imply its existence. It would arguably be evidence for the following direction of fit: imagination has a mind-to-scenario direction of fit. It aims at representing what is true in the scenario. Let me postpone an evaluation of this thesis. I will return to it when discussing another interpretation of Velleman's view below. Let us instead discuss the second reading of Thesis 1. In ordinary language, regarding *p* as *x* can mean judging or believing *p* to be *x*. When I say that I regard your sister as intelligent it means that I judge your sister to be intelligent or believe that she is. Thesis 1 can be interpreted as: in imagining *p*, *S* necessarily judges or believes *p* to be true in the imagined scenario.¹⁰⁴ Yet Thesis 1 now arguably states something false. We often imagine *p* without thereby forming any judgments about the content of our imagining. This interpretation also is

¹⁰⁴ The difference between beliefs or judgements and imaginings can be fleshed out as follows: In imagination, the subject judges *p* to be true in the imagined scenario, but when believing *p*, or judging that *p*, the subject judges *p* to be true, or believes that *p* is true.

not what Velleman has in mind.¹⁰⁵ Let us assume for the sake of argument that Thesis 1 understood as such is true. It does not follow that imagination has a direction of fit. It follows that imagining p necessarily comes with a judgment or belief, which has a mind-to-world direction of fit. I presented a phenomenal and a judgment-related interpretation of Thesis 1. I claim that the latter is false. I will discuss the former in due course. Let us move on to the second interpretation.

Thesis 2: Whenever a subject S imagines p , necessarily, p is true in the imagined scenario.

According to the most natural interpretation of Thesis 2, it is trivially true. Imagining p implies that p is true in the imagined scenario. This is so, as p being true in the imagined scenario is merely a metaphorical way of saying that the content of the imagining is p .¹⁰⁶ There is no question whether p is true, and relatedly it does not make sense to say that we can discover whether p is true or false.¹⁰⁷ Thesis 2 merely describes a property of the content of imagination. As properties of contents are unrelated to directions of fit, Thesis 2 is not of interest to us.

Moreover, in my view, Thesis 2 is not the correct interpretation of Velleman's view, as he is concerned with a property that desires, hopes and wishes lack. He argues that there is an important disanalogy between beliefs and imaginings on the one hand and beliefs and desires on the other. Yet versions of Thesis 2 are trivially true for those states as well. We can equally well say that in desiring p , necessarily, p is true in the

¹⁰⁵ For an extensive critical discussion of views according to which 'regarding as' is interpreted as 'judging as' see Velleman (1992: 8ff).

¹⁰⁶ This locution is arguably derived from modal semantics.

¹⁰⁷ This does not suggest that we cannot be mistaken about how best to describe the contents of our imaginings and that we cannot learn from imagination; these are topics that are not our concern here.

desired scenario, or, what is the same thing, that when I desire p to be true, I regard it as true in the desirable world. This suggests that Thesis 2 is not the correct interpretation of his view.

There is a possibility that Velleman, in developing his position, formulated Thesis 2, yet mistook it for expressing a normative thesis on the attitude of imagining. Thesis 2 for imaginings looks *prima facie* structurally equivalent to the following normative thesis for beliefs: In believing p , necessarily, p is true in the actual world. Yet the normative thesis for beliefs, unlike thesis 2, refers not to a property of the contents, but a property of the attitude. It describes the direction of fit of beliefs, in the normative sense. It suggests that beliefs are necessarily correct if and only if they aim at truth. In my view, if Velleman holds that a structurally analogous normative thesis for imaginings is correct, then his view is best expressed by thesis 3.

Thesis 3: Whenever a subject S imagines p , the imagining itself regards p as true in the imagined scenario.

In my view, Thesis 3 is the formulation most in line with Velleman's view. He distinguishes between the claim that subjects, in believing p , regard p as true and the claim that beliefs themselves regard p as true. He considers a mode of regard to be a property of the attitude itself, and not a property of subjects (see for example (1992: 8)). Thesis 3 also remains the most obscure. It is unclear exactly in what sense imaginings can in fact regard something as something. Velleman claims that what he calls a mode of regard are nothing beyond what philosophers usually call a direction of fit (ibid.).¹⁰⁸

¹⁰⁸ To be clear, Thesis 3 and the phenomenal interpretation of Thesis 1 can both be true.

If Velleman's thesis is that imaginings have a direction of fit in the normative sense that is of interest to us, Thesis 3 is to be interpreted as follows: Imaginings are directed at the imagined scenario. They aim to represent that which is true in the imagined scenario. Subjects, whenever they imagine, ought to imagine that which is true in the imagined scenario.

I now argue that Thesis 3 is likely false. Thesis 3 falls prey to a triviality objection. It is structurally like the one which led us to reject the view that imaginings aim to represent possibilities, if they necessarily represent possibilities. I argued in Chapter 1, section 1.3, that the view that imaginings aim to represent possibilities is to be rejected if it is the case that imaginings necessarily represent possibilities. This is because the norm on imaginings would be trivially satisfied. A similar situation arises for Thesis 3. If imaginings aim to represent that which is true in the imagined scenario, their aim is necessarily fulfilled. This is because contents of imaginings are defined in terms of truth in imagined scenarios. Whenever I imagine p , I thereby imagine p being true in the imagined scenario. In imagining p , p necessarily is the case in the imagined scenario. We now encounter the same problem we had earlier: The imagination norm is necessarily fulfilled. This casts doubt on whether it is a norm in the first place and puts significant pressure on Thesis 3.

In this section, I discussed what I believe are the three most natural interpretations of Velleman's view. The first thesis has two readings. If we adopt the first reading, Thesis 1 can at most be defeasible evidence for attitude-specific normativity of imagination. If we adopt the second second, Thesis 1 is false. The second thesis is true, yet concerns the nature of contents of attitudes, not their normativity. According to the third thesis the normativity of imagination is necessarily fulfilled. I

argued that this casts doubt on the truth of this thesis. I hope to have shown that none of the three interpretations gives us reason to believe that the normativity of imagination is akin to the normativity of belief, or indeed that it has any attitude-specific normativity at all.

2. 2. 2 Against the Norm of the Good

Let me now briefly focus on norms of the good. Various norms of the good figure in discussions on the normativity of intentions, desires, hopes and wishes and elicit fine-grained differences between these attitudes. Consider for example the following norm of the good applied to imagination:

(*Good*) For any imaging, any proposition p and subject S , S ought to imagine p if and only if p is good for S from the perspective of S .¹⁰⁹

Intuitively, (*Good*) is false. Many instances of imagining p are such that p is bad for S from the perspective of S . Moreover, such imaginings are permissible. In our deliberations about alternative pasts, we at times imagine scenarios which, from our perspective, ought not obtain in the world. For example, I wonder what would have happened if I had not noticed the smoke coming from the kitchen. I imagine how the wood around the stove would have caught fire and the house would have burnt down. Imagining undesired events and situations helps subjects to prepare for them, plan

¹⁰⁹ These are formulated as merely necessary but not sufficient conditions, as it can be argued that the same conditions hold for intentions, hopes, wishes or desires.

around them, evaluate their danger, and related mental activities. I consider cheating on my long-term partner and imagine the likely consequences of this behavior. In this case, I ought not imagine only that which I consider to be immediately pleasurable, but other likely consequences, which I consider not to be good – namely that my partner would be very hurt – something which, from my perspective, also ought not obtain in the world. In representing counterfactuals, we commonly represent scenarios that from our perspective ought not obtain in the world. The same empirical evidence against (*Truth*) can also be used against (*Good*). If what I claimed in chapter 1, section 1. 5. 5, about the empirical evidence for the function of imagination is correct, both (*Truth*) and (*Good*) are false.

What is the relationship between the norm of consistency and the norm of the good? Unfortunately, there is no analogous argument available that appeals to (*Consistency*) and establishes that imaginings are not subject to the norm of the good. This is because if an attitude is subject to a norm of the good, it is nevertheless unclear whether (*Consistency*) holds for it. Desires are commonly considered to be subject to the norm of the good. Yet whether desires can be inconsistent is subject to much debate.¹¹⁰

2. 2. 3 Summary

Before I proceed to present my own proposal on the norms of imagination, let me sum up what I have done in chapter 2 so far. So far I have focused on the question whether imaginings are subject to a norm of truth, like beliefs, or a norm of the good, like

¹¹⁰ For recent discussion on inconsistent desires see for example Wall (2017) and other articles in Lauria and Deonna (2017).

desires. In section 2. 2. 1 I focused on the norm of truth. I provide additional arguments for the intuitively plausible claim that imagination is not subject to the norm of truth by appeal to norms of consistency. I argued first that if mental states are not subject to norms of consistency, they also are not subject to a norm of truth and second that imaginings are not subject to norm of consistency. From this it follows that imaginings are not subject to a norm of truth. In section 2. 2. 1. 3 I discussed Velleman's view according to which imaginings and beliefs are truth-directed and share a direction of fit. I presented three interpretations of his view and argued that none of them gives us reason to believe that imaginings are truth-directed or have the same normative direction of fit as beliefs. I then focused on the norm of the good (section 2. 2. 2). I presented intuitive arguments against the view that imaginings are subject to the norm of the good. An argument that appeals to consistency, unfortunately, can, in my view, not be given to defend that imaginings are not subject to a norm of the good.

2. 3 The Normativity of Imagination

2. 3. 1 The Negative Thesis

I reject the view that the attitude of imagining is subject to a possibility-norm, a norm of truth, a norm of the good or a norm of consistency. In my view, the following stronger claim holds:

(Non-Intrinsic) The attitude of imagining is not intrinsically normative.

In Chapter 1, section 1. 2, I explained the notion of attitude-specific normativity. Attitude-specific norms are norms that are specific to a propositional attitude. If an attitude is subject to attitude-specific normativity, or what is the same thing, has a direction of fit, it thereby is *intrinsically* normative. It is subject to normative constraints regardless of the context in which the mental state is instantiated and regardless of other features external to the mental state, for example the overall cognitive state that a subject is in at the time. As I endorse (*Non-Intrinsic*), I believe imaginings lack intrinsic, attitude-specific correctness conditions.

To establish the claim that the attitude of imagining is not subject to attitude-specific intrinsic normativity, one might endorse an argument along the following lines:

- P1 Attitudes are subject to the norm of truth, the norm of the good, or are not intrinsically normative.
- P2 The attitude of imagining is subject to neither the norm of truth, nor the norm of the good.
- C The attitude of imagining is not intrinsically normative.

This argument is intuitively compelling, if you consider P1 to be a plausible way of cashing out the conceptual space of the normativity of attitudes. According to orthodox classifications of propositional attitudes, they are normatively either belief-like or desire-like (or in other words, have either a mind-to-world or a world-to-mind direction of fit) or they are like neither beliefs nor desires.¹¹¹ The dichotomy between belief-like

¹¹¹ The distinction between belief-like and desire-like states more or less maps onto the distinction between cognitive and conative states. In Kriegel's (2015) terminology, mental states are either cognitive, conative or neutral. Lewis (1979) for example famously pointed out that all mental attitudes can be located on either the degrees of beliefs or degrees of desirability scale, while this leaves out a certain class

and desire-like states is widely endorsed and supported by belief-desire folk psychology, the Humean theory of motivation, and related views.¹¹² The classification P1 suggests is exhaustive: the class of attitudes that are subject to neither the norm of truth nor the norm of the good is unified. The class is unified in that it is the class of attitudes with are not intrinsically normative.¹¹³ As intuitively compelling as this argument is, P1 is false. It is possible for an attitude to be subject to attitude-specific norms that are neither the norm of truth nor the norm of the good. The previous chapter focused on the view that the attitude of imagining is subject to an attitude-specific possibility norm. A revised P1 states:

P1* Propositional attitudes are either i) subject to a norm of truth, or a norm of the good or a norm of possibility or ii) not intrinsically normative.

For the conclusion to follow, we add P3:

P3 The attitude of imagining is not subject to an attitude-specific norm of possibility.

I argued for the truth of P3 in Chapter 1. Yet the disjuncts in P1* also do not exhaust the conceptual space of attitude-specific normativity. In Chapter 1 I introduced a norm according to which imaginings ought not represent our immediate perceivable

of “ill-understood attitudes of imagining, conceiving, contemplating or entertaining a thought.” (529). This is yet another, related distinction.

¹¹² Further consider Bratman (1987), Lewis (1989), and for a discussion of Hume see for example Smith (1987).

¹¹³ If you wish you can further claim that it is a necessary property of an attitude that it is subject to a specific norm and that mental states without attitude-specific normativity are not attitudes.

surrounds.¹¹⁴ Revising P1* once more will also not be satisfactory. In sum, for the argument to conclusively establish that the attitude of imagining is not subject to attitude-specific intrinsic norms, what might be required instead, first, would be an argument in favor of the correct view of the conceptual space of attitude-specific normativity and, second, an argument that shows for all candidate norms that they do not apply to the attitude of imagining. In my view, this strategy is unnecessarily complex, and therefore I do not intend to proceed this way.

2. 3. 2 The Positive Thesis

The view that imagination is not subject to attitude-specific normativity has received criticism because of its apparent inability to explain how imaginings contribute to reasoning, how they interact with other mental states and how they can guide action. An important step in my argumentation is to provide a plausible positive account of the normativity of imagination to complement the negative thesis and deflect the criticisms. In the following sections I present my positive account of the normativity of imagination.¹¹⁵ In a nutshell, according to my view, instances of imagining are subject to norms that are determined by purposes of use.

¹¹⁴ According to this norm, imaginings ought not be about the imaginer's immediate perceivable surrounds. These are possibilities *of a certain kind* only. Therefore, this norm is distinct from the norm of possibility.

¹¹⁵ Note that I am concerned with norms on the attitude of imagining and not norms on attitude reports or descriptions of imaginings. Let me add a brief remark on norms on describing and ascribing, just to put this phenomenon aside. The content of an imagining can be correct or incorrect relative to a description or ascription that I have of it. Consider a popular example in the wake of Putnam (1975) and Kripke (1980). I imagine that the watery stuff in the rivers and lakes, something that superficially looks like water, has a molecular structure that is not H₂O. Because I am not able to distinguish water *a priori* from something that superficially looks like water, I believe that I imagine that water is not H₂O, instead. In this case I describe the content of my imagining incorrectly. The content of the imagining is then incorrect relative to a description of it. This is not normativity on the attitude of imagining itself. Langland-Hassan (2015) makes a related point. Unfortunately, he takes himself to be arguing against the

(*Purpose*) Instances of imaginings are subject to norms determined by their purposes of use.

While imaginings are not subject to attitude-specific intrinsic norms, they are nevertheless subject to norms that are not intrinsic to imaginings. They are subject to norms extrinsic to the attitude of imagining, norms not inherent to the attitude of imagining, but which nevertheless impose correctness conditions on them.¹¹⁶

Imaginings can be correct and incorrect relative to a purpose of use. The account of normativity that is underlying (*Purpose*), properly spelled out, can fully explain how imaginings contribute to reasoning and how they interact with other mental states and how they can guide action. In the following sections I present my positive account. This will involve three steps. First, I clarify that imaginings are subject to hypothetical norms because one can intend, wish, hope and desire to imagine (section 2. 3. 3). It is a common conception that imaginings are subject to the will. This important feature distinguishes them from many other attitudes. Second, I argue that instances of imagining are subject to norms determined by their purposes of use (section 2. 3. 4). I do this by analyzing example imaginings. Imaginings are subject to subpersonal purposes also (section 2. 3. 5). I use a comparison between imaginings and scientific

view that imaginings do not have a direction of fit. I discuss his view further in section 2. 5. 2 in this chapter.

¹¹⁶ The following argument for the view that imagination is not subject to attitude-specific norms was presented to me by Uriah Kriegel in conversation:

- P1 Imaginings cannot be correct or incorrect.
- P2 A lack of correctness implies the absence of a direction of fit.
- C Imaginings do not have a direction of fit.

Two notes on this. First, the term ‘correct’ in P1 and P2 is ambiguous. On my view, imaginings can be correct or incorrect, but do not have intrinsic correctness conditions. Only a lack of intrinsic correctness conditions implies the absence of a direction of fit. Second, a lack of intrinsic correctness conditions only implies the absence of a mind-to-world direction of fit. If the argument is altered accordingly, the conclusion states that imaginings do not have a mind-to-world direction of fit.

models (section 2. 3. 6) to carve out further central elements of my view. On my view, imaginings are typically used as mental models in ordinary reasoning in a way that is akin to the way scientific models are used by scientists in scientific reasoning.¹¹⁷ The normativity of imaginings and scientific models is importantly alike.

2. 3. 3 Hypothetical Norms

Imaginings are subject to hypothetical norms. Hypothetical norms are such that they depend on specified conditions to hold. Norms on imaginings are in place that depend on what subjects intend to do, what they desire, hope or wish for, for example. For example, given a specific intention I_1 , my imagining ought to be of q . This is the topic of the current section. My focus in the next paragraphs is on intentions, and not desires, hopes or wishes, but most of what I claim to hold for intentions also applies to these attitudes.

Let us begin. Here is one important property of imagination: both the occurrence of the mental state of imagining and its content are subject to the will. That imaginings are subject to the will is widely accepted.¹¹⁸ If I want to, I can imagine. I can imagine now or in ten minutes. I can imagine an elephant, or else a pig. If I want to imagine an

¹¹⁷ I return to this view in chapter 4, where I apply it to imagining perceptually experiencing something.

¹¹⁸ Versions of this view are endorsed by Collingwood (1958), Budd (1989), Levinson (1998), McGinn (2004), Sartre (2004), Scruton (1974), Wittgenstein (1953), (1984) and Wollheim (1973a). Sartre (2004) for example argues that sensory imaginings are ‘spontaneous’ (11) and ‘creative’ (19) and always involve an ‘intention’ (32) as opposed to perceptions. Collingwood (1958) argues that imaginings are ‘active’ (195).

Dorsch (2012) defends the further view that it is essential to imaginings that they are subject to the will. Whether this is so, depends on how the attitude of imagination is defined, which in turn depends on how you carve up the space of attitudes. In this dissertation I characterize the attitude of imagination in terms of the representational properties of instances of imagining. Most accept, as I do, that involuntary episodes of imagining still count as imaginings (see for example Sartre (2004:19) and Collingwood (1958: 179, 195)). In my view, being subject to the will is therefore not essential to imaginings in the following sense: not every token imagining is necessarily voluntary.

elephant on a swing, I simply proceed to do so. The terminology of imaginings being subject to the will is vague, and one natural way of cashing it out is in terms of intentions.¹¹⁹

Let's say I intend to imagine an elephant on a swing and then proceed to do so. Intending to be in a mental state is not sufficient for a subject to be in that state, as intentions can be ineffective. I might intend to believe that all will be well in the end but it is very hard or impossible for me to bring about this belief, since I have a high credence in the opposite being true. In such a case, we can say that I did not *complete* the intention. Completed intentions are successfully executed intentions. When we say that imaginings are subject to the will, we have in mind that our intentions to imagine are typically and commonly completed. Moreover, the notion of imaginings being subject to the will refers to intentions that are completed *directly* instead of *indirectly*. If I intend to desire ice-cream, I might be able to complete the intention by waiting until I am hungry and then looking at pictures of ice-cream. Intuitively I cannot simply decide to desire ice-cream or to believe that my mother is a vampire, for example. For such states to be instantiated in virtue of a completed intention there needs to be more to the case than the intention to bring them about. It usually involves the instantiation of further mental states and possibly actions. Intentions that are completed *indirectly* are mediated via further mental states and possibly actions. This is not the case for imaginings. Intentions to imagine are usually completed *directly*, without being mediated in this way.¹²⁰ To be clear, they can also be completed indirectly, even if such

¹¹⁹ According to Sartre (2004: 14), spontaneous imaginings involve intentions, which distinguish them from perceptions.

¹²⁰ Two remarks. 1. This difference could be fleshed out further in terms of differences in the complexity and length of the causal paths between the intention and the instantiation of the intended mental state, but since the viability of causal accounts of intentions is controversial, I refrain from this here. 2. We can stipulate that only mental states caused by intentions directly deserve the label 'action',

cases are rarer. For example, I might intend to imagine Winnie-the-Pooh and do so by intending to read one of the books about Winnie-the-Pooh by A. A. Milne.

The nature of intentions is subject to much debate. Most agree that intentions impose a normative constraint on the world. Some argue that if I intend to perform an action A , the world ought to be such that I perform action A .¹²¹ This might be so, because bringing about A is good for the subject in a deflationary sense of ‘good’; it is good merely in virtue of the subject intending to perform this action. Analogously, if I intend to imagine p , the world ought to be such that I imagine p . If I intend to imagine an elephant, the world ought to be such that I imagine an elephant. If I imagine an elephant, I imagine as I ought to. We can also say that I imagined correctly in this case. If I imagine a pig instead, I do not imagine as I ought to; I imagine incorrectly. These are context-relative correctness conditions on individual imagining tokens which are determined by intentions.

Imaginings typically figure in means-ends-reasoning. For example, I might form the intention to imagine that the couch I just ordered is standing in the living room already, because I would like to know whether it would fit. As imaginings figure in means-ends-reasoning, they are subject to hypothetical norms. For example, consider a norm of the following kind:

(Intention) For any imagining p that is prompted by an intention I , S ought to imagine p in order to complete the intention.

but nothing hangs on this in this chapter. For a mental state to be a mental action it is sufficient that it is caused directly by an intention to be in that mental state. If it is true that many imaginings are the result of directly completed intentions, then many imaginings are mental actions. The view that imaginings are actions is defended in for example Dorsch (2012).

¹²¹ Whether this is indeed the correct analysis and how to flesh out this view precisely is not of concern. For further discussion and defense see Setiya (2015).

We can say that imagining p is correct to the extent that it aids the completion of the intention to imagine p . Whether it is completed directly or indirectly is not of relevance.

Intentions are also subject to (*Consistency*) from which further norms on imaginings follow. Let's assume it is true that if S intends to perform action A , then S ought not intend to not perform action A .¹²² The following is then true for any subject S who imagines p : if S intends to imagine p at time t_1 , then S ought not intend to not imagine p at time t_1 . If I intend to imagine that I will own a pig in the future, then I ought not intend to not imagine that I will own a pig in the future at the same time. In this example, I intend to imagine something specific. But I can also intend to imagine, regardless of what it is that I imagine. We can add the norm that if S intends to imagine, then S ought not intend to not imagine. To be clear, that (*Consistency*) holds for intentions and that imaginings figure in means-ends-reasoning does not imply that imaginings always ought to be consistent.

Nevertheless, there are context in which they ought to be. We can now provide a better explanation of such cases. Recall the earlier discussion of whether imaginings ought to be consistent. There I gave two examples of contexts in which they ought to. Consider the second example again. In the context of reading Steinbeck's *Of Mice and Men* and imaginatively engaging with it, it is not rationally permissible for me to both imagine that Lennie is caressing his dead dog and also imagine that Lennie is not caressing his dead dog. This norm on imagining is to be explained by appeal to intentions. Because of my intention to imagine in line with the fiction, I intend to

¹²² For a defense of this position, see for example Setiya (2015).

imagine consistently because the fiction is consistent. I therefore intend to adhere to (*Consistency*) for imaginings.

This section focuses on hypothetical norms on imagination. One specific example are norms on imaginings, given what a subject intends to do. I claim that, first, from an attitude-specific norm on intending and the fact that imagining tokens can be intentionally completed directly, it follows that if *S* intends to imagine *p*, and completes her intention as intended, she imagine as she ought to. If *S* intends to imagine *p*, and does not complete her intention as intended she either a) does not imagine as she ought to (in cases where she imagines *q* instead for example) or b) she does not imagine at all and thereby does not satisfy her intention. Second, from the fact that imaginings can be intended and (*Consistency*) holds for intentions it does not follow that (*Consistency*) holds for imaginings. Imaginings nevertheless ought to be consistent at times, when subjects intend to adhere to (*Consistency*).

Subjects also desire, wish and hope to imagine and attitude-specific norms on desires, wishes and hopes also determine correctness conditions on imaginings.¹²³ These are further examples of hypothetical norms. For all imaginings which are prompted by a desire, a wish or a hope to imagine, the imagining is correct to the extent that it aids the satisfaction of the desire, wish or hope respectively. To be clear, beliefs and desires are also subject to hypothetical norms. I might intend to desire ice-cream and complete this intention by waiting until I am hungry and then looking at pictures of ice-cream, for example. Nevertheless, arguably, beliefs and desires differ from imaginings in the following important respects: Beliefs and desires are not merely subject to hypothetical

¹²³ See for example Boswell (2018), Schleifer McCormick (2017) and Velleman (1992). Whether and how intentions, desires, wishes and hopes differ in which normative constraints they impose is a matter of much debate. On my view, the normative constraints that wishes impose on the world differ slightly from the ones that intentions impose, for example. For the purpose of this chapter we do not need to spell out the differences in further detail.

norms. They are also subject to categorical norms. Attitude-specific norms, such as the norm of truth for beliefs, and the norm of the good for desires are not hypothetical in nature. They are categorical. Their application conditions do not depend on further facts obtaining. Recall my brief discussion in section 2. 3. 1 where I claimed that imaginings are not intrinsically normative. That imaginings are not subject to categorical norms is another way of making this point.

2. 3. 4 Purposes of Use

In the previous section, I argued that imaginings are subject to hypothetical norms. It is a hypothetical norm that imaginings are correct to the extent that they aid the completion of the intention in cases where they are prompted by intentions. In the current section, I focus on the further fact that subjects use imaginings for specific purposes. That imaginings are subject to the will enables them to be used in a myriad of purpose-driven cognitive projects. The contents of imaginings are subject to correctness conditions which are determined by their purposes of uses. I elaborate on this point in what follows.

Let's consider an example. I introduced this example earlier when discussing whether the norm of consistency holds for imaginings:

Example 1. I wonder whether the couch I just bought will fit through the doorway. To answer this question, I picture the couch and the doorframe and mentally rotate the

couch. I mentally simulate the couch being carried through the door.

What are the correctness conditions on this episode of imagining, or in other words, under which conditions did I imagine as I ought to? In this example, the purpose of my imagining is an epistemic one. On my view, purposes of use determine correctness conditions on the contents of imaginings. I ought to imagine something in particular in order to be able to infer on the basis of my imagining whether the couch will fit through the doorway.

What is it that I ought to imagine in particular? When I picture the couch, I will most likely form an image of it that is inaccurate. The imagined colors are different from the actual colors. My perspective is slightly skewed. But for my imagining to be useful in my deliberation only certain aspects of the imagining need to be accurate. I do not need to imagine veridically. It is sufficient to imagine the couch and the doorframe accurately along certain dimensions. What is relevant are accurate representations of the geometrical properties of these objects, for example. I imagine correctly by imagining the spatial dimensions of these objects more or less as they are. It is irrelevant for example whether I accurately imagine how the couch feels or how heavy it is. If the spatial dimensions of these objects are imagined accurately, and I also imagine that the couch fits through the doorway, I imagine a scenario that could obtain in the actual world. Now consider the following example for comparison:

Example 2. I wonder how many marbles are in the jar in front of me. To answer this question, I imagine that there

are 100 marbles in it. As a matter of fact, there are 100 marbles in the jar, which is a coincidence.

In this case, my imagining is not suited to the purpose at hand. The purpose of my imagining is epistemic: I would like to know how many marbles are in the jar in front of me. For the imagining to epistemically aid me I ought to either veridically imagine the amount of marbles or else be able to infer the correct amount on the basis of my imagining. Given that I want to obtain knowledge about the world there must also be a suitable epistemic link between the content of my imagining and the world. For example, I might form a veridical memory image of the jar of marbles, then mentally rotate the jar in my mind and for that reason I am able to accurately count the marbles.

The nature of epistemic justification is complex and I will not provide a satisfactory in depth account of how imaginings exactly justify beliefs in what follows. Let's consider example 1 again. Adherents of a possibility norm for imagination might provide the following explanation: In order to get to know whether the couch will fit through the doorway, I first try to get some modal knowledge, namely knowledge of whether it can fit. I imagine that it does fit and so come to believe, with justification, that it can. This belief is justified because there is a tight normative connection between imagination and possibility. It is the primary function of imagination to represent possibilities. An attitude-specific possibility norm on imagination is in play. On some versions of this view, whenever I succeed in imagining p , I am thereby already defeasibly justified in p being possible. In any case, I form the justified belief that the couch can fit through on the basis of imagination. In a second step, I then infer from the belief that it can fit to the conclusion that it will in the case at hand.

The second step, namely the idea that one infers from what is possible to what is actual is sometimes justified and whether it is, depends on further facts. Moreover, it can be paired either with the view that imagination is subject to an attitude-specific possibility norm or with a view that rejects it. What is relevant to my view and the difference between my view and the view on which imagination is subject to a possibility norm is the first step. On my view it is not the case that whenever I imagine p I am thereby already defeasibly justified in p being possible. There is no such robust general relationship between imagination and possibility. My view does not suggest that imagination is a reliable guide to possibility, for example. As correctness conditions on imaginings are determined by the use they are put to in a particular instance, imagining p is not generally correct if and only if p is possible. In example 1, the imagining of the couch is not correct only if the couch is imagined as a possible object. Instead the imagining is correct only if the geometrical dimensions of the couch and the doorframe are represented accurately. On my view, what matters for epistemic justification is that the imagining provides an accurate (truthful) representation along certain dimensions. That the imagining also represents a possibility is a side-effect of it being a truthful representation, in our example. Whether the belief that the couch will fit through is epistemically justified on the basis of my imagining depends on many more factors than whether what I imagined is possible.

When I imagine that the couch fits through the doorway, I probably imagine a scenario that could obtain in the actual world. But note that the imagining does not need to represent a possibility for it to be correct. An imagining that provides an accurate (truthful) representation of the geometrical properties of the couch and the doorframe might still be of an impossible situation as a whole. For example, it might represent the

geometrical properties of the couch and the doorframe accurately but also in addition represent a Penrose's triangle, which is a logically impossible object, as part of the imagined scenario. Such an imagining is nevertheless a correct imagining in this case. If I imagined this impossible triangle in addition to the couch and the doorframe I would still have imagined as I ought to. This is because for the epistemic purpose at hand I ought to imagine the geometrical properties of the couch and the doorframe accurately. I ought to imagine a couch that is similar to the actual couch in certain respects and imagine that it is going through a doorframe that is similar to the actual doorframe in certain respects. If I do this correctly, I can infer that the actual couch fits through the doorway, for example.

On my view, the belief is justified on the basis of imagining, only if there is a suitable epistemic link between the imagining and facts about the world. This is a link that does not hold across the board for any imagining of *p*, but depends on the purpose of use. On the alternative view, the belief is justified on the basis of imagining, only if there is a suitable epistemic link between the imagining and possibility. This link is secured by the function of imagination, and it is a link that holds for any imagining of *p*.

For example, on my view, justification can be achieved as follows in this example: I use a veridical memory image of the couch that I then rotate in my mind. In addition, I rotate roughly in accordance with how an object that size would in fact move. Not only the memory image needs to be suitably epistemically linked to facts about the world but also the simulation of the rotation of the couch needs to be executed correctly. In my view, this account, spelled out properly, provides an accurate explanation of how a belief is typically justified on the basis of imagining.

I claim that imaginings have correctness conditions relative to purposes of use. On this view, two instances of the same type mental state of imagining can differ in their correctness conditions. Consider example 3 and compare it with example 1:

Example 3. I wonder whether the color of the couch I ordered matches the color of the doorframe. I use a token of the same type of imagining as in the previous example (out of sheer cognitive laziness). I picture the couch and the doorframe and mentally rotate the image of the couch. I mentally simulate the couch being carried through the door.

In this example the epistemic purpose of my imagining differs from the purpose in example 1. Here I intend to form an aesthetic judgment. Again, I imagine as I ought to if and only if I imagine such that my judgment can be epistemically justified on the basis of imagination. I already explained that not every feature of the imagined situation in example 1 is relevant to the cognitive task. Different features of the same imagined situation are relevant to the cognitive task in example 3. If I use the token imagining of example 1, my imagining, which was previously correct, is incorrect now, as I do not imagine the color of the couch accurately. My imagining is correct only if I imagine the color of the couch and the color of the doorframe veridically. The geometrical properties of the couch do not need to be represented accurately.

Examples 1 and 3 show that if I imagine correctly along the relevant dimensions I am epistemically warranted in basing my belief on imagination, yet which dimensions

are relevant depends on the intended purpose of the imagining. I can use a token of the same type of imagining for two purposes, for example to determine whether the couch will fit through the doorway and to determine whether the color of the couch matches the color of the doorframe. In both cases the same token imagining might be used, while the correctness conditions differ. Therefore, it can be argued that the same mental state type of imagining is correct in one case, but not in the other. To be clear, the normativity of imagination allows for more than one correctness condition on token imaginings. A purpose of use might determine two or more correctness conditions on imaginings, also.

So far, I claimed that imaginings are subject to hypothetical norms and that their normativity is determined by purposes of use. I elaborated on the fact that imaginings are extensively subject to the will. This also highlights that imaginings share their normative properties with actions. Let's consider an action to illustrate the similarity. Suppose I intentionally waive my hand in the air. One might ask, whether this action correct or not. Does this action as such have correctness conditions? It seems that the action as such does not have correctness conditions. It is not intrinsically either correct or incorrect of me to waive my hand in the air. One might say instead that an action is correct only relative to an aim or purpose that I have for acting a certain way. For example, if I intend to signal a goodbye to my wife at the airport or I intend to hail a taxi, waiving my hand arguably is the correct action. If I intend to hide from my daughter while playing a game of hide and seek, waiving my hand in the air is not a correct action.¹²⁴ In fact, some such as Dorsch (2012) defend the view that imaginings

¹²⁴ To be clear, there are not only contextual but also conventional cultural standards of correctness on gestures, such as waiving your hands to signal saying goodbye. Imaginings, as they are private actions, are arguably not subject to conventional, cultural standards of correctness in this sense.

are actions – mental actions. The similarity between imaginings and actions also further supports the view that the attitude of imagining is not subject to intrinsic normativity.

2. 3. 5 Personal and Subpersonal Purposes

In the previous section I gave three examples of cases in which we ought to imagine in specific ways for specific epistemic purposes. I claim that imaginings have correctness conditions relative to purposes of use. Yet to be able to fully account for the cognitive roles imaginings play we need to distinguish between consciously accessible cognitive purposes of subjects and purposes which are not always consciously accessible. Furthermore, some purposes are the purposes of cognitive subsystems and are not under voluntary control. In other words, we need to broaden the concept of ‘purpose’. Stich (1978) distinguishes for example between person-level and subpersonal purposes. According to Stich (1978) person-level purposes operate on doxastic states. Doxastic states are such that they “form a consciously accessible, inferentially integrated cognitive subsystem” (508). Subpersonal purposes operate on subdoxastic states, states that “occur in a variety of separate, special purpose cognitive subsystems” (ibid), which are not consciously accessible. The personal/subpersonal distinction is vague, ambiguous and has been subject to much discussion and clarification.¹²⁵ For example, arguably, subpersonal purposes are nevertheless had by subjects. Whether purposes are had by subjects or not is a property that seems orthogonal to the distinction Stich describes. Moreover, it is unclear in what sense imaginings are doxastic states. All we can say is that they figure in inferences. Nevertheless, I claim that imaginings can be

¹²⁵ See for example Drayson (2012).

subject to both subpersonal and person-level purposes in Stich's sense, and norms on instances of imaginings are determined by both kinds of purposes. Subpersonal purposes operate on specific cognitive subsystems and are not consciously accessible. Here is an example of imaginings which might have been subject to subpersonal purposes:

Example 4. Leon is asking me whether I know where John is. I believe that John is currently at home, and while telling Leon, I picture John sitting at home in his living room. Thinking about where John is happens to trigger this image of John. The image also triggers a desire in me to visit John at home at some point. This desire triggers an image of him opening the front door of his apartment, greeting me in a friendly way and letting me enter.

In this example, I do not intentionally and/or purposefully imagine, instead I happen to imagine associatively. I did not intend to form associative imagery for a purpose. Yet a cognitive subsystem of mine might have caused me to form associative imagery for a purpose which I am unaware of. For example, it might be the function of a cognitive subsystem to imagistically represent the contents of our beliefs and desires. Sometimes I form an image and believe that what the image represents is the case. Sometimes I form an image and desire that which the image represents. I believe p or desire q , where p and q are image contents. If this is so, then imaginings are subject to norms which are determined by subpersonal purposes.

One such subpurpose might be to imagistically represent the content of a belief or desire accurately to a certain degree. In the example, belief content and imagining content differ. The belief content, namely that my friend is currently at home, is compatible with him taking a shower, while the imagining content, namely my friend sitting at home is not compatible with him taking a shower. The content of my desire, namely that I visit my friend at home is compatible with visiting my friend by entering through the backdoor, while the content of the imagining, namely entering his apartment through the front door is not compatible with it. There might be a norm according to which in believing p and imagining q , imagining q is correct if and only if q is a specific subset of p . In this case, the set of worlds in which my friend is sitting at home is a subset of the worlds in which he is at home.¹²⁶ To be clear, this is merely one example of how a norm that is determined by subpersonal purposes might look like. It would require further work to spell out exactly which subsets of p are adequate and which ones are not adequate, in the example.

Prima facie, example 4 involves associative imagery and associative imagery does not have correctness conditions. Yet on my view, this not the correct analysis of the example. My discussion shows that what seems to be merely associative imagery can at times also be purpose-driven and therefore subject to norms.

¹²⁶ Note that the phenomenon illustrated in example 4 is to be distinguished from what one might call imagistic beliefs or imagistic desires. Belief or desire can involve imagery. We can call such beliefs and desires imagistic beliefs and imagistic desires. In such cases, the image inherits the attitude-specific normativity of the respective attitude. Insofar as the image is a representation of what I believe, it inherits the attitude-specific normativity of belief and ought to be veridical. Insofar as my imagining is a representation of what I desire, it inherits the attitude-specific normativity of desire. The world ought to be such that it holds. Imagery can be combined with propositional attitudes to yield complex attitudes that are subject to attitude-specific normativity. To be clear, this does not imply that the normativity of imagination is attitude-specific. Imagery is indirectly subject to attitude-specific normativity, namely whenever it inherits the normativity from an attitude it is embedded in.

2. 3. 6 Imagining as Model Construction

In the previous sections I gave examples to illustrate that imaginings are subject to norms that are determined by their intended use. I claimed that we can further distinguish between subjects intending to imagine, and cognitive subsystems of subjects causing us to imagine, in each case for a particular cognitive purpose. Both person-level and subpersonal purposes of cognitive subsystems can determine norms on token mental states of imagining.

We gain a deeper understanding of the normativity of imagination by comparing imaginings to scientific models. This is what I do in the current section. If my account of the normativity of imagination is correct, the normativity of imagination is importantly similar to the normativity of scientific modelling. Moreover, on my view imaginings are commonly used as models by ordinary subjects in a way akin to the way scientists use models in science. In the upcoming section I first give a rough introduction to the nature of scientific models. I then focus on the normativity of scientific models. I argue that imaginings are typically models. Lastly, I elaborate on the nature of representation which, I claim, is common in imagination and scientific modelling.

The ontology of scientific models is subject to much debate. Nevertheless, there is widespread agreement over many of their basic properties, some of which I address in what follows. Roughly speaking, scientific models can be understood as representations that are intentionally constructed for epistemic purposes in scientific inquiry. Scientific

models can represent selected phenomena in the world,¹²⁷ systems, sets of data points or elements of theories, such as laws, axioms or theorems, for example. Many models are concrete, such as a wooden scale model of a wing of an airplane, others abstract, such as a mathematical model of the shape of a wing of an airplane.¹²⁸ The chemist John Kendrew constructed a plasticine model of myoglobin, a protein that is responsible for oxygen uptake and release in muscle cells in humans. This model was constructed out of data on the electron densities of the molecule of myoglobin. This three-dimensional concrete model represents the sequence of amino acids that the protein consists of and its three-dimensional structure. On the basis of this model Kendrew could gather the following new information about myoglobin: it folds into a flat disk of which the exact size could be specified, at large angles the chains within the disk turn and the molecule consists of two layers of chains.¹²⁹ These are considered important findings. As the example of the myoglobin model shows, a scientific model typically fosters a deeper understanding of a phenomenon by bringing to the surface implications of a theory or sets of data points.

Not all scientific models are concrete models, as is the plasticine model of myoglobin. Weisberg (2013) for example distinguishes between three kinds of scientific models: concrete models, computer models and mathematical models. On his view, scientific models are essentially composed of structures and interpretations and they

¹²⁷ “[W]here ‘phenomenon’ is used as an umbrella term covering all relatively stable and general features of the world that are interesting from a scientific point of view” (Frigg and Hartmann (2017: 1).

¹²⁸ While some model objects are concrete and others abstract, philosophers of science typically assume that models have a common nature. There is no consensus on the ontology of models. In recent years the view that scientific models are fictions has gained popularity (see Contessa (2010), Frigg (2010a), Frigg (2010b) and Frigg and Nguyen (2016), Godfrey-Smith (2006, 2009), Leng (2010) and Toon (2010), Toon (2012), Toon (2016)), while the majority view is that they are structures (see for example Bueno (1997), Bueno, French and Ladyman (2002), Da Costa and French (2003), Lloyd and Mundy (1986), Suppes (1960), van Fraassen (1980), (1997), (2008)).

¹²⁹ Kendrew built such a model at the University of Cambridge and was awarded the Nobel Prize in chemistry (with Max Perutz) in 1962. This example is discussed extensively in Frigg and Nguyen (2016) and my description relies on this discussion.

represent scientific targets. They can nevertheless differ systematically from each other – mathematical models, for example, are typically theories expressed algebraically, while concrete models do not typically merely encode mathematical equations. Others hold less restrictive views on what counts as scientific models, and include fictional objects, set-theoretic structures and descriptions, for example (cf. Hartmann and Frigg (2017)).

On my view, the normativity of imagination and scientific models is importantly alike.¹³⁰ Whether and to what degree a scientific model is epistemically valuable or correct depends first on its target, second its structure or its representational properties and third, on what it is intended to represent (or its interpretation in Weisberg’s sense). For example, if the plasticine model I just described is interpreted as representing a dog’s intestines instead of myoglobin it will be much less accurate or correct. The correctness conditions of a model therefore depend on the purpose of the model. This purpose is determined by the scientist or the scientific inquiry.

Similarly, whether an imagining is correct does not merely depend on what the imagining represents (i.e. the content of the mental state) but instead also on its intended target, i.e. what it is supposed to model. This in turn depends on the specific epistemic or otherwise cognitive purpose of the imagining. In our example 1, the example of imagining how the couch fits through the doorway, our quasi-scientific goal is to get to know whether the couch fits through the doorway. This goal determines correctness conditions on the imagining. Our target is the real-world phenomenon of a specific couch being carried through a specific doorframe. Arguably, imaginings differ from

¹³⁰ There is a growing literature on the relationship between imagination and scientific models which recognizes important similarities between imagination and scientific modeling (see in particular Salis and Frigg (forthcoming) and Toon (2016)). Yet the focus of this literature is on gaining a deeper understanding of scientific models, and does not sufficiently engage with understanding imaginings for their own sake so far.

scientific models in that their targets typically are concrete situations or events instead of complex or abstract systems. But this is not a necessary property of imaginings.

In scientific modelling, one and the same model object can be used to represent distinct targets. The concrete plasticine object I introduced can be used to represent the intestines of a dog for one scientific purpose, and myoglobin in another case for a different scientific purpose. In the same way do we use one mental state type of imagining for two distinct cognitive purposes. Recall my examples 1 and 2, of imagining the couch fitting through the doorframe. Here the same mental state type of imagining is used for two distinct epistemic purposes. In example 1 I intend to know whether the couch fits through the doorframe and in example 2 I intend to know whether the colours of the couch match the colours of the doorframe.

Moreover, some have stressed the importance of the scientist's intentions in determining the representational content of the model. Giere (1988, 2004, 2010), who focuses on the fact that "scientists are intentional agents with goals and purposes" (2004: 743), develops an account of scientific representation according to which:

[a]gents (1) intend; (2) to use model, M; (3) to represent a part of the world W; (4) for purposes, P. So agents specify which similarities are intended and for what purpose. (2010: 274)

On my view, we can use Giere's account of scientific representation also to illuminate representation in imagination. Subjects intend to use a mental state token of an imagining to represent a part of the world, such as an existing couch and an existing doorframe, and they do so for a specific cognitive purpose, namely to find out whether

the couch fits through this doorframe. In addition, it also is the case that subjects “specify which similarities are intended and for what purpose.” (ibid.).

Recall my introductory remarks on the nature of the contents of sensory imaginings in chapter 1, section 1. 2. On my view, imaginings involve image contents and conceptual contents. The overall contents of imaginings typically outstrip their image contents. The overall contents of imaginings are constituted by an interplay between conceptual and imagistic contents, which can be under voluntary control. Through conceptual stipulations we can alter the contents of imagination and we do so relative to our intentions. Because I intend to imagine a hallucination of an elephant, I stipulate that the image of an elephant also represents a hallucination, for example.

In example 1 intended similarities between what the imagining represents and the real world phenomenon are the geometrical relations between the couch and the doorframe, for example. These similarities are intended because the imagining has the purpose of justifying the belief that the couch fits through the doorway. The typical targets of imaginings are not systems, but situations, events, or at times, perceptual states. Typical targets are counterfactual relations, expected future perceptions, and ourselves, for example imagined ‘better versions of ourselves’.

Not only do imaginings share important properties with scientific models. On my view, imaginings are typically models themselves. Instances of constructively imagining p for cognitive purpose A are instances of model construction. It is a plausible assumption that we construct imagistic models in ordinary reasoning in a way that is akin to the way scientists use models in scientific reasoning. I do not claim that imaginings are essentially models. Imaginings, as characterized in this dissertation, are

representational mental states that necessarily involve imagery.¹³¹ My claim is that we typically use imaginings as models. And furthermore that this is an important fact in explaining the normativity of imagination. We can call these models imagistic mental models.¹³² They are mental models, because the model objects are mental states. They are imagistic as they necessarily involve imagery.

Let me elaborate a bit more on the nature of representation which, I claim, is common in imagination and scientific modelling. Scientific models are considered to represent their targets through what are called distinct representational styles. Standard examples of representational styles are abstractions, idealizations and approximations.¹³³ Which styles are used depends on our intentions and the purposes of use. To illustrate this, let us return to example 1 from the previous section. I wonder whether the couch I just ordered will fit through the doorway. I form an imagistic model of the couch and the doorframe and simulate the couch being carried through the doorframe. Recall that given my epistemic goal my focus lies on accurately representing the spatial properties of the couch and the doorframe, but not their colour properties.

The concept of approximation can be applied to this example to flesh out the nature of representation of the imagining. Approximation as it is used in the literature on scientific representation is a concept that was initially introduced in mathematics. It was then later applied to scientific representation. Frigg and Hartmann (2017) explain approximation as follows: “One mathematical item is an approximation of another one

¹³¹ Interestingly, the view that scientific and pictorial representation are importantly alike is shared by many. See for example Elgin (2010), French (2003), Frigg (2006), Hughes (1997), Suarez (2004) and most importantly van Fraassen (2008).

¹³² In my terminology, ‘imagistic model’ is not equivalent or related to ‘imaginary model’. Imaginary models are imaginings of models. Imaginings can represent models. An imagistic model is an imagining that is used as a model of a target. It is not a representation of a model. We can also construct imagistic models of imaginary models, which are special cases of imagistic models.

¹³³ For an overview on representational styles see Frigg and Hartmann (2017).

if it is close to it in some relevant sense” (8). For example, “we approximate an equation by another one by letting a control parameter tend toward zero” (ibid.) This example shows that the concept of approximation does not require two items to literally resemble each other. We can say that the content of one equation resembles the other more than previously after the control parameter is set to tend towards zero. But this arguably is only a metaphorical way of speaking.

It is a common assumption in the philosophy of scientific representation that scientific models approximate their target objects by representing objects that are close to the target or resemble it, in relevant ways. In our example 1, spatial properties are the relevant properties. We can now say that for an imagining to be correct, the couch and the doorframe that are represented in imagination ought to approximate the actual couch and the actual doorframe in terms of their spatial properties and geometrical relations to each other. Cognitive purposes and my intentions determine which approximations are justified in each case. We can approximate the represented objects to the actual objects along specific dimensions, for example along the dimension of color properties or along the dimension of spatial properties. The concept of approximation bears similarities to the concept of idealization, yet the latter is arguably less precise. According to Frigg and Hartmann (2017), an idealization is, loosely speaking, “a deliberate simplification of something complicated with the objective of making it more tractable” (6). In that sense, approximations are specific instances of idealizations. A proper defense of the view that imaginings are models requires a more extensive argument, one that I will not give in the current context.¹³⁴ But it should have become clear that a comparison between scientific models and imaginings is a worthwhile enterprise, one that enables

¹³⁴ For example, this view requires a defense from Weisberg (2013) and Norton (2004) who independently argue that imaginings are not models.

us to gain a deeper understanding of the nature of imagination. Imaginings are to be understood as intentionally constructed imagistic representations that represent their targets via representational styles, such as approximations and idealizations, amongst others. Instances of imaginings are correct relative to the cognitive purposes they are meant to serve in each instance. An in-depth application of the current literature on scientific models, which has been subject to much philosophical scrutiny, to imaginings will be left to another occasion.

Before I close this section, let me briefly address the relationship between the view I advocate and the view that imaginings are subject to a possibility norm. A proponent of this view can also appeal to imaginers as “intentional agents with goals and purposes” (Giere (2004): 743). She can also claim that imaginings are typically used as imagistic mental models for specific purposes. Yet she will have to reject the view that imaginings are used to represent a part of the world, as she believes that imaginings are used to represent possibilities. She will also deny that imaginers have to “specify which similarities are intended and for what purposes” (2010: 274). Nevertheless, on her view, an imaginer’s intentions can also be important. While imagining that p might always make it reasonable to believe that p is possible, it can depend on the imaginer’s intentions how one exploits this modal belief in reasoning about the actual world, for example.

2. 4 The Possibility Norm Revisited

At the beginning of Chapter 1, section 1. 1, I stated two motivations for the view that the attitude of imagining is subject to an intrinsic attitude-specific possibility norm.¹³⁵ The first is that imaginings would fit nicely into the general pattern of the normativity of propositional attitudes. The second is that it can provide evidence for an epistemic link between imagination and the possible, which is required in our practice of thought-experimentation in philosophy. I then argued that imagination is not subject to attitude-specific norms. I argued further that the normativity of imagination is explained best by contextual factors external to the attitude. Correctness conditions of imaginings are determined by the imaginings' intended purpose of use. Moreover, I claimed that it is plausible that imaginings are quasi-scientific models. How does this view leave us with respect to these two motivations?

For propositional attitudes, such as belief, perception or desire a straightforward link between their normativity and their cognitive roles can be established. Some say that beliefs aim at truth and in accordance with this it is their cognitive role to represent the world truthfully. Analogously, desires aim at satisfaction and it is their cognitive role to represent the world how we would like it to be. That imaginings are not subject to intrinsic attitude-specific norms puts them at odds with most other mental states. Nevertheless, I believe my view yields an accurate picture of the relationship between the normativity of imaginings and their cognitive roles.

Postulating an epistemic link of some form between imagination and the possible is required to justify our practice of thought-experimentation in philosophy.

Prima facie, as I reject the view that imaginings are intrinsically subject to an attitude-

¹³⁵ To be precise, I stated not two, but five motivations. Three motivations I do not revisit now as they are not specific to the view that imagining is subject to an intrinsic, attitude-specific possibility norm, but apply to any thesis on the normativity of imagination. Therefore, they are also captured by the account of normativity of imagination I endorse in the current chapter. What is of interest to be in this section 2. 4. are only those motivations that are not straightforwardly captured by it.

specific possibility norm it seems that my account cannot provide justification for the claim that imaginings are an epistemic guide to possibility.¹³⁶ Nevertheless, my account can at least in part vindicate the intuition that imagining metaphysical possibilities is epistemically correct. In philosophy, imagination is used for a specific purpose, namely to justify modal claims. Philosophers intend to construct imagistic models of metaphysical possibilities to test hypotheses that are formulated as necessary metaphysical truths, among others. Such a purpose determines correctness conditions on the mental state of imagining in the context of a specific philosophical task. We can say that relative to the purpose of justifying modal claims, my imagining should be about a metaphysical possibility, for example. Relative to this purpose, imagining p is correct only if p is metaphysically possible. This view is not inconsistent with Yablo (1993), who argues that imagining p is correct only if p is metaphysically possible, if this claim is suitably re-interpreted as a claim that only concerns imaginings used for such purposes in philosophical reasoning.

Let us consider a more specific example. Suppose my aim is to figure out if some proposition p is metaphysically possible. I therefore imagine a situation in which p holds. Is my imagination correct, or else what needs to be the case such that it is correct? In this example my imagining is correct as long as it can justify the belief that p is metaphysically possible. An imagining can do this for example if it represents a metaphysically possible scenario in which p holds. As not all imaginings are of metaphysically possible scenarios not all imaginings can justify this belief. Moreover, as it is not always introspectively accessible whether an imagining is of a metaphysically possible scenario it is not always introspectively accessible whether an

¹³⁶ Perhaps we can consider this a virtue of the view presented as I and many others are pessimistic about an epistemic link between imagination and possibility.

imagining is correct. My account of the normativity of imagination is therefore compatible both with van Inwagen's (1998) modal skepticism and Chalmers' (2002) modal rationalism, for example.

2. 5 Objections

Let me now discuss two objections, which I believe are important, in the hope that this further clarifies the view advocated in this chapter.

2. 5. 1 A Triviality Worry

According to my explication of imagination, imaginings necessarily involve imagery. It is generally accepted that imagery is not subject to intrinsic norms. This is accepted equally by defenders of the view that imaginings aim at the possible, such as McGinn (2004), and by those who believe that imaginings are not subject to normativity, such as Dorsch (2012).¹³⁷ The objection is that in arguing for the view that the attitude of imagining is not subject to intrinsic attitude-specific normativity, I have argued for nothing above and beyond this uncontroversial claim.

In response to this objection, let us distinguish the claim that imaginings are not subject to intrinsic attitude-specific norms from the related claim that imagery is not subject to intrinsic norms. While the latter might universally be accepted, the former is a non-trivial substantive claim. I argued for the former claim. The triviality worry might

¹³⁷ McGinn (2004): "Percepts supply (defeasible) reason to believe; they insist on their own veracity. But images do not invite belief in this way; they do not purport to tell us how the world is. They are neutral about reality... Not only does the image not tell us about the external world in the way the percept does; it does not even try to: it is not in this line of business" (21).

seem pressing if you consider acts of imagining to be identical to acts of forming imagery. Let's briefly recapitulate how I distinguish the act of forming imagery from an act of imagining. This in my view can deflect the triviality worry. On my view, every instance of forming imagery which is not remembering, belongs to the attitude of imagination. But not every imagining is an act of just forming imagery. This is because most imaginings have contents that outstrip image contents. Many have argued, and I agree, that imaginings have both imagistic and conceptual contents. For example, I picture an elephant who is my mother in the imagined scenario. This is an act of imagining and not merely an act of forming imagery. Imaginings are typically used in ordinary reasoning for a variety of purposes, that range from representing alternative pasts to unlikely futures. In order for them to be able to play these cognitive roles their contents typically depend on an interplay between imagistic and conceptual representations. Imagery alone can only be used to represent a small set of alternative pasts or unlikely futures, if at all. The claim that the attitude of imagining is not subject to intrinsic attitude-specific normativity is therefore a substantive claim.

In addition to this, there is a further point that can be made in response to the objection. While it is arguably true that imagery is not subject to intrinsic attitude-specific normativity, a strong case can be made, in my opinion, that it is subject to non-intrinsic norms in the same way that the attitude of imagination is. For some epistemic purposes, we might conjure up images and use them to aid us in our deliberations. In such cases, the having and/or forming of imagery is also correct relative to purposes of use. So while I agree with the common assumption that imagery is not subject to intrinsic norms, my view on the normativity of imagination indicates how the normativity of forming and having mental imagery is to be carved out. This is a further

advantage of my view. Against the objector I claim that I did not argue for nothing more than the trivial claim that imagery is not subject to intrinsic normativity, but that I provided an account of normativity that does not merely apply to imagination but imagery as well.

2. 5. 2 Imaginative Attitudes

Langland-Hassan (2015) defends the view that there are several attitudes of imagining. Two objections can be developed from this view. First, the objection that my view collapses into a version of his view. Second, the objection that his view is superior to mine.

I first present his view and then discuss the two objections. According to Langland-Hassan's view there are different attitudes of imagining, each of which has a distinct direction of fit (or normative profile) in my terminology. In expounding this view, he focuses on one attitude in particular, what he calls the attitude of judgment-imagining. Let me demonstrate what a judgment-imagining is with our example from the previous sections. I would like to know whether the couch I just ordered would fit through the doorway and use imagination as an epistemic tool. I imagine the couch and the doorframe and rotate the couch in my mind to see whether it would fit through. On the basis of this I judge that the couch will fit through the doorway. According to Langland-Hassan the mental state that I am in when I imagine the couch is a judgment-imagining, i.e. a mental state that is both an imagining and a judgment. Its content is 'the couch I just ordered will fit through the doorway when it arrives'.¹³⁸ It is an

¹³⁸ For Langland-Hassan, the content is a future state of affairs.

imagining since parts of the content are represented imagistically.¹³⁹ I picture the couch. The mental state also is a judgment at the same time, since while representing the couch imagistically, I also judge that the couch will indeed fit:¹⁴⁰ “[You are] trying to predict how the couch will look as it comes to (...) [your] door, in order to determine whether it will fit through. The attitude (...) [you] take (...) toward the overall content is that of judging it to be the case” (679). On my view, this example is an example of a complex mental state that is composed both of an imagining and also a judgment at the same time. Langland-Hassan calls this complex mental state a judgment-imagining.

According to Langland-Hassan, such complex mental states of judgment-imagining have a mind-to-world direction of fit. He uses the direction of fit terminology, but we can reformulate his view as follows:

(JI-Norm) For any judgment-imagining, any proposition p and subject S , S ought to judge-imagine p if and only if p is true.

The example judgment-imagining is correct if it is the case that the couch fits. Langland-Hassan explains that “the mental episode as a whole is veridical if the couch will indeed fit, and non-veridical if it will not” (676).

On Langland-Hassan’s view not all imaginings are judgment-imaginings. He also introduces so-called episodic memory-imaginings. Episodic memory-imaginings are complex mental state clusters composed of an episodic memory state and an imagining. On his view, episodic memory-imaginings also seem to have a mind-to-

¹³⁹ According to Langland-Hassan imagining is “all cognition that involves a sensory mental image as a proper part” (664).

¹⁴⁰ The attitude of judgment-imagining is introduced initially merely as an “attitude akin to judgment” (675); a few lines later this is altered into “judgment”, a “judgment (...) that involve[s] mental imagery as proper parts” (ibid.).

world direction of fit, but that is not a sufficient condition. Memory-imaginings are correct if and only if they veridically represent the past and the content is suitably linked to the subject. She must have had “the right kind of past perceptual encounter with the object in question” (678). We can arguably reconstruct his view as follows:

(*MI-Norm*) For any memory-imagining, any proposition *p* and subject *S*, *S* ought to memory-imagine *p* if and only if *p* was the case and *S* had the right kind of perceptual encounter with *p*.

A third attitude of imagining is desire-imagining. Desire-imaginings have yet another direction of fit. To be clear, on Langland-Hassan’s view not all imaginings are attitudes that have a direction of fit. On his view, some imaginings, such as forming mere imagery, do not involve any attitude towards a content.¹⁴¹

I now discuss and deflect the objections. In the course of this I further clarify Langland-Hassan’s view. According to the first objection, my view collapses into a version of his. On my view, both are versions of the same view. In this sense, the objector is correct. The second objection is that his view is superior to mine. In response I argue that my view is to be preferred to his.

Let me explain how Langland-Hassan’s view and my view relate to each other. First, here are a few uncontroversial points of agreement. We both claim that mental states of imagining tend to have contents which are more complex than mere imagery. We both claim that the overall content of an imagining can outstrip its image content. In

¹⁴¹ On his view, “[o]ther imaginings may involve taking another attitude toward a partly imagistic content, or no attitude at all” (678).

other words, Langland-Hassan is likely to be sympathetic to the two-fold view of the contents of imagination I introduced in section 1. 2 in chapter 1. Moreover, Langland-Hassan and I agree that what and whether we imagine can be determined by our intentions. Arguably, in the example, my intention determines that the image is not of any couch, but the specific couch I ordered. Note that this analysis is compatible also with the view that representation in imagination is akin to scientific representation, the view I adhere to and introduced in section 2. 3. 6 earlier. Langland-Hassan's view on the representational nature of imagination is compatible with my view.

I am also happy to grant Langland-Hassan that there are complex mental episodes that involve both imagery and judgments (imagery and memories, imagery and desires, respectively). Recall the example of a judgment-imagining. I am happy to grant Langland-Hassan that this complex mental state both involves mental imagery and a judgment at the same time. I take this to be a defining feature of the example. Moreover, I agree with him that judging that the couch will fit is correct if the couch will fit. Judgments are beliefs and beliefs are subject to the norm of truth.

In what follows, I point out where Langland-Hassan's view is mistaken while further discussing his position. On my view, the attitude of imagination is not subject to attitude-specific normativity. Langland-Hassan takes himself to reject this view, as he considers it unable to account for the cognitive roles of imagination in reasoning. He criticizes that “[h]olding that imaginings completely lack correctness conditions, or are “neutral about reality,” fails to connect the content and attitude of imaginings in any substantive way to the specific functional roles they play in cognition” (2015: 670). At this point, Langland-Hassan overlooks that there is a third alternative view available. If imagination is not subject to attitude-specific normativity, this does not imply that it

lacks correctness conditions altogether. It might merely lack correctness conditions which are intrinsic to the attitude. On my view, while imaginings are not subject to attitude-specific normativity, they are also not “neutral about reality”. Instead they are subject to context-relative norms, which are not specific to the attitude of imagining. This view is not considered by Langland-Hassan.

Interestingly, in my view, Langland-Hassan’s position is in fact a version of the view that imaginings are not subject to attitude-specific normativity. This is interesting as he takes himself to reject this view. Let me explain why I believe that his position is a version of the view that imaginings are not subject to attitude-specific normativity. On his view, a judgment-imagining is an attitude that is subject to attitude-specific inherent norms. In philosophy of mind, standardly, a mental episode of a judgment-imagining in Langland-Hassan’s sense, is described as two distinct mental states, one imagining and one judgment. Typically, we only say of the judgment that it has a mind-to-world direction of fit. We then further ask whether the imagining has its own direction of fit or not. If the imagining does not have its own direction of fit, imagining do not seem to be subject to attitude-specific normativity. Typically, we would say that the fact that the complex mental episode of judgment-imagining has a mind-to-world direction of fit is entailed by it involving a judgment and judgments being beliefs and standard assumptions about the direction of fit of beliefs. Recall (*JJ-Norm*), the norm on judgment-imaginings that Langland-Hassan introduces:

(*JJ-Norm*) For any judgment-imagining, any proposition p and subject S , S ought to judge-imagine p if and only if p is true.

From (*JJ-Norm*), it does not follow that imaginings themselves have a mind-to-world direction of fit. For this to hold, a separate argument is required. This suggests that Langland-Hassan endorses the view that imagination is not subject to attitude-specific normativity. At least the examples Langland-Hassan discusses cannot establish that imaginings are subject to inherent attitude-specific norms. Moreover, to be able to claim this, one would need to deny that the normativity of the imagining in the example of the judgment-imagining is merely a function of the imagining being associated with a judgment. But this is something Langland-Hassan does not establish in his argumentation. His view seems to imply that imaginings have correctness conditions which they simply inherit from their accompanying attitudes. But this position is at least compatible with the view that imagination is not subject to attitude-specific normativity. On this view (*JJ-Norm*) posits a norm on imagination because (*J-Norm*) holds:

(*J-Norm*) For any judgment, any proposition p and subject S , S ought to judge p if and only if p is true.

In my opinion, that (*J-Norm*) holds can fully explain why an imagining can be subject to a norm of truth. Moreover, similar explanations can be given for all so-called attitudes of imagining that Langland-Hassan introduces. I mentioned that Langland-Hassan postulates the existence of memory-imaginings and desire-imaginings. On his view, these are distinct attitudes of imagining with their own attitude-specific normativity. Yet, if what I claim is correct, so-called episodic memory-imaginings, if they have a direction of fit, have their direction of fit merely on the basis of them involving memories. Desire-imaginings, if they have a direction of fit, have their

direction of fit merely on the basis of them involving desires, and so on. In other words, the normativity of imagination that Langland-Hassan introduces can be explained away merely by appeal to the normativity of other propositional attitudes, such as beliefs and desires. This suggests that the examples Langland-Hassan discusses support the view that imagination is not subject to attitude-specific normativity.

Some might suggest that the difference between Langland-Hassan's view and mine is merely terminological. I do not think this is the case. I believe explicitly stating the view in terms of imaginings not being subject to attitude-specific norms is superior to Langland-Hassan's presentation. Here are a few reasons why I believe this: First, my view is more parsimonious. If my analysis of the examples is correct, then there is no need to introduce norms on attitudes beyond our usual candidate norms, such as the norm of truth, norm of the good, consistency, and the like. This is a theoretical advantage. Second, how my view individuates the attitude of imagining is in line with ordinary language and how imagination is commonly characterized in philosophy and across the cognitive sciences. Langland-Hassan's view individuates attitude(s) of imagination in an idiosyncratic and novel fashion. In philosophy and ordinary language, imagination is commonly understood to necessarily involve an imagistic ('quasi-sensory') way of presenting things. Moreover, imagination does not involve judgments or memories as proper parts. Of this attitude of imagining we claim that it is not subject to attitude-specific norms. In my view, it is an advantage if a philosophical account of the normativity of imagination is compatible with this widespread conception of imagination. It ought to answer the question which norms apply to this kind of mental state. But Langland-Hassan does not provide an answer to this question. He presents an

account of which norms apply to different kinds of mental states, namely cluster of imaginings and judgments, for example.

Langland-Hassan individuates attitudes of imagining in virtue of the causal profiles of complex mental state clusters. A focus on causal profiles for individuating an attitude is in line with how belief and desire are at times individuated. Since imaginings play many distinct causal roles, the result is, according to Langland-Hassan, that there are many distinct attitudes of imagining. Unfortunately, carving up the space of mental states in this way neglects properties of imaginings, such as their typical representational properties like involving imagery. A mere focus on the causal roles in individuating imaginings neglects these commonalities between judgment-imaginings and memory-imaginings, for example. Langland-Hassan's attitudes of imagining have representational, phenomenal and neurological commonalities, but this is not made explicit on his view. On his view, all that can be said is that since they all differ in their causal roles, they are distinct attitudes. This is also in tension with Langland-Hassan stating in the beginning of his paper that he wishes to identify imaginings in terms of them involving imagery.

I argued previously, in section 1. 2 in chapter 1, that the direction of fit terminology problematic, as it is metaphorical and misleading. Furthermore, Langland-Hassan's usage of the direction of fit terminology is problematic. According to the standard conception of a direction of fit in this literature, a direction of fit is an intrinsic property of an attitude. Yet on his view, a direction of fit could at best be understood as an intrinsic property of a complex mental state cluster – such as for example of a judgment and an imagining. This leads us to another, more speculative problem with how Langland-Hassan individuates attitudes. In his framework, complex mental state

clusters are attitudes. Now consider the following: It is a plausible assumption that cognitive attitudes require for their existence reiterated instantiations of mental state tokens belonging to this attitude. On my view, the mental state clusters Langland-Hassan discusses seem to differ from attitudes in precisely this respect. Token mental state clusters Langland-Hassan discusses might be instantiated once for all times. For example, it might be that in the history of the world only one person once wondered whether her couch would fit through the doorway and formed a judgment-imagining in response. On Langland-Hassan's view, it seems, this single instantiation is nevertheless sufficient to ground the existence of this particular attitude of judgment-imagining.

So far I argued that Langland-Hassan's view is a version of the view that imagination does not attitude-specific normativity, but merely inherits its normativity from other attitudes. In other words, it is a version of what Langland-Hassan calls the *Fitness View*, a view he himself rejects. I also claim that explicitly stating the view in terms of imagination not being subject to attitude-specific normativity, as I do, is superior to Langland-Hassan's conceptual framework. There is no explicit agreement in philosophy on how propositional attitudes are best individuated. Nevertheless, the reasons I just gave indicate that individuating the attitude of imagining in Langland-Hassan's way is not that appropriate.

Here is a further reason why my account of the normativity of imagination is to be preferred to his view. Langland-Hassan claims that his view can explain the normative roles imaginings play. He considers his view to have this crucial advantage over the view that imagination is not subject to attitude-specific norms. Yet in my opinion his view dramatically fails at what it set out to do, as it fails to adequately

explain the normativity of imagination. Langland-Hassan does not proceed to give an account of the normativity of imagination. I explain this point now.

To illustrate, let us focus again on the couch example. In the example at hand, a subject uses an imagining of the couch to form a justified belief about whether it would fit through the doorway. On Langland-Hassan's view, postulating that there is a complex mental state of a judgment-imagining which has its own inherent normative profile can capture the cognitive role that the imagining of the couch plays. The cluster of my judgment and my imagining is, according to Langland-Hassan, correct if and only if it is veridical.

Yet in order to explain why an imagining is able to play the desired cognitive role we would need to give an account of the epistemic relation between the imagining and the judgment. Langland-Hassan does not address this point. We are not given an account of why a subject is epistemically justified in their judgment on the basis of their imagining. Furthermore, we are not given any information about what the imagining ought to represent. Ought it for example represent the content of my judgment? Langland-Hassan's view is not explanatory in this respect.

To contrast and compare, here is, very briefly, my view on this matter: It is noncontroversial that, for my imagining to play an epistemic role, the imagining ought to justify the judgment. One necessary property of the imagining is that the content of the imagining is suitably correct. For example, someone might claim that the imagining can epistemically justify the judgment only if the imagining is veridical. On my view, imaginings have context-relative correctness conditions that are determined by purposes of use. Imaginings do not need to be fully accurate for me to justify my beliefs based on them. In the couch example, according to my view, the imagining need not be veridical

for it to be correct. The imagining token has context-relative correctness conditions of its own, independent of the correctness conditions of the mental state cluster. This way my view can provide an explanation as to why it is that I can justify my judgment based on imagination. Furthermore, according to my view, the normativity of imagination is best accounted for by understanding imagination as the construction of mental models. In this respect, my view diverges substantially from Langland-Hassan's account.

One final remark. My view puts emphasis on our intention-driven use of imaginings. Langland-Hassan does not paint a comprehensive picture of the distinct roles that intentions play for the normativity of imagination. According to him, the contents of imaginings are constituted by a second component of content, "which lies outside (...) [the sensory mental image] and is transferred from one's intentions" (675). He endorses the view that intentions can contribute to the overall content of the imagining. For example, my intention can determine that the image is not of any couch, but the specific couch I ordered. But, unfortunately, Langland-Hassan neglects the role of intentions in voluntarily bringing about the mental state of imagining itself, which I believe is crucial in properly grasping the normativity of imagination and its nature as constructed mental models.

At this point I end my critical discussion and comparison of Langland-Hassan's position. In this section I discussed two objections to my view. According to the first, my view is trivial because it amounts to the uncontroversial claim that forming mere imagery is not subject to attitude-specific normativity. In response I clarified the difference between forming mere imagery and imagining. In this chapter I argued for the substantive claim that the attitude of imagining is not subject to attitude-specific normativity. My positive proposal of the normativity of imagination can also be applied

to imagery, which yields a substantive view on the normativity of imagery. According to the second objection, my view collapses into a version of Langland-Hassan's (2015) proposal that there are several attitudes of imagination with a distinct direction of fit each. I argued in response that my view can be interpreted as a version of his view. This is so, even though he takes himself to argue against the position that imaginings are not subject to attitude-specific normativity. I argue further that my view has important advantages over Langland-Hassan's view. One advantage concerns the conceptual framework that is involved, while another one the explanatory power. Furthermore, I argued that only my view provides an account of the normativity of imagination.

2. 6 Concluding remarks

In this chapter I continued my argument for the view that imaginings are not subject to attitude-specific norms. In the first part of the chapter, section 2. 2. 1, I presented an argument for the view that imaginings are not subject to a norm of truth. My argument appealed to the relationship between the norm of truth and the norm of consistency. The fact that imaginings can be inconsistent implies that they are not subject to the norm of truth. I explained why an analogous relation does not hold between the norm of the good and the norm of consistency (section 2. 2. 2). I argued against the view that imaginings are subject to the norm of the good primarily by appeal to intuitions. In section 2. 2. 1. 3, I critically discussed Velleman's claim that imaginings have the same direction of fit as beliefs and demonstrated that his concept of a direction of fit is unrelated to our normative notion. In the second part of the chapter, section 2. 3, I presented my positive account of the normativity of imagination. The view that

imaginings are not subject to attitude-specific norms has received criticism because of its apparent inability to properly connect the attitude of imagining to its cognitive roles in reasoning. If imaginings can be neither correct nor incorrect, it is hard to see how they could justify beliefs about the world or motivate us to act, so the thought goes. I argued that the fact that imaginings are not subject to attitude-specific norms does not imply that imaginings are not subject to any norms. On my view, the normativity of imagination can be explained by appeal to norms on intentions and norms derived from personal or subpersonal goals or purposes. I argue further, in section 2.3.6, that we often use imaginings as mental models in ordinary reasoning in roughly the same way that scientists use scientific models in science. Recognizing this enables us to better understand the nature of the normativity of imagination. In the final part of the chapter, section 2.5, I discussed two important objections to my view in the hope that this would further clarify my position.

PART II

3. Sensory Imagination as Perceptual Imagination

3. 1 Introduction

I am in the zoo, at the Red Panda enclosure, watching a red panda cub sitting next to an adult animal on a tree branch. The cub looks cute, with its fluffy white ears and its black nose. His mother had rejected his older brother at birth, but luckily this one, it seems, will not be treated the same way. In the evening at home, I imagine what the panda cub might be up to now while the zoo is closed. I picture the cub sitting on the tree branch and hear the rustling sound of the tree branches in my mind. I picture him eating a piece of apple.

Here is an intuitive observation about imaginings: imaginings are similar to perceptual experiences. Visualizing a red panda is similar to seeing a red panda, and auditorily imagining the sound of rustling tree branches is similar to hearing the sound. A common view holds that the phenomenology of imagination and perception is alike. Intuitively, visualizing a red panda is phenomenally similar to seeing a red panda, and auditorily imagining the sound of rustling tree branches is phenomenally similar to hearing the sound.

In response, imagination is often defined with reference to perception. Let me give you a few examples. Currie and Ravenscroft (2002) define what they call perceptual imaginings as “perception-like experiences in the absence of appropriate

stimuli” (Gendler (2016: 4-5)).¹⁴² McGinn (2004) argues that visualizing is, as he calls it, ‘a kind of seeing’, namely, ‘seeing with your mind’s eye’. For McGinn, seeing and visualizing are of the same natural kind. According to Martin (2002) and Peacocke (1985), imagining is necessarily imagining of perceptual experiences. Walton (1990) claims that imagining an object involves imagining seeing an object (see 28).¹⁴³ Balcerak-Jackson (2016) explicates our capacity to imagine as a capacity for what she calls “experiential perspective-taking” (47). She distinguishes imagination from conceivability and supposition this way. Goldman (2006) introduces what he calls enactment-imagination. Enactment-imagination involves “enacting, or trying to enact” (47 – 48, italics omitted) and simulating perceptual experiences. “[P]rime examples of [enactment]-imagination include sensory forms of imagination, where one creates, through imagination, perception-like states” (42). According to this classification, at least a subclass of the mental states and episodes I call imaginings in this dissertation are enactment-imaginings in Goldman’s sense.

The views I just presented differ substantially, yet all stress that there is a constitutive relationship between imaginings and perception of some kind.¹⁴⁴ In chapters 1 and 2 I focused on the normative character of imagination. I argued for the view that imaginings are not subject to norms intrinsic to them, but norms relative to

¹⁴² Their notion of perceptual imaginings is narrower than my concept of sensory imagination. All perceptual imaginings in their sense are what they call ‘recreative imaginings’, i.e. imaginings in the capacity of putting “ourselves in the place of another, on in the place of our own future, past, or counterfactual self: seeing, thinking about, and responding to the world as the other sees, thinks about, and responds to it.” Currie and Ravenscroft (2002: 9). Not all sensory imaginings in my sense are recreative imaginings, while all perceptual imaginings are also sensory imaginings.

¹⁴³ For example, according to him “[i]magining an elephant in Central Park is likely to involve imagining oneself seeing an elephant in Central Park, especially if one visualizes the elephant.” (28).

¹⁴⁴ It is equally common to define mental imagery in terms of perception, but the focus of my dissertation lies on imaginings. Richardson (1969), for example, proposes a definition of mental imagery according to which “[m]ental imagery refers to all those quasi-sensory or quasi-perceptual experiences [...] which exist for us in the absence of those stimulus conditions that are known to produce their genuine sensory or perceptual counterparts” (2-3).

purposes of use. The cognitive roles and the normativity of imagination differs substantially from the cognitive roles and the normativity of perception. Does this assumption put pressure on views according to which there is a constitutive relationship between imagination and perception, such as the views I just mentioned? In the current chapter, I explore this question. I critically examine views that define imagination with reference to perception, also against the background of the account of imagination I developed in chapters 1 and 2. This taps into foundational issues. To what degree should we rely on perceptual experiences as a guide to a theory of sensory imagination? How (else) are we to explain the sensory nature of imagination? In chapter 1 I discussed and rejected Balcerak-Jackson's normative claim that imaginings aim at being about experiences, here I focus on its constitutive counterpart. In section 3.2 I evaluate the thesis that imagining is imagining perceiving something, as it is defended by Martin. This thesis has already received some critical attention in the literature. I provide novel arguments against it. It is an important upshot of the discussion in this chapter that the phenomenology of imagination and perception is relevantly, even if not categorically, distinct. As I reject Martin's thesis, an alternative thesis is required that accounts for the phenomenal similarity between imagination and perception and the phenomenal character of imagination. In section 3.5 I make a proposal of how to characterize the phenomenology of imagination by appeal to perception. This thesis rests on dispositions and is, as I argue, superior to a rival counterfactual account. It is compatible both with my view on imagination and Martin's thesis. In the final section of the chapter I focus on the relationship between phenomenology and normativity. Let us assume that the intuitive observation is correct and imagination and perception are importantly alike. What follows from this for the normativity of imagination? If perception and

imagination are alike in their phenomenal character, does this suggest that they are alike in their normative character also? What is the relationship between the normativity of imagination and its phenomenal character? Some claim that there is a constitutive relationship between the normativity of a mental state and its phenomenal character. While this relationship might hold for perceptions, I argue that it does not hold in the case of imagination.

3. 2 Imagining as Imagining Perceptually Experiencing

Intuitively, when we visually imagine apples, we visually imagine mind-independent objects. Sometimes we visually imagine apples and other times we imagine visually experiencing apples. These imaginings are distinct. A prominent view on the nature of sensory imagination rejects these intuitions. Balcerak-Jackson (2016), Martin (2002), Peacocke (1985) and Walton (1990) endorse a version of what has been called the Dependency thesis of sensory imagination.¹⁴⁵ According to the Dependency thesis, all sensory imaginings are necessarily imaginings of perceptual experiences. If all sensory imaginings are necessarily imaginings of perceptual experiences, imaginings are never merely of mind-independent objects and properties. For a defender of the Dependency thesis, such as Peacocke (1985), it is “impossible consistently to imagine an unperceived material object” (31). Whenever I visually imagine an apple, I necessarily also imagine perceptually experiencing an apple.

According to the Dependency Thesis, one satisfaction condition of the contents of sensory imaginings is the existence of perceptual experiences in the imagined

¹⁴⁵ The term ‘dependency thesis’ is introduced in Martin (2002). Note also that I will not discuss Walton (1990) in what follows.

scenario. For any sensory imagining to be veridical there must be a perceptual experience in imagination with a first-person perspective from which things are presented. Intuitively, this view on the nature of sensory imagination is in conflict with an account of the cognitive roles that sensory imaginings play in reasoning.

We often intend to merely imagine objects without thereby imagining perceptual experiences of these objects also. Consider the following example: Suppose I wonder what my children might be up to at home while nobody is watching them. I intend to use imagination in my speculation. I use imagination to simulate how they would behave while unsupervised. I visualize them in our living room sitting on the couch, playing Mario Kart. They laugh and discuss how easy it is to convince their mother to give them more pocket money. As part of this simulation, if it is done accurately, I imagine my children from a perspective which is not the perspective of an experiencing subject. In the imagined scenario there is no one else in the house. Consider for contrast, a mental simulation that uses imagination in which a perceptual experience is imagined. Suppose that I secretly observe them from the stairway. In this example, my children might whisper instead when they discuss the pocket money situation, because they assume that I am in the house somewhere and that I could hear what they are saying. These examples indicate that imagining unobserved entities play important cognitive roles which are distinct from imagining experiences. It is apparent that such examples stand in conflict with the Dependency Thesis. While the Dependency Thesis has already received a fair amount of critical attention in the literature¹⁴⁶, criticisms often remain intuitive. Moreover, they do not take into account the cognitive roles and function of imagination.

¹⁴⁶ For criticisms see in particular Currie and Ravenscroft (2002), Gregory (2010), Nanay (2015), Noordhof (2002), Smith (2006) and Williams (1973a).

I now present the thesis in more detail. The most prominent defenders of Dependency accounts are Peacocke (1985) and Martin (2002).¹⁴⁷ I focus on Martin's version for the reason that he provides the most substantive defense of this thesis, in comparison with Peacocke (1985) and other writers who have defended the thesis such as Walton (1990) and Balcerak-Jackson (2016). In the current section, I present Martin's version of the thesis. In section 3. 2. 1, I present Martin's arguments for it and evaluate the thesis in detail.

The Dependency Thesis is introduced in the following passage in Martin's 'The Transparency of Experience' (2002). In the passage, it is directly motivated by our intuitive observation about the phenomenal similarity between sensory imaginings and perception.¹⁴⁸

When I visualize an apple, I imagine how it would look. This suggests a certain correspondence between the objects of vision and the objects of visualizing: If I succeed in visualizing things a certain way, then the way I visualize them to be is the way that they would look if veridically perceived. The Dependency Thesis, as I shall call it, claims more than this: to sensorily imagine ϕ is to imagine experiencing ϕ .

Martin

(2002: 40)

¹⁴⁷ Peacocke (1985) defends what he calls the Experiential Hypothesis according to which "to imagine being ϕ (...) is always at least to imagine from the inside an experience as of being ϕ " (22).

¹⁴⁸ To be precise, Martin (2002) endorses the Dependency Thesis to argue against intentionalism. Specifically, he argues that intentionalists have a problem explaining contents of imagination that is similarly severe to a different problem that disjunctivists have in explaining contents of perception. This argument depends on the assumption that there is an intimate metaphysical connection between imagination and perception. This connection is established by the Dependency Thesis.

Here is the Dependency Thesis again, (*DET*) for short:

(*DET*) *S* sensorily imagines ϕ if and only if *S* imagines perceptually experiencing ϕ .¹⁴⁹

Note that the term ‘sensory’ has disappeared on the right side of the biconditional. (*DET*) provides a definition of what it is for an imagining to be sensory. (*DET*) defines sensorily imagining something as imagining perceptually experiencing it. According to a pre-theoretic characterization of what makes an imagining ‘sensory’, which defenders and opponents of (*DET*) both endorse, imaginings that are ‘sensory’ necessarily involve mental imagery. Typically, they are also phenomenally conscious mental states which are phenomenally similar to sense perception. (*DET*) is in comparison a substantive thesis on what it is for an imagining to be ‘sensory’.

‘ Φ ’ refers to that which imaginings and perceptual experiences are about: properties, such as redness; objects, such as apples; actions, such as falling off a chair and events, such as Barack Obama giving birth to a frog. ‘ Φ ’ does not refer to perceptual experiences. Perceptual experiences themselves cannot be that which perceptual experiences are about.¹⁵⁰ According to (*DET*), a subject *S* sensorily imagines an apple if and only if *S* imagines experiencing an apple. A subject *S* sensorily imagines

¹⁴⁹ Balcerak-Jackson (2016), McGinn (2004), Peacocke (1985) and Walton (1990) defend a version of (*DET*) for all sensory imaginings, while Martin (2002) defends it only for a restricted class of imaginings. As I am interested in the nature of sensory imagination, I discuss (*DET*) as a thesis for all sensory imaginings.

¹⁵⁰ Noordhof (2002) and Peacocke (1985) voice the concern that if ϕ referred to experiences, (*DET*) would lead to a regress. (*DET*) would state for example that *S* sensorily imagines experiencing an apple if and only if *S* imagines experiencing experiencing an apple. States of imagining then are constituted by mental states which are constituted by mental states. In my view, ϕ can refer to experiences without (*DET*) starting a regress, if (*DET*) is suitably reinterpreted. In cases where ϕ refers to experiences, (*DET*) states that for *S* to sensorily imagine experiences is to imagine experiences *in an experiential way from the first-person perspective*. This interpretation is at least in the spirit of (*DET*).

President Obama giving birth to a frog if and only if *S* imagines experiencing President Obama giving birth to a frog, and so on. (*DET*) is a dependency thesis, as the nature of imagination depends on perceptual experiences. It is a higher-order thesis, in the sense that imagination is defined in terms of perceptual experiences: perceptual experiences constitute the contents of imaginings, or what imaginings are about.

In chapter 1 I discussed the claim that necessarily imaginings are of the possible. Note that, according to (*DET*), imagination does not constitutively depend on experiences being possible. If perceptual experiences were impossible, (*DET*) would not be false, but would state that sensory imaginings are necessarily about impossible things.

3. 2. 1 Martin's Argument for (*DET*)

An important motivation for the Dependency Thesis is that it provides a straightforward account of the sensory nature of imagination and the phenomenal similarity between imagination and perception.¹⁵¹ Explaining the sensory nature of imagination by appeal to imagined perceptual experiences is elegant, as it seems to capture something essential about sensory representation, namely its constitutive (and possibly also conceptual) dependence on perceptual experiences. The thought that any representation that is sensory is by its nature experiential is very intuitive. Sensory representation can plausibly be defined as a kind of representation that necessarily involves the instantiation of sensory and/or phenomenal properties in experiencing subjects.

¹⁵¹ For further, extensive, discussion of this point see Noordhof (2002).

According to Martin, imaginings share further important features with perceptual experiences. First, they share perspectival properties. Both are alike in how spatial perspectives are represented. Second, they share *de se* properties.¹⁵² I now present my reconstruction of his line of reasoning in terms of four premises that, I take it, Martin defends and which together favor (*DET*). First, Martin endorses P1 and P2.

P1 In ordinary visual and auditory perception of ϕ , ϕ is perceived as spatially extended relative to a point of view.

P2 In ordinary visual and auditory imagination of ϕ , ϕ is imagined as spatially extended relative to a point of view.¹⁵³

Note that Martin, in his defense of a claim concerning all sensory imaginings, relies on a modality-specific argument, i.e. an argument that focuses on vision and audition. Martin claims that in visual and auditory perception and imagination, objects and properties are perceived and imagined, respectively, as spatially extended in three-dimensional or two-dimensional space, relative to a point of view.¹⁵⁴ For example, when we perceive of an apple lying on a table, we perceive the apple as being located a certain distance away on the table, and both apple and table are perceived as extended objects. Typically, the apple and the table are perceived as spatially extended along three dimensions. For Martin, it is obvious that visual imagination and perception are

¹⁵² I return to the question whether these features are further features of phenomenal similarity or properties of content at a later point.

¹⁵³ To be clear, this is my reconstruction of his argument.

¹⁵⁴ Martin does not distinguish between representations along two dimensions and representations along three spatial dimensions. Yet his view ought to be able to cover perceptual experiences that are two-dimensional. Some visual imaginings are arguably also two-dimensional spatial representations.

alike in that they present objects along spatial dimensions. He explains that “visual imagination takes over these orientational aspects of visual experience. One can visualize a red light to the left and a green light to the right.” (2002: 408). Martin explains further that “the point of view in imagining must be part of the imagined scene” (ibid.). We can see why this is so “if we look to the way in which perspective can affect what has been visualized” (ibid.).

Martin’s elaborations are in part pre-theoretic. We can unpack the meaning of the phrase ‘part of the imagined scene’ by appeal to examples. Let’s compare the role of the narrator in *Madam Bovary*, who is not a character in the story, with the role of the narrator in *The Rocky Horror Picture Show*, who is a character in the story. Both are part of the scene, in Martin’s sense. The narrator in *The Rocky Horror Picture Show* is part of the scene, trivially so, as he is a character. Yet the narrator of *Madame Bovary* is also part of the scene. One cannot capture the content of the story without at some point mentioning the narrator. In that sense is it that the narrator affects the contents of the scene. The point of view in imagining is part of the imagined scene in the way that the narrator of *Madame Bovary* is part of it. For the narrator to be part of the scene it is not necessary that he or she be one of the characters in the story.

Here is another example as an analogy. Assume that you are standing in front of a painting in a museum. The painting is a three-dimensional representation of a landscape. There is a tree in the foreground and you can see a house farther away. The painting represents the landscape from a point of view, from a visual perspective. This point of view accounts for the represented spatial dimensions; for example, that the house is proportionally smaller in relation to the tree. The house is part of the depicted scene, but on Martin’s view, the point of view is also part of the depicted scene. This is

because the point of view affects what is depicted. It affects the content of the depicted scene. In this respect, it is like the narrator in *Madame Bovary*. To be clear, the terminology of something affecting the content is potentially misleading, as something can also in a different sense affect the content of a depicted scene without being a part of it. In the painting the point of view is also part of the scene as it does not merely alter the content of the painting and determines what is depicted, but what is depicted is in itself perspectival. In that sense, the point of view is part of the depicted scene.

Nevertheless, while looking at the painting I also have a point of view of my own. This point of view is analogous to the point of view of the reader of *Madame Bovary*, for example. My point of view is distinct from the point of view represented in the painting. Suppose I look at the painting from a little to one side of center. My point of view does not affect what has been depicted in that it does not affect the content of the painting. The painted size of the house does not change when I change my point of view. It is not part of the represented landscape in Martin's terminology. According to Martin, the point of view in perception and imagination is like the point of view that is part of the painting of the landscape and not like my point of view as I am looking at the painting. The point of view in perception and imagination affects what has been perceived or visualized in the same way that the point of view from which the landscape is presented affects the relative size of the house that is depicted.

This is Martin's first piece of evidence for (*DET*) and he concludes on this basis that perception and imagination are sufficiently alike in their perspectival nature. Martin takes the second piece of evidence to be that they are alike in what I call their *de se* properties. In other words, intuitively speaking, they are alike in how the self is presented to the subject from the first-person perspective. Here is Martin's view:

P3 In ordinary visual and auditory perception, the point of view from which objects are presented is not presented as the point of view of the perceiving self.

P4 In ordinary visual and auditory imagination, the point of view from which objects are presented is not presented as the point of view of the imagining self.

Interestingly, Martin seems to be a defender of what has been called the Minimal View of Self-location.¹⁵⁵ On this view, while there is in fact an experiencing self, no experiencing self is presented to me in perception at the point of view from which things are perceptually experienced. Perry (1993) and Campbell (1994), (2000) are also defenders of this position. In other words, on Martin's view visual perception is not about the experiencing self from whose point of view things are experienced. Here, Martin clarifies the nature of the point of view in perception. Objects are perceived as spatially extended relative to a point of view but the point of view is not presented as mine. When I visually perceive a table the table is perceived as spatially extended relative to a spatial point of view but it is not part of what is perceived that this spatial point of view is mine.

Martin claims further that while in perceptual experience objects are oriented within three-dimensional space, monadic instead of relational spatial notions best describe what is presented in experience. In arguing for (*DET*), Martin cites Campbell

¹⁵⁵ For this terminology see Schwenkler (2014).

(1994): “the egocentric frame used in vision employs monadic spatial notions, such as ‘to the right’, ‘to the left’, ‘above’, ‘in front’, and so on rather than relational notions, such as ‘to my right’, ‘above me’, ‘in front of me’, and so on” (119). On Martin’s view, in perception, objects are presented to the right but not to my right, for example.¹⁵⁶ In my opinion, strictly speaking, on the view Martin defends, it is misleading for him to claim that monadic instead of relational spatial notions best describe what is presented in experience. He accepts that there is some designated point of view in perception, even if it is not a ‘self’. What experiences are about can therefore be described using relational vocabulary. For example, one can say that things are presented as being to the right of the spatial point of view, or as above the spatial point of view, without any reference to an experiencing self.

For Martin, the same holds for visual imagination as it does for visual perception. In visual imagination, the point of view is part of the imagined scene, yet “[o]ne visualizes the red light in front, to the left, rather than explicitly in front of, and to the left of me” (ibid.). In visual imagination, there is no experiencing self that is part of the imagined scene at the point of view from which things are presented.¹⁵⁷ In Martin’s terminology, while a point of view is part of the imagined scene, an

¹⁵⁶ Some might object that linguistically speaking, phrases such as ‘to the right’ and ‘above’ are elliptical for relations, such as ‘to the right of me’ or ‘above me’, for example. But even if this is so, it is not an objection to Martin’s view or the Minimal View of Self-location. It is not an objection because the Minimal View of Self-location allows for relational vocabulary as long as it does not refer to a self. The relations are to be described as “to the right of a point of view”, for example.

¹⁵⁷ Martin must be able to give an explanation of how we can justify beliefs about ourselves on the basis of perception. For example, upon perceiving a cup on the table, I judge that there is a cup on the table in front of *me* and not merely in front of a spatial point of view. On Martin’s view, *de se* judgments, such as the judgment that there is a cup on the table in front of *me*, can be justified on the basis of perception because perception disposes us to form such *de se* perceptual judgments. Whenever I see a cup on a table, I am disposed to judge that there is a cup on a table in front of *me*. The judgment has *de se* content even if the perceptual content is not *de se*. For Martin, the same applies to visual imagination: “[T]here is a link between the perspective from which one imagines and the first person in as much as one can exploit that point of view in first person thoughts, and so judge with respect to the imagined situation, ‘I am situated before a tree’.” (2002: 411). Unfortunately, he does not explicate what kind of link he has in mind as holding between the perspective and the first person.

experiencing self is not part of it. We will discuss further below whether and in what way this view might be in tension with (*DET*).

Let me sum up Martin's position so far: He endorses (*DET*) on the basis of the observation that perception and imagination share important properties. First, they are phenomenally alike. Second, they share perspectival properties. In visual and auditory perception and imagination, objects and properties are experienced as oriented relative to a spatial perspective. In other words, visual and auditory perception and imagination are 'perspectival'. Furthermore, perception and imagination are alike in that the perspective from which things are perceived or imagined is not *de se*. There is no experiencing self that is presented to me as being located at the perspectival point of view. On Martin's view, objects and properties are experienced in perception and imagination as spatially orientated, but not as orientated towards a subject. He claims that for this reason monadic, instead of relational terminology accurately describes what is experienced.¹⁵⁸ That perception and imagination are alike in these ways provides sufficient evidence for (*DET*), on Martin's view. In other words, we can say that for Martin, an inference to the best explanation of these similarities favors (*DET*).

3. 2. 1. 1 Sufficiency

I now evaluate the Dependency thesis. As (*DET*) is a biconditional, I discuss both sides separately. I begin with the sufficiency claim. I argue that it is true, if suitably interpreted. The necessity claim on the other hand is hard to defend. I discuss the

¹⁵⁸ I suggested in footnote 158 that relational notions are adequate on his view as long as they do not refer to the self, but instead a spatially perspectival point of view. Again, recall also that on Martin's view there is a link between the point of view from which things are experienced and the subject, such that the subject can form *de se* judgments based on perception or imagination.

necessity claim in section 3. 2. 1. 2. There I evaluate Martin's arguments for *(DET)* which I just presented. Section 3. 2. 1. 2. 1. 1 focuses on the perspectival nature of imaginings and perceptions and section 3. 2. 1. 2. 2 focuses on *de se* properties of imaginings and perceptions. I conclude that *(DET)* is to be rejected as its necessity claim is false. The upcoming sections are intended to complement and complete the existing critical discussions of *(DET)* in the literature. Here is the sufficiency claim of *(DET)*, *(SuffDET)* for short:

(SuffDET) *S* sensorily imagines ϕ if *S* imagines perceptually experiencing ϕ .

According to *(SuffDET)*, it is sufficient for a subject *S* to be sensorily imagining ϕ , that *S* is imagining perceptually experiencing ϕ . It states that all instances of *S* imagining perceptually experiencing ϕ are sensory imaginings. This is plausibly true, if the terms 'sensory' and 'perceptually experiencing' are interpreted in the most natural way. Let us unpack the statement that *S* imagines perceptually experiencing ϕ . Philosophers of language have pointed out that gerund constructions, such as 'experiencing' in '*S* imagines perceptually experiencing', linguistically indicate the first-person perspective.¹⁵⁹ Therefore, the sentence '*S* imagines perceptually experiencing apples', for example, indicates that what is imagined is a perceptual experience of apples from the first-person perspective. The notion of a first-person perspective is vague. Typically, when we say that something is experienced from the first-person perspective we refer to the fact that it is experienced from the perspective of the subject. In other words, the first-person perspective is the perspective of the experiencing subject. But note that

¹⁵⁹ For more on this see Stephenson (2011) and Chierchera (1989), among others.

experiences from the first-person perspective are prime examples of sensory mental states.

To be clear, sentences such as ‘*S* imagines experiencing ϕ from the third-person perspective’, or ‘*S* imagines experiencing ϕ from the outside’ are not ungrammatical. Their meaning can be clarified through overt pronouns and an overtly propositional structure, such as ‘*S* imagines from the outside that she is experiencing ϕ ’. Attitude ascriptions of this kind do not refer to imaginings of perceptual experiences from the first-person perspective. Are they counterexamples to (*SuffDET*)? In my opinion, the correct reading of the right side of (*SuffDET*) does not involve the ‘from the outside’ modifier, or an overtly propositional structure. Therefore, we do not need to address such cases for the current purpose.

I claim that all imaginings of perceptual experiences from a first-person perspective are sensory imaginings. But this claim is imprecise. Typically, imaginings of perceptual experiences from a first-person perspective are sensory imaginings because they are imaginings of perceptual experiences from a first-person perspective. Yet this is not always the case. Consider the following example: I visually imagine that someone is looking at an apple. This is an imagining of a visual experience from a first-person perspective, namely somebody’s first-person perspective. It also is a sensory imagining. But it is a sensory imagining because it is a visual imagining and not because it is an imagining of a visual experience from somebody’s first-person perspective. In response to examples like this one, we ought to precisify our claim as follows: all imaginings of perceptual experiences that are presented to me in imagination from the first-person perspective, i.e. the perspective of an experiencing subject, are sensory imaginings. The phrase ‘perceptual experience from the first-person

perspective' I introduced in analysing (*SuffDET*) refers to the content of the imagining being presented from the first-person perspective.

In my opinion, we can safely assume that all imaginings on the right side of (*SuffDET*) are imaginings of perceptual experiences presented from the first-person perspective. (*SuffDET*) now claims that all imaginings of perceptual experiences presented from the first-person perspective are sensory imaginings. I have focused on the phrase 'perceptually experiencing' so far. Let's consider the term 'sensorily' in 'S sensorily imagines ϕ '. (*SuffDET*) is to be evaluated against a theory-neutral, independent characterization of what it is to imagine sensorily. Earlier I fleshed out what I believe to be a plausible pre-theoretic characterization of 'sensory' that defenders and opponents of (*DET*) can both endorse: sensory imaginings necessarily involve mental imagery. More precisely, an imagining is sensory because it involves imagery. What is imagery? There is a rich body of literature on the nature of imagery but in the current context we can stick to our pre-theoretic characterization I provided at the beginning of this dissertation.¹⁶⁰ The having of imagery, if it is brought to consciousness, is a specific phenomenally conscious mental state. Moreover, this state is phenomenally similar to a perceptual experience and there is significant overlap in neural basis. To evaluate (*SuffDET*) we now ask: Are all instances of imagining perceptually experiencing ϕ also sensory imaginings in this sense? Do all instances of imagining perceptually experiencing ϕ involve imagery? If they are, are they phenomenally similar to sense perceptions in some way? The answer is 'yes'. It is an

¹⁶⁰ Conceptions of what an image is can be found among philosophers across the board. For recent discussions and views on image contents and the nature of images see Benjamin (2011), Block (1983), Casey (1971), Currie (1995), Elkins and Naef (2011), Hannay (1973), Hopkins (1998), Matthen (2014), Phillips (2009), Kosslyn (1980), Kung (2010), Nanay (2015), Noordhof (2002), Tye (1993) and Wiltsher (2016), among others.

uncontroversial assumption that all instances of imagining perceptually experiencing ϕ are sensory imaginings. We can therefore safely conclude that (*SuffDET*) holds.

3. 2. 1. 2 Necessity

Let us move on to the necessity side of (*DET*), (*NecDET*) for short:

(*NecDET*) S sensorily imagines ϕ only if S imagines perceptually experiencing ϕ .

(*NecDET*) has been the primary target of criticisms of (*DET*) in the literature.¹⁶¹ (*NecDET*) claims that there are no instances of a subject S sensorily imagining ϕ that are not also instances of S imagining perceptually experiencing ϕ . Counterexamples to (*NecDET*) are examples of subjects sensorily imagining ϕ , which are not also examples of imagining perceptually experiencing ϕ . In my view, counterexamples to (*NecDET*) are easy to generate. For example, we can visually imagine an apple without imagining an experience of an apple. But to show that such apparent counterexamples are genuine counterexamples to (*DET*) an argument is required. While I agree with the criticisms that are present in the literature, the current literature seems to be in danger of leading to a stalemate between defenders and opponents of (*DET*). In what follows I provide an extensive argument against (*NecDET*). I focus on Martin's line of reasoning and argue that it is flawed. In particular, I claim that phenomenal differences exist that indicate that imagining is not necessarily imagining experiencing something.

¹⁶¹ See in particular Currie and Ravenscroft (2002), Gregory (2010), Nanay (2015), Noordhof (2002) and Williams (1973a).

3. 2. 1. 2. 1 Perspectival Imagination is not Experiential Imagination

Let us return to Martin's argument for (*DET*), for a moment. Recall that for Martin it seems to be true that in ordinary visual and auditory perception of ϕ , and in ordinary visual and auditory imagination of ϕ , ϕ is perceived (or imagined, respectively) as spatially extended relative to a point of view. He seems to consider this to be strong evidence for (*DET*). In this section I focus on the fact that it is not. In a nutshell, Martin mistakenly claims that instances of imagining a situation that is presented from a spatial point of view are necessarily also instances of imagining an *experience* of a situation that is presented to a spatial point of view. Martin claims for example that "the red light is imagined as ... to the left of the point of view within the imagined situation by being imagined as presented to a point of view within that situation, and *hence [is imagined] as being experienced* as to the left from that point of view" (2002: 410) (italics are mine). Martin does not explain what he has in mind with the locution of something being 'presented to a point of view' and I leave this notion intuitive in what follows. For Martin, it always is "an *experience*-relative aspect of a visualized scene, how it and its elements are oriented" (2002: 410) [italics are mine]. These quotes suggest that the fact that objects and properties are visually presented as in three-dimensional space to a point of view is sufficient for Martin to conclude that experiences are visualized. The thought is that if imaginings present objects as spatially extended relative to a point of view, then imaginings must present experiences. But the problem is that we do not get

imaginings of perceptual experiences merely from imaginings that present from spatial perspectives.¹⁶²

To illustrate this problem, consider again our example of the painting of the landscape. On Martin's view, the painting represents a landscape and a house from a point of view. But importantly, it does not thereby present a visual experience of the landscape and the house. Visual representation that is perspectival in the way outlined by Martin is not thereby representation of visual experiences.¹⁶³ Wilson (2011) draws attention to film contents in this context. He argues that the fact that film scenes are visual representations from a point of view does not imply that a character in the film is having a perceptual experience from that point of view in the scene.

Williams (1973a) and Wilson (2011) consider these to be counterexamples to (*DET*). Yet, in my opinion, it is unclear whether defenders of (*DET*) will be persuaded by these examples. While Martin accepts that the painting of a landscape is not necessarily also a representation of a perceptual experience, he claims that sensory imagination works differently. Defenders of (*DET*) distinguish film contents and paintings from sensory imagination. Peacocke (1985) writes in defense of (*NecDET*): "So why is it, on my view, that cinematographic and theatrical representation are so different from imagination? It is because it is in the nature of the sensory imaginings with which we are concerned that to imagine something is, in part, to imagine an

¹⁶² To be clear, sensory imaginings can also be imaginings of perceptual experiences without being spatially perspectival imaginings. These are not counterexamples to (*DET*). To illustrate, here is an example. Suppose, I imagine tasting the sweetness of a ripe raspberry. In this case, I imagine having a perceptual experience, but taste properties such as the sweetness of the fruit are not presented as located somewhere relative to a spatial point of view. Gustatory experiences are not spatially perspectival experiences, on my view. Therefore, imagining having gustatory experiences is not a spatially perspectival imagining. The cases Martin (2002) discusses are primarily visual and auditory imaginings. Philosophers tentatively assume that gustatory, tactile and olfactory experiences are not spatially perspectival, while vision and auditory experiences are. Yet more research into taste, smell and touch is needed. The thought is that due to a sense-specific phenomenal similarity between perception and imagination, the same can be said for imagination.

¹⁶³ Williams (1973a) provides counterexamples to (*NecDET*) along these lines.

experience.” (29) And “that is not in the nature of theatrical or cinematographic representation” (ibid.).

Peacocke provides conceptual reasons for why this is so. The underlying thought seems to be the following: Sensory mental states can be defined as states that necessarily involve the instantiation of sensory (or phenomenal, if you prefer) properties in experiencing subjects. Sensory properties per definition are had by experiencing subjects, and a sensory mental state that is had by a subject necessarily involves an experience. This highlights an important difference between film contents and paintings on the one hand and sensory imaginings on the other: as paintings and film contents are not sensory states, they are not to be defined in terms of experiences. Only the latter necessarily involve the instantiation of sensory (or phenomenal properties) in experiencing subjects. For that reason, on Peacocke’s view, the sensory nature of imaginings is to be defined in terms of perceptual experiences. Moreover, sensory imagination is to be defined in terms of imagining perceptually experiencing something. This implies that experiencing subjects are part of the imagined scenarios themselves. The existence of imagined experiencing subjects is considered to explain the sensory nature of imagination. The apple in the scenario is presented in a quasi-visual way because there is an experiencing subject in the imagined scenario who is visually experiencing it. For these reasons also, film contents and paintings are not counterexamples to (*NecDET*).

Unfortunately, this line of reasoning relies on an equivocation. Sensory mental states can be defined as mental states that necessarily involve the instantiation of sensory (or phenomenal, if you prefer) properties in experiencing subjects. Sensory imaginings are sensory mental states. But from this it does not follow that sensory

imaginings are necessarily *of experiences*. Instead, the sensory nature of imagination can be explained by appeal to the imagining subject, the subject who is having an experience of imagining.¹⁶⁴ A sensory imagining is itself an experience, as sensory imaginings involve the instantiation of sensory (or phenomenal, if you prefer) properties in experiencing subjects. Therefore, we do not need to appeal to imagined experiences, as (*DET*) does, to explain the sensory nature of imagination.

Opponents of (*DET*), such as Williams (1973a) or Noordhof (2002), argue that (*DET*) is false because we can obviously imagine objects without thereby imagining experiences. They typically appeal to introspective evidence. It seems to me that I can visually imagine a red panda, without thereby imagining an experience of a red panda, for example. Whenever I visualize an apple, and introspect on what I imagine, I seem to merely visualize an apple and not imagine an experience of it. Introspective evidence tells me that it is possible to visually imagine an apple without imagining an experience of it. And arguably, introspection yields direct access to the contents of our imaginings.

Defenders of (*DET*), such as Martin (2002) and Peacocke (1985), are likely to not be persuaded by these considerations. Martin suggests that we need not usually be introspectively aware of the fact that we are imagining a visual experience when we visually imagine an apple. While it might seem to us that we can imagine an apple without thereby imagining an experience, this does not imply that we do so.

It is a plausible assumption that introspection does not always yield direct and complete access to the contents of our imaginings, generally speaking. In my opinion, in

¹⁶⁴ Note that a complete account of the sensory nature of imagination requires a more complex explanation which appeals to further facts, such as the phenomenal similarity to perception, the causal relationship to sensory inputs, the neurological basis of these mental states, and the like.

this debate, the following question is central: To which degree can introspection yield evidence for the claim that a visual imagining is of a visual experience? This question is notoriously difficult to respond to, as it comes with a challenge. Visual experiences are commonly considered to be ‘phenomenally transparent’. It seems that whenever I have a visual experience and try to attend to the experience itself, I cannot help but attend to the objects and properties experienced.¹⁶⁵ I attend to what is presented to me in experience and not to the experience itself. The experience itself escapes us, so to speak. Martin is a proponent of the view that both visual experiences and visual experiences that are imagined are phenomenally transparent.¹⁶⁶ Indeed, our intuitive observation that imaginings and perceptions are phenomenally alike suggests that transparency holds both for visual experiences and imaginings of visual experiences. But this raises the worry that there is not enough introspective evidence available to determine whether I imagine a visual experience of an apple or merely visually imagine an apple. It seems that whenever I visually imagine an experience of an apple and introspectively attend to what I imagine, and intend to focus on the imagined experience itself, I cannot help but attend to the imagined apple, instead of the imagined experience.

Martin appeals to the transparency of experiences in perception and imagination as evidence for (*DET*) as it seems to be yet another property that perception and imagination share. Yet the current discussion shows that appeal to transparency can also undermine introspection-based arguments against (*DET*), an issue Martin does not discuss. The transparency of imagined experiences suggests that it is difficult to find introspective evidence in support of the counterexamples presented. This is problematic

¹⁶⁵ The transparency observation was most famously made by Moore (1903) and more recently by Harman (1990). Tye (1991), (1995), (2000), for example, discusses the transparency of experiences at length.

¹⁶⁶ Martin’s main line of argument in *The Transparency of Experience* (2002) relies on this assumption (see 378ff).

for opponents of (*DET*), as they often do not appeal to more than intuition. Martin does not do so, but in defense of (*DET*) he could respond that appeal to the transparency of experience is sufficient as an explanation for why it introspectively seems to us that we can visually imagine an apple without thereby imagining an experience of an apple. In other words, Martin could explain away the force of the counterexamples by appeal to the transparency intuition.

I side with the critics of (*DET*). Not all perspectival sensory imaginings are experiential imaginings. Not all imaginings of apples are imaginings of experiences of apples. But the evidence against (*DET*) I have presented so far is not decisive, in my view. In particular, due to the transparency intuition, appeal to introspective evidence is not enough to demonstrate the difference between imagining experiences and imagining objects, so to speak. In the next section I focus not on the perspectival nature of imagination, but on *de se* properties of imagination. As I argue, introspection in that domain provides clearer evidence against (*DET*).

3. 2. 1. 2. 2 That Obscure Subject in Imagination

In the previous section, I discussed intuitive reasons for why spatially perspectival imagination need not be experiential imagination. In this section, I focus on *de se* properties of imagination and perception.

First, consider the following scenario: I look into the mirror and see in it a person whose trousers are on fire. This person does not seem to have noticed that her trousers are on fire, or else she does not seem to care about it. On the basis of what I see, I form the belief that this person's trousers are on fire. Then I look down at myself

and realize that in fact my own trousers are on fire. I look back into the mirror and realize that I am the person whose trousers are on fire. In shock, I now believe that my trousers are on fire. The belief that my trousers are on fire is a *de se* belief. It involves a first-person reference to the self. In comparison, the belief that this person's trousers are on fire is a *de dicto* belief. In the example, it refers to the same person, namely me, but it does not involve a first-person reference to the self. While both refer to the same person, they do so systematically in different ways. This difference is considered to be a difference in the belief content. One indication for it being a difference in the belief content is that it is informative to me to come to believe that the person whose trousers are on fire is in fact me. I have learned something new. Some philosophers, in the wake of Perry (1979) and Lewis (1979), have claimed that *de se* contents are considered to be immune to error through misidentification. If they are immune to error through misidentification, it is impossible for subjects to misidentify the referent as being something other than the self. Whether *de se* contents are in fact immune to error through misidentification, is unclear, but this is not of relevance in the current context.¹⁶⁷ It is generally accepted that not only beliefs but thought contents, generally speaking, perceptions and imaginings can be *de se*. For example, I picture a person in a mirror and imagine that this person's trousers are on fire. I then imagine that I am this person in the mirror and that my trousers are on fire. The former is a *de dicto* imagining, while the latter a *de se* imagining.

In this section I argue that perception and imagination differ in their *de se* properties. More specifically, while both can be *de se* and often are, they are not always

¹⁶⁷ Furthermore, many, such as Lewis, and Perry, hold the view that *de se* content is a special kind of *de re* content, as it refers directly and uniquely to the self. Some, such as Recanati (2009) argue that *de se* contents involve a special self-mode of presentation. This view arguably goes back to Frege (1956). In the discussion to follow I will not side with one particular theory of *de se* content. Instead, my remarks are intended to apply to a wide range of theories.

de se in the same way. I believe further that this alone is a good reason to reject (*DET*). Before we start, I give you two reasons why a focus on *de se* content is of particular interest. First, in my view, a focus on this topic has been neglected in the literature on (*DET*). Interestingly, arguments against (*DET*) at times target not (*DET*), but a related thesis. Compare (*DET**) with (*DET*):

(*DET**) *S* sensorily imagines ϕ if and only if *S* imagines an experience of ϕ .

(*DET*) *S* sensorily imagines ϕ if and only if *S* imagines experiencing ϕ .

Noordhof (2002) argues against the view that imagining is always “imagining of a perceptual experience of an ϕ in the imaginary world” (443). He claims to reject (*DET*), as it is committed to there being experiences in the imagined world. In my view, he provides reasons to reject (*DET**), but does not argue against (*DET*) directly. In a similar vein, Nanay (2015), who is also a critic of (*DET*), introduces it as “the suggestion that visualizing *x* consists of representing the experience of *x*” (1725), in other words as (*DET**). Why does the difference between (*DET**) and (*DET*) matter? It matters insofar as only (*DET*) seems to have clear implications for whether imaginings necessarily involve *de se* contents. Interestingly, the existing debates on (*DET*), in my view, do not do justice to the implications of (*DET*) concerning *de se* contents.

On the face of it, the difference between (*DET*) and (*DET**) is merely verbal. You might say, imagining smelling coffee is just a slightly different way of saying that you are imagining the smell of coffee. You might claim that the right side of (*DET*) and (*DET**) respectively refers to the exact same set of imaginings. In many cases, this is

the correct interpretation of the phrase ‘S imagines an experience of ϕ ’, but this is not so in every case. ‘S imagines an experience of ϕ ’ and ‘S imagines experiencing ϕ ’ are grammatically distinct. The grammatical difference between (*DET**) and (*DET*) lies in a difference in how they refer to an experience. (*DET*) contains the gerund construction ‘experiencing ϕ ’ while (*DET**) contains an object construction ‘an experience of ϕ ’. Recall that, as I alluded to earlier in discussing the sufficiency claim of (*DET*), gerund constructions such as ‘experiencing’ in ‘S imagines experiencing ϕ ’ grammatically indicate the first-person perspective. This is not the case for object constructions.

In my opinion, the gerund construction in (*DET*) indicates that we are concerned with imaginings of perceptual experiences that are presented to me in imagination from the first-person perspective, i.e. the perspective of an experiencing subject. According to (*DET**), all sensory imaginings are imaginings of perceptual experiences but they need not be presented from the first-person perspective, i.e. from the perspective of the experiencing self. This is an important difference between (*DET*) and (*DET**). (*DET**) leaves open the option of imagining a perceptual experience not presented from the perspective of the experiencing self. Walton (1990) recognizes this important distinction:

To imagine seeing a rhinoceros is to imagine *oneself* seeing a rhinoceros, not just to imagine an instance of rhinoceros seeing. One who imagines *Napoleon’s* seeing a rhinoceros, or imagines *a* seeing of a rhinoceros

without imagining whose seeing it is, does not thereby “imagine seeing a rhinoceros” as this phrase is ordinarily understood. (31).¹⁶⁸

An imagining of an experience (as in *(DET*)*) is not already an imagining of an experience from the *perspective of the experiencing subject* (as in *(DET)*). To clarify, consider this example: I imagine that John is having an experience of an apple. I can do this by picturing John looking at an apple. This is an imagining of an experience, as there is an experience in the imagined world, which is had by John. The imagining is not thereby an imagining of an experience from the perspective of the experiencing self.

Now consider our previous discussion on the difference between spatially perspectival imaginings and imaginings of experiences. Someone might claim that according to the intended reading of *(DET*)*, *S* imagines an experience of ϕ only if the imagining is an imagining of an experience from a spatial point of view. The example of imagining John looking at an apple is not an instance of imagining an experience of ϕ in that sense. In response to this, I stress that even on the intended reading of *(DET*)*, *(DET*)* and *(DET)* differ in an important way. On the intended reading of *(DET*)*, *S* imagines an experience of an apple from a spatial point of view, which is an experience John is having. According to *(DET)*, *S* imagines an experience of an apple from a spatial point of view which also is the point of view of the experiencing self, namely John.

Let me give you another example to illustrate the difference between *(DET)* and *(DET*)*. Consider the phenomenon of inserted thought. According to a common conception, inserted thoughts are thoughts that are not experienced as being the

¹⁶⁸ Walton draws attention to a further distinction which is not our focus: There is a difference in what is imagined between imagining my seeing a rhinoceros and imagining one seeing a rhinoceros, even if both are imaginings from the perspective of an experiencing self.

subject's own thoughts.¹⁶⁹ Ordinary thoughts are experienced as being the subject's own thoughts. Arguably, this difference affects the contents of the thoughts. Inserted thoughts do not involve a reference to or representation of the thinking subject in the way that ordinary thoughts do. As an analogy, consider the possibility of inserted perceptual experiences. Inserted perceptual experiences are experiences that are not experienced as being the subject's own experiences. Let's assume that inserted visual experiences of ϕ are experiences of ϕ presented to me from a spatial point of view, but not presented to me from my point of view, namely the point of view of the experiencing subject. Let's suppose further that they are experienced as experiences from the point of view of my mother. Such experiences might be unusual, but they are possible.¹⁷⁰ If inserted perceptual experiences are possible, they can also be imagined. Imaginings of inserted visual experiences are imaginings of experiences from a spatial point of view, but they are not imaginings of experiences from the point of view of the experiencing subject. In other words, they are imaginings of experiences of ϕ without being cases of imagining experiencing ϕ .¹⁷¹ (*DET**) defines sensory imagination in terms of imaginings of inserted perceptual experiences, while (*DET*) defines sensory

¹⁶⁹ For recent views on inserted thoughts that endorse this conception, see for example Broome and Bortolotti (2009), Graham and Stephens (2000), Langland-Hassan (2008), Parrott (2016), Schofield (2006), Sollberger (2014) and Vosgerau and Voss (2014).

¹⁷⁰ Relatedly, consider for example the phenomenon of out-of-body experiences. Out-of-body experiences typically involve perceiving your body as not being where you are. You might visually experience your body as outside of yourself. For research on out-of-body experiences, see in particular Carruthers (2015), Guterstam and Ehrsson (2012), Metzinger (2005), Kemmerer and Gupta (2006) and Tong (2003).

¹⁷¹ My point here does not require that an experience that is not had by anyone is possible. Here we are merely concerned with what is represented in imagination. Most philosophers would argue that an experience that is not had by anyone is impossible. But in imagination we can represent impossible things.

imagination in terms of ordinary perceptual experiences. (*DET**) and (*DET*) differ in their analysis of how the experiencing subject is presented in imagining experiences.¹⁷²

I just presented my first reason why a discussion of *de se* contents in imagination is of particular interest. Here is the second reason. A focus on *de se* content in imagination and perception has an important dialectical advantage: As indicated earlier, it is plausible that perceptual experiences are phenomenally transparent and therefore it might not be introspectively accessible to us whether a visual imagining is of a perceptual experience or not. At least, matters are highly unclear in this respect. The same cannot be said for *de se* contents.

The thought that phenomenally conscious mental states with *de se* contents have a specific phenomenal character enjoys wide-spread popularity.¹⁷³ What it is like to see yourself in the mirror differs from what it is like to look at somebody who merely looks identical to you. Research into the phenomenon of inserted thoughts (or alien limbs or related phenomena) indicates that what it is like to think a thought that is mine differs from what it is like to think a thought that is not mine. What it is like to experience a leg as being mine differs from what it is like to experience a leg as not being mine. What it is like to perceive an apple from my point of view differs from what it is like to perceive an apple from somebody else's point of view. Such examples suggest that *de se* contents have a specific phenomenology. To be clear, the position that *de se* contents have a specific phenomenal character is contested. In what follows, let us nevertheless grant that there is some *de se*-specific phenomenology for the sake of argument. If it is

¹⁷² If you are unsure whether imagining inserted experiences in the sense outlined is possible, I am happy for the sake of argument to grant you that it is not. In that case, I merely reiterate that a focus on (*DET**) in discussions of (*DET*) has neglected the topic of *de se* contents in imagination.

¹⁷³ The literature on the phenomenology of the self is wide-ranging, from traditional discussions in phenomenology in Husserl (1977), (1989) and Merleau-Ponty (1962), (2004) to recent explorations, for example in Guillot (2016), Kriegel (2009), Sass (2013), Strawson (2000) and Zahavi (2003).

correct, whether a mental state has *de se* content or not is then introspectively accessible. At least we seem to have better introspective evidence for a visual imagining having *de se* contents than for an imagining being of an experience. This enables us to use introspective evidence to argue for or against (*DET*).

I now discuss (*DET*) and its relationship to *de se* properties in perception and imagination. On my view, perception and imagination differ systematically in this respect. This alone I consider to be a reason to reject (*DET*). Recall Martin's argument for (*DET*). On his view, perception and imagination are alike in their *de se* properties. In what follows, I critically discuss Martin's view and use this as a foil to present my own position.

We can evaluate his line of reasoning along two lines. First, one can ask whether Martin's analysis of the *de se* properties of perception and imagination is correct. Second, one can address the question whether the analogy between perception and imagination, if it exists, is correctly captured. In what follows, I argue that Martin's line of reasoning is insufficient on both accounts. The discussion will provide a further set of counterexamples to the Necessity side of (*DET*).

First, I argue that Martin's analysis of the *de se* properties of perception and imagination is incorrect. Recall Martin's view: For Martin (2002), perception and imagination present objects and properties in three-dimensional (or two-dimensional space), relative to a spatial point of view. In perception the "orientation of objects perceived (relative to the subject) does not come from an explicit representation of a relation between the object and the perceiver" (410). For example, whenever I visualize standing in front of a tree, I do not explicitly represent myself or an imagined perceiver.

One does not “imagin[e](...) oneself visually experiencing a tree” (411) or “visualiz[e](...) someone within the scene standing before the tree (or imagining oneself reflected in a puddle in front of the tree)” (ibid.).

In the passage in which Martin discusses *de se* properties he claims that neither perception nor imagination is *de se*. More precisely, he seems to claim that the contents of perception and imagination are not *de se* at the spatial point of view from which objects are presented. On his view, while objects are presented relative to a point of view, they are not presented as relative to the experiencing self. Instead, the point of view from which things are presented in perception and imagination is ‘unoccupied’, so to speak. There is no self at the spatial vantage point. Martin plausibly allows for perceptual experiences and imaginings to be *de se* in other ways, as there are many uncontroversial examples of perceptual experiences and imaginings being *de se*. Consider looking in the mirror, and seeing yourself, and not merely somebody who is in fact you, without you realizing this, for example. The first perceptual experience involves a *de se* representation of the self.

The main alternative to Martin’s position is the view that perception and imagination are *de se* at the spatial point of view. According to this position, the experiencing self is presented at the point of view from which objects and properties are presented. On this view, relational phrases such as ‘the table is perceived as in front of me’ are adequate in describing the contents of perception and imagination. To be clear, while the table is perceived as in front of me, from my own perspective, the experiencing self is not represented explicitly, as it is not perceived as in front of me, like the table, for example.

I (and many others) disagree with Martin on the *de se* nature of perception. In my view, ordinary perceptual experiences that are perspectival are *de se* at the point of view. A cup on a table is perceived by me as located at a certain distance away from me. Peacocke (1983), (1992) endorses this view. On his view, perceptual experiences involve not only spatial perspectives but also first-person perspectives. To capture this, he introduces what he calls positioned scenario contents. Perceptual experiences present objects relative to a subject and her body. Recently Chalmers (2006) and Brogaard (2010) argue in line with this that perceptual experiences are best characterized by appeal to centered possible worlds, where the center refers to the experiencing self at the point of view.¹⁷⁴

According to a wide-spread belief, mental content is best characterized in terms of possible worlds. In this framework, *de se* content can be modelled in terms of centered possible worlds, i.e. pairs of worlds and individuals. We can also reframe the positions I have been discussing by appealing to centered worlds. What is central in our current discussion is the question of what the individual is that is involved in the construction of the relevant centered worlds. Formally speaking, the individual could be for example a rough space-time region. But for *de se* contents it is a common assumption that the individuals are subjects. On Martin's view, ordinary perceptual experiences are not centered on experiencing subjects, but mere spatially perspectival points of view. These can, roughly speaking, be constructed as geometrical points in three-dimensional space. I, along with many others, such as Chalmers (2006) and Brogaard (2010), believe that ordinary perceptual experiences are centered on

¹⁷⁴ For further discussion, see also Egan (2006a), (2006b) and (2010).

experiencing subjects. Earlier, I introduced inserted perceptual experiences.¹⁷⁵ Inserted perceptual experiences are not *de se* at the point of view from which things are presented. Inserted visual and auditory perceptual experiences are arguably centered on geometrical points in three-dimensional space, only.¹⁷⁶ I do not frame the current discussion in terms of centered possible worlds because not everybody who believes in *de se* perceptual experiences and imaginings also endorses this framework.

While I (and many others) disagree with Martin about the *de se* nature of perception, I agree with Martin on the *de se* nature of imagination. Recall that Martin argues that because perception and imagination are alike in this respect an inference to the best explanation favors (*DET*). I claim, contrary to Martin, that perception and imagination are not alike. For this reason, an inference to the best explanation does not favor (*DET*). Instead, (*DET*) get's the *de se* nature of imagination wrong. This is a reason to reject (*DET*).

Let us now focus on the *de se* nature of imagination. In ordinary cases, imagination is not *de se* at the point of view from which things are presented in imagination. In other words, ordinary imaginings are not centered on experiencing subjects. If they are spatially perspectival, such as auditory and visual imaginings they are roughly speaking centered on points in three-dimensional space. That imaginings are not *de se* in this way is not a necessary property of them. Some imaginings are *de se*, for example imagining seeing an apple from my own perspective. But these cases do not tell us anything deep about the nature of imagination. Ordinary cases of visual imagination are for example imagining an apple on a table that is presented as an

¹⁷⁵ One might claim that perception is necessarily *de se* at the point of view. This view is false as inserted perceptual experiences are not *de se* in this way.

¹⁷⁶ I leave it open whether these are space-time points, i.e. whether time should also be taken into consideration.

extended object in three-dimensional space. It is imagined as located at a certain distance, relative to the spatial point of view from which things are presented. In other words, Martin's view on the nature of *de se* properties in imagination and perception is correct when it comes to ordinary cases of visual and auditory imagination.

I cannot provide a conclusive argument for the view that the ordinary perception and imagination systematically differ in terms of their *de se* properties, or in other words, the nature of the center, in a centered possible worlds framework. In what follows I give an argument for it from the phenomenology of imagination. I consider it to be an independently plausible assumption that *de se* content involves a specific phenomenology. The view that there is a phenomenology of the experiencing self is not new.¹⁷⁷ The thought is that when I, for example, perceive an apple and introspect on what I perceive, the phenomenology of my perceptual experience suggests that the apple is experienced by me, from the perspective of myself. Introspection tells us that what it is like to have an experience that is presented as mine differs from what it is like to have an experience that is not presented as mine. The phenomenology of inserted perceptual experiences differs from the phenomenology of ordinary perceptual experiences, for example. Similarly, the phenomenology of inserted thoughts differs from the phenomenology of thoughts that I experience as being mine.

Moreover, this phenomenology, if it exists in visual perception, I claim, is lacking in ordinary cases of visual imagination. Let us visually imagine an apple on a table. Introspection provides evidence that what it is like to visually imagine an apple on a table ordinarily does not involve the phenomenology of an experiencing self that is

¹⁷⁷ The literature on the phenomenology of the self is wide-ranging, from traditional discussions in phenomenology in Husserl (1977), (1989) and Merleau-Ponty (1964a), (1964b), (1968), (1993), (2012) to recent defenders, for example in Guillot (2016), Kriegel (2009), Sass (2013), Strawson (2000) and Zahavi (2003).

located at the point of view from which the apple is presented. Introspection tells us that what it is like to visually imagine an apple on a table that is lying in front of *me* differs from what it is like to visualize an apple that is lying on a table, for example.¹⁷⁸

The advantage of this line of reasoning against (*DET*) is that *de se* phenomenology, if it exists, plausibly is introspectively accessible. Consider the argument I presented in section 3. 2. 2. 1. 3 *Perspectival Imagination is not Experiential Imagination*. There I argued against the claim that spatially perspectival imaginings are necessarily imaginings of perceptual experiences. I also claimed that it is unclear whether we can tell on the basis of introspective evidence alone whether a perspectival imagining also is an imagining of an experience. Yet we can arguably tell on the basis of introspective evidence whether an imagining is an imagining from my point of view (i.e. whether it is *de se*) or whether it is an imagining from an unoccupied spatial point of view (i.e. whether it is not *de se*).

Furthermore, introspection yields evidence that perspectival imaginings are not always imaginings from my perspective. This casts doubt on the truth of (*DET*), as it questions the claim that perception and imagination share their *de se* properties. According to (*DET*), all sensory imaginings are imaginings of perceptual experiences. Therefore, according to (*DET*), if all perceptual experiences are *de se* at the point of view, all sensory imaginings are also *de se* at the point of view. And under the

¹⁷⁸ This line of reasoning is compatible both with views according to which the phenomenal difference between imagination and perception is categorical and gradual. My argument in the current section primarily relies on the claim that the phenomenology of typical perceptual experiences of φ differs from the phenomenology of φ which indicates that imaginings of φ are not thereby imaginings of perceptually experiencing φ . Imaginings and perceptions can be categorically distinct kinds of mental states but still be importantly phenomenally similar. They can also be gradually distinct and their similarity might be explainable by the existence of a gradual difference. For criticism, see for example Hopkins (2012). Recent defenders of the view that imaginings and perceptions are categorically distinct are Kriegel (2015) and Sartre (2004). Recent defenders of the view that imaginings and perceptions are gradually distinct include Thomas (2014) and Nanay (2015).

assumption that perceptual experiences are typically *de se* in this way, typical imaginings that are not *de se* in this way are counterexamples to (*DET*).

3. 2. 1. 2. 3 Perception of extremities

A close-up on *de se* properties suggests that imagining ϕ is not necessarily imagining perceptually experiencing ϕ . This is because typical cases of perceptually experiencing ϕ have different *de se* properties than typical cases of imagining ϕ . This claim is true for many more properties of perception and imagination.

In what follows I present one further such property to supplement the arguments against (*DET*). Consider the representation of your own body parts in perception. In many cases of seeing ϕ , perception also presents to you parts of your extremities. My visual field typically contains part of my hands, arms or legs, depending on my bodily position, and possibly a small part of my nose which I can attend to. That perceptual experiences typically explicitly present some parts of the body of the perceiver is related to the fact that humans are embodied and typically engage with their environment through the combined effort of perception and bodily actions together. But this property is lacking in typical cases of imagining ϕ . When I visually imagine a cup standing on a table I do not also imagine parts of my body, at least typically so. Only in cases in which I decide to imagine perceptually experiencing a cup standing on a table, I might do so. This seems to be an important difference between typical cases of perception and imagination.

(*DET*) derives its plausibility from the observation that imagination and perception share phenomenal and representational properties. (*DET*) implies that

imagining ϕ is sufficiently alike perceptually experiencing ϕ in terms of the presentation of the extremities of the subject who is perceiving or imagining, respectively. Yet typical imaginings do not also involve representations of the extremities of subjects. Typically, when I imagine an apple on a table, I merely imagine an apple on a table without imagining parts of my arms or hands. Typical cases of perception are unlike typical cases of sensory imagination. This casts doubt on (*DET*). Such observations reveal that (*DET*) gets the nature of sensory imagination wrong in terms of its representational properties.¹⁷⁹ Recall my focus on the cognitive function of imagination in chapters 1 and 2. It is arguably the function of perceptual experiences to accurately represent my immediate perceivable environment in which I am embedded in. Accurate representations of my extremities through perception are of vital importance for me to be able to dynamically interact with my environment and to execute movements with precision. The fact that my extremities are not presented in imagination in the same way can also be seen as an indication of its function, which is distinct from perception. Visual imaginings are used to trigger desires, to recall the location of objects, to understand geometrical proofs, to name a few uses. Only in specific cases are visual imaginings used to simulate an interplay between the environment and bodily movements. Examples of this are imaginings used in preparation for competitive sporting events.

3. 2. 2 (*DET*) and Image Content

¹⁷⁹ At this point you might object and say that (*DET*) nevertheless captures ideal imaginers. Ideally, sensorily imagining a cup standing on a table involves representations of extremities from the first-person perspective. Typical cases are merely non-ideal cases. I get back to this objection in section 3. 5. 3 when I discuss the normative version of (*DET*).

Some philosophers defend (*DET*) for image content only. Currie (1995) claims that „the content of visual imagery is always of the form, ‚That I am seeing such-and-such‘“ (36-37). Peacocke (1985) believes that “[w]hen the same image can serve two different imaginative projects, that is because the imagined experience fulfilling each project can be the same” (24). According to one interpretation of this quote, Peacocke is stating that the same image can be used, because it is about the same imagined experience. This would suggest that images themselves are about imagined experiences.

The arguments I presented against (*DET*) also apply to such views of image content. In fact, (*DET*) as I presented it earlier, implies that (*DET*) also holds for image content alone. On my view, sensory imaginings necessarily involve imagery. An instance of having imagery is per definition a sensory imagining, as long as it is an instance that belongs to the attitude of imagining.¹⁸⁰ These cases of having imagery are per definition cases of imagining ϕ sensorily.

But even if you prefer a different definition of imagination and also defend (*DET*) for image content separately, the same arguments apply. Conjuring up images is cognitively useful for a plethora of reasons. Typically, subjects use images to represent external objects and their properties, events and states of affairs, but the cognitive focus does not typically lie on representing perceptual experiences. A visual image represents objects and their properties as extended relative to a spatial perspective, but there is no experiencing subject at the perspective. Typically, when I form an image of an object, such as an apple for example, the *de se* phenomenology is lacking that is present in cases of imagining perceiving an apple or in ordinary cases of perceiving an apple. In

¹⁸⁰ This is to be contrasted with having imagery as a part of episodic memory. I distinguish the attitude of imagining from memory as I consider their functions to be distinct. It might nevertheless be that imagination and memory belong to a single capacity (see for example Suddendorf and Corballis (2007) for more on this).

the latter two cases the apple is presented from the perspective of the experiencing subject. But not so when merely having an image of an apple. Moreover, the plausible assumption that perceptual experiences are transparent also holds for images: Whenever we imagine perceptually experiencing something and use images for this, that it is a perceptual experience is not part of the image content itself, as perceptual experiences are arguably transparent by nature. Therefore, even in cases, where perceptual experiences are imagined with the help of imagery, the images do not itself represent the experience.

In the literature on imagination and perception we find various accounts of image content in sensory imagination, which are compatible with rejecting (*DET*). Nevertheless, they typically are also derived from or at least strongly influenced by accounts of perceptual contents. Here are two examples, the accounts of Kung (2010) and Nanay (2015).

For Nanay (2015), image content is the same as perceptual content as is it understood by Peacocke (1992). He explains that “[o]ur perceptual apparatus attributes various properties to various parts of the perceived scene, where I take the perceived scene to be spatially (...) organized in the way Peacocke’s scenario content is.” (4) Analogously, “our imagery attributes various properties to various parts of the imagined scene. The content of imagery is the sum total of the properties attributed to the imagined scene” (6). Note the restrictive focus on visual imagery alone instead of a broader notion involving all sensory modes. Accounts of image content in imagination that are strongly influenced by accounts of perceptual contents are in danger of not being able to explain properties of imagination that are unlike perception. Recall my intuitive characterization of imagination in chapter 1, section 1. 2, according to which

the contents of imaginings typically outstrip image contents. On my view, imagination contents also involve conceptual contents. Moreover, conceptual stipulations can alter what images represent. In this respect, imaginings and perceptions differ systematically. For this reason also, Nanay's usage of the word 'imagined scene' in his explication of image content needs to be treated with caution. He writes that the content of imagery is the sum total of the properties attributed to the imagined scene. Yet the sum total of the properties attributed to the imagined scene typically outstrip the image contents. This is because what is true in the imagined scenario is more than what is represented in the image. I might for example visually imagine an elephant who is my mother in the imagined scene. But that the elephant is my mother is conceptually stipulated. It is not part of the image content. While Nanay (2015) is not opposed to the view that the contents of imaginings involve more than imagery, he does not seem to take this thought to its logical conclusion when developing an account of image content in imagination. His view remains difficult to evaluate thoroughly, as he does not specify which kinds of properties can be attributed to be imagined scene or explicate the intuitive concept of an imagined scene.

According to Peacocke, scenario content represents surfaces, colors and shapes, which are organized on a three-dimensional plane and represented from one spatial perspective.¹⁸¹ On my view, while visual imagery in imagination might often represent in the form of Peacocke's scenario content, it is not a necessary feature of it. This is due to the fact that the image content is less constrained and also subject to voluntary reconstruction, similarly to the overall contents of imagination, but unlike the contents of perception which are typically not subject to the will in this way. For example, if I

¹⁸¹ Recall that Peacocke does not endorse this position for image content himself, as he believes that a version of (*DET*) holds for image content.

wish to do so, I can form an image of a cup on a table organized on a three-dimensional plane, represented from one spatial perspective, as Peacocke describes, but then also imagine a second cup on this same table that is geometrically oriented as if it was represented from a slightly different spatial perspective. In this imagined scenario, similar objects are simultaneously represented from two different spatial perspectives. Such imaginings are not impossible. Furthermore, visualizations of this kind can be cognitively useful. Imagery that contains accurate information about how a cup looks like from two distinct spatial perspectives enables me to form a justified belief on how an actual cup would look like if I changed my location, for example. This information can be used in planning actions.

Kung's (2010) account of image content is also heavily influenced by Peacocke's (1983) theory of qualitative content in perception. Yet it is fleshed out in greater detail than Nanay's. For Kung (2010), mental images are 'qualitative phenomenal components' of imaginings that have 'basic qualitative content', where, according to him, basic qualitative content "specif[ies] (...) the distribution of objects and "basic observational" properties in three-dimensional (egocentric) space. Basic observational properties include at least the traditional primary and secondary properties." (3). For example, as Kung explains, when you imagine a stack of US-Dollar bills "your imaginative experience presents greenish whitish flat objects, laid out in space, some above others, some to the left, others to the right" (3).¹⁸²

Note again the narrow focus on the visual domain, already apparent in the characterization of basic qualitative content in terms of *observational* properties. This

¹⁸² Byrne and Siegel (2017) distinguish between thin and rich properties represented in perceptual experiences. Thin properties are colors, textures, spatial relations, shapes, luminance and motion. Rich properties are those that are not thin. The concept of thin properties is related to the concept of primary qualities and basic observational content.

explication of image content is roughly accurate for visual imagery, although also ought to be treated with some caution. For example, not all visual imagery has basic qualitative content, as it is understood here. It can be argued that not all visual imagery represents properties in three-dimensional space, since some involves merely two dimensions. An example of visual imagery that involves two-dimensional representations might be an image of redness, or a line. At least it seems that I can visually imagine redness, without thereby representing anything in three-dimensional space. This is because I do not always represent the expanse of red as being some distance away. I can represent an expanse of red without representing it at some distance away. We could say that in this case, the image content is just redness. Another issue with Kung's view is that not all visual images represent in egocentric space, i.e. not in all cases is the spatial perspective also the perspective of an experiencing subject in the imagined scene. This has been the main topic of our discussion of the differences between *de se* properties in imagination and *de se* properties in perception in the previous sections. Again, the reason why Kung's account of image content is slightly too restrictive seems to be because the analogy to perception is taken slightly too far.

The main tenor of the current section is negative. In our critical discussion of (*DET*), I argued that contents of imagination are systematically distinct from perceptual experiences. (*DET*) fails for this reason. In the current section I focused on (*DET*) as applied to image contents. The arguments against (*DET*) I presented also apply to image contents. Interestingly, even philosophers who do not defend (*DET*), seem to fall prey to the objection that they overlook important differences between the contents of imagination and perceptual experiences. This transpired in the last few paragraphs. In this section I do not present an alternative, sufficiently comprehensive account of image

content in imagination. Many questions are left unanswered. Research into comprehensive accounts is still in its early stages. Nevertheless, let me end this section on a positive note. While caution needs to be exercised in constructing an account of the nature of sensory imagination from the perspective of philosophy of perception alone, philosophy of perception can nevertheless be a good guide to our theory of image content and to which further questions to ask in order to build such a theory. Let me give you one example.

Chalmers (2006) introduces the concept of phenomenal content as part of his account of perceptual experiences. Phenomenal content is defined as content that is determined by phenomenology alone. In my view, it is a plausible assumption that image content involves phenomenal content. Phenomenal content is one kind of image content in imagination.¹⁸³ The notion of phenomenal content is useful because at times we want to cash out phenomenal similarities between perception and imagination, and phenomenal similarities between two imaginings. Imaginings that are phenomenally indistinguishable have the same phenomenal content. Perceptual experiences and imaginings that are phenomenally similar share phenomenal content. Consider as an example visually imagining an apple. Then visually imagine a perfect wax replica of an apple. This example is taken from Martin (2002) who introduces it to illustrate that two imaginings with distinct overall contents can be phenomenally alike. When I visually imagine an apple, the phenomenal character of my imagining represents color and shape properties, such as redness or roundness, or three-dimensionality. The same properties are represented in imagining a perfect wax replica of an apple, as both imaginings are stipulated to be phenomenally alike. In other words, they share phenomenal content.

¹⁸³ This is compatible with Kung's view, as phenomenal content, as I understand it, comprises traditional primary and secondary properties.

Account of image content in the literature do not tend to focus on the question of how to explain imaginings that are phenomenally indistinguishable.¹⁸⁴ The view that image content involves phenomenal content has this advantage over Kung's or Nanay's views. It is particularly well suited to account for imaginings that are phenomenally indistinguishable, as phenomenal content is per definition confined to that which phenomenal properties represent.¹⁸⁵ A second advantage this claim has is that it can easily account for two-dimensional visual representations, such as imaginings of colour properties. Visually imagining redness has phenomenal content, as we can say that the imagining represents the phenomenal redness. We can also formulate our previous objection to (*DET*) in terms of phenomenal content: Since I claim that there is a phenomenology of the self (see the previous discussion in section 3. 2. 1. 2. 2), the phenomenal content of a typical case of perceiving ϕ differs from a typical case of imagining ϕ .

Philosophy of perception can be a guide to which questions to ask in order to build a theory of the contents of imagination. Chalmers (2006) argues that the contents of perceptual experiences are more complex than phenomenal content. Analogously, it is a plausible assumption that image content in imagination is richer than phenomenal content.¹⁸⁶ In the wake of thought-experiments, such as Twin-Earth, for example, philosophers of mind have come to distinguish so-called wide (or broad) content from narrow content. Narrow content is determined by the individual's intrinsic properties

¹⁸⁴ The question as to which kind of content image content is, is distinct from the question as to which kind of content is necessarily shared in imaginings that are phenomenally indistinguishable.

¹⁸⁵ Kathleen Stock (manuscript) dismisses the distinction between 'image' and 'imaginative project' for the reason that to her it seems impossible give a satisfactory general account of what the content of an 'image' is. Phenomenal content, in my view, is a satisfactory general account of the content of an image, but discussion of her criticisms will have to wait for another occasion.

¹⁸⁶ For example, in footnote 184 I suggested that image content can be wide content. But it is unclear whether phenomenal content can be wide. This suggests that image contents outstrip phenomenal contents.

and does not depend on features of her environment, her history or linguistic community. Narrow content is content that is shared by subjects that are identical physical duplicates of each other. Wide content is not narrow. It is determined by features of the environment of the individual. It is not shared by subjects that are intrinsically identical physical duplicates, but live in different environments, for example.¹⁸⁷ While the issue of whether perceptual experiences are wide or narrow has been the subject of much discussion, the question whether image content in imagination is wide or narrow is largely unexplored. This is unfortunate as it taps into the foundations of the relationships between imagery in imagination, memory and perceptual experiences.¹⁸⁸

3. 2. 3 The concept ‘sensory’

So far I discussed and rejected Martin’s argument for (*DET*). Martin’s argument is not the argument given by Peacocke (1985) or Balcerak-Jackson (2016). This raises the worry that even if this argument fails, (*DET*) might still be true. Before I close the

¹⁸⁷ Arguably, the importance of wide content was first acknowledged by Putnam (1975), who introduced the Twin Earth scenario to argue for wide content. This was followed up by McGinn (1977) and Burge (1979), for example. For more on the distinction between wide and narrow content, see Brown (2016).

¹⁸⁸ Here is a rough argument for the existence of wide image content in imagination which appeals to memory imagery: Suppose, I recently visited Paris. I remember the Eiffel tower and form an accurate visual image of it, based on my memory. It is an instance of episodic memory with image content. My friend visited the city of Paris in Tennessee, in which she admired a replica of the Eiffel tower. She also forms an accurate memory image of the tower in Tennessee. Let us stipulate that our visual memories are phenomenally indistinguishable. Our memory image depicts grey bars in the shape of the tower, for example. Nevertheless, intuitively speaking, the images are of something different. My image is of the Eiffel tower, while hers is not. Memory content is arguably wide as it depends on which features of the environment were experienced and remembered. It is likely that image content in episodic memory are causally linked to the contents of perceptual experiences. If this is true, then memory image content is more than phenomenal content. In addition, it is plausible that imagination and episodic memory can share image contents. In imagination we can use memory images. I might for example imagine trying to climb up the Eiffel tower by using my memory image of it. From this it follows that image content in imagination can be wide.

discussion of (*DET*), I briefly discuss Peacocke's arguments for (*DET*).¹⁸⁹ I then continue to discuss Balcerak-Jackson's view, which can be interpreted as a version of (*DET*).

Consider Peacocke's account of sensory imagination. Peacocke claims that "to imagine something is always at least to imagine, *from the inside*, being in some conscious state" (1985: 21) [of sensorily experiencing it]. What is it to imagine something 'from the inside'? I might, for example, imagine swimming in the ocean from the inside. In such a case, I imagine how my body feels like as it is surrounded by warm water. I can also imagine swimming in the ocean, from the outside. In this case, I picture myself swimming in the water, from a perspective that is not my own. I might picture a small head that seems to be floating on the water, as seen from the perspective of the beach. Typically, whenever we imagine a scenario from the inside, we imagine a scenario from the first-person perspective of a subject. Whenever we imagine a scenario from the outside, we do not imagine it from the first-person perspective, but instead from somebody else's perspective or nobody's perspective, also. The distinction between imagining from the inside and imagining from the outside, while it is intuitive, need not be made precise for current purposes.¹⁹⁰

Peacocke's thesis is a version of (*DET*). Moreover, Peacocke (1985) explicitly states that it is a conceptual truth that 'sensory' refers to sensory experiences. For that reason, the term 'sensory imagination' refers to 'experiential imagination' and

¹⁸⁹ Walton (1990) endorses the view that all imaginings are *de se* imaginings. In my opinion, his view can be interpreted as a version of (*DET*), if the concept of imagination is understood to only refer to mental states involving imagery. His account is therefore susceptible to my objections to (*DET*). While Walton (1990) takes himself to defend a claim weaker than (*DET*), his view in fact implies (*DET*) and is vulnerable to my objections to it.

¹⁹⁰ This distinction is not clear-cut and has been subject to much recent discussion. For more on the distinction between imagining from the inside and outside see for example Ninan (2008), Recanati (2007) and Smith (1997). For related distinctions see Vendler (1979) (subjective vs. objective imagination), Nagel (1974) (perceptual vs. sympathetic imagination) and Wollheim (1984) (central vs. acentral imagination).

experiential imagination always is imagination of experiences.¹⁹¹ On his view, (*DET*) is a conceptual truth. I did not, so far, discuss the plausibility of (*DET*) interpreted as a conceptual thesis.

In my view, it is arguably a conceptual truth that every sensory mental state, in some interesting sense of ‘sensory’, is also an experience. Yet it is not a conceptual truth that (some) sensory mental states (such as imaginings) are *representations of* or *are about* sensory experiences. Peacocke seems to imply that it is a conceptual truth both that sensory imaginings are experiences themselves and that they are of experiences. At least if (*DET*) is to be true for conceptual reasons we must endorse a version of the latter claim. Note that the notion of a sensory mental state being of an experience is ambiguous. One can argue that it is conceptually true that sensory mental states are of experiences, in the sense that they are ‘experiential’, i.e. that they are kinds of experiences. But this does not mean that these experiences represent experiences, i.e. that it is in the content of the sensory mental state that there is an experience. There is nothing in the concept of a mental state being ‘sensory’ that suggests that it is of an experience in this sense. Not even Peacocke believes the latter for perceptual experiences. He does not claim that perceptual experiences necessarily or typically are about experiences. Yet it is unclear why an analogous claim should hold for sensory imaginings, if it doesn’t hold for perceptual experiences.

Note also that it is unclear whether and in what sense imaginings are in fact sensory states, strictly speaking. The term ‘sensory’ in ‘sensory imagination’ is imprecise, as sense perception and imagination differ in non-negligible ways that are related to the senses. For example, only sense perception but not imagination requires

¹⁹¹ To be clear, in my view, Peacocke (1985) does not provide arguments for the conceptual thesis outside of intuitive considerations, which makes his position harder to evaluate.

direct input from the senses. The term ‘quasi-sensory’ is commonly used instead to indicate that imagination does not causally depend on sensory inputs in the way that perception does. But does this help Peacocke in a conceptual defense of *(DET)*? It is also not a conceptual truth that quasi-sensory imagining is necessarily imagining of sensory experiences. Imagination is typically called quasi-sensory, as it shares phenomenal and neurological properties with perception, but not because it is about experiences.

It seems that there is no conceptual evidence for *(DET)*, which could deflect the arguments against *(DET)* I provided earlier. Peacocke’s conceptual justification for *(DET)* does not provide additional reasons to endorse *(DET)*. This, of course, does not preclude the option to defend restricted versions of *(DET)* merely on the basis of conceptual analysis. For example, there can be a subclass of sensory imagination which we call ‘experiential imagination’, for example, and which we define by stipulating that for this subclass *(DET)* holds.

3. 3 Imagining as Experiential Perspective-taking

Balcerak-Jackson (2016) claims that imagination is the capacity for what she calls ‘experiential perspective-taking’. Moreover, she defends the view that “just as perceptual experience aims at capturing the external world, imagination aims at capturing the character of possible experiences” (51). In chapter 1, section 1. 5. 3 *Possible Experiences* I focused on her normative claim. There I provided counterexamples to the view that a subject *S* ought to imagine *p*, if and only if *S* sensorily imagines *p*, where *p* is a possible perceptual experience.

Interestingly, Balcerak-Jackson also claims that all imaginings are instances of what she calls “experiential perspective-taking” (6). While the former is a normative thesis, this is a constitutive one. Balcerak-Jackson (2016) argues that the capacity to imagine is to be distinguished from conceiving and supposing in this way. She does not explicitly discuss (*DET*) and the claim that imagining is always experiential perspective-taking is open to interpretation.

According to one interpretation, ‘experiential perspective-taking’ implies that imagining is constitutively imagining experiences from the perspective of the person experiencing. This is a version of (*DET*). The arguments against (*DET*) I provided in the previous sections can be successfully applied to this interpretation of Balcerak-Jackson (2016). Our capacity to imagine sensorily is not exhausted by our capacity to imagine perceptual experiences. We can visually imagine the chair itself, from a specific visual perspective, without thereby imagining an experience of it, for example. Our capacity to imagine is not confined to imagining perceptual experiences, as we can imagine objects and properties from a spatial perspective without imagining an experience also.

According to a second interpretation, both imaginings and perceptual experiences are instances of something we can call experiential perspective-taking, without imaginings being of perceptual experiences. What they share is their phenomenal character and that they represent objects and properties from spatial perspectives, for example. As this interpretation does not suggest that imagining is imagining of perceptual experiences itself, it is distinct from (*DET*) and not susceptible to the arguments to (*DET*) I provided earlier. The term ‘experiential’ in ‘experiential perspective-taking’ does not refer to the contents of imaginings being experiences but instead to the way in which objects are presented in imagination. This view is

compatible both with opponents and defenders of (*DET*), who accept that imaginings are phenomenally similar to experiences. In fact, it is, moreover, compatible with simulationist accounts of imagination, according to which imagining is simulating perceptual experiences. It might be that Balcerak-Jackson's (2016) view is best interpreted as a version of a simulationist account of imagination.

In sum, according to one interpretation of Balcerak-Jackson (2016), her view is a version of (*DET*) and susceptible to my objections to (*DET*). According to a second interpretation, her view is not a version of (*DET*). In my opinion, Balcerak-Jackson's (2016) view is not sufficiently developed enough for us to be able to provide a more extensive analysis.

3. 4 Imagining as Simulating Perception

(*DET*) is just one example of a definition of sensory imagination that strongly appeals to perceptual experiences. I argued that (*DET*) is to be rejected. There always is a danger of appealing too strongly to theories of perception in building one's account of imagination. This concern also became apparent in our discussion of (*DET*) applied to image content. In what follows I discuss another example of defining sensory imagination in terms of perception, namely simulationist accounts of sensory imagination. According to simulationist accounts, imaginings are in a sense to be specified simulations of perceptual experiences. I focus on the simulationist accounts of Currie and Ravenscroft (2002). While this is not the only simulationist account of imagination, see for example Goldmann (2006), it is, I believe, one of its most

developed and prominent versions.¹⁹² First I evaluate how this view relates to (*DET*). I argue that Currie and Ravenscroft's view is compatible with rejecting (*DET*) as it involves weaker claims than (*DET*). Second, I focus on the relationship between this view and my own view on imagination which I presented in chapters 1 and 2. I argue that it is not compatible with my view and I tentatively show that my view is preferable over theirs.

Currie and Ravenscroft (2002) defend a simulationist account of imagination. Their focus is on what they call 'recreative imaginings', i.e. imaginings that we use to put "ourselves in the place of another, on in the place of our own future, past, or counterfactual self: seeing, thinking about, and responding to the world as the other sees, thinks about, and responds to it." (2002: 9) According to Currie and Ravenscroft (2002), there are a "broad range of states of recreative imagining that divide naturally into two classes: propositional imaginings and perceptual imaginings" (51). Perceptual imaginings simulate perceptions. Not all sensory imaginings in my sense are recreative imaginings in Currie and Ravenscroft's sense, yet all perceptual imaginings are also sensory imaginings. Perceptual imaginings are so-called 'counterparts' of perceptual experiences. More specifically, as Currie and Ravenscroft argue these "states of perceptual imagining mimic" (72) "characteristic ways of presenting information, with their attendant phenomenology" (ibid.). They admit that "it is not easy to say exactly what these similarities are, and it is equally evident that there are important differences between them as well." (ibid). Perceptual imaginings are simulations or counterparts of perceptions in the further sense that they simulate the role of perception in inferential and other processes (see 49 and 72ff).

¹⁹² To be clear, in what follows, I do not critically discuss simulationist accounts of imagination in general.

In their simulationist account of imagination Currie and Ravenscroft focus on the inferential roles perceptual imaginings play, their overall phenomenology and the way they convey information. Consider the example of a visual imagining of a table, which is not also an imagining of a visual experience of a table. It can be argued that this imagining shares its phenomenology and its “characteristic ways of presenting information” (72) with a visual experience and is in principle therefore suited to play inferential roles visual experiences play. Visual experiences inform us about the world and the objects and properties in it, such as the table for example. For a perceptual imagining in this sense to be a counterpart of perception, it need not be an imagining of a perceptual experience itself, or an instance of imagining perceptually experiencing something. It seems that it is sufficient for it to be an imagining that represents objects and properties in a way that is phenomenally alike perception. This suggests that Currie and Ravenscroft’s account is compatible with the rejection of (*DET*) and the arguments against (*DET*) I presented do not apply to their view. Moreover, in Currie and Ravenscroft (2002) they explicitly reject (*DET*):

Our answer to the question ‘Is visual imagery imagining seeing?’ depends, unsurprisingly, on what we mean by ‘Imagining seeing’. If it means imagining *that* I am seeing, the answer is no. To think otherwise is to confuse imagery’s having a perceptual character (which it does) with imagery’s having perception as its content (which it need not). If I have a visual image of a mountain, then the content of my imagining (assuming that imagery is a form of imagination) is the mountain, or if we want to make all contents propositional, there being a mountain somewhere. (27)

Let us now focus on the question how their view relates to the view on the nature of sensory imagination that I endorse and developed in chapters 1 and 2. On my view, not all sensory imaginings are perceptual imaginings in Currie's and Ravenscroft's sense. Not all visual imaginings simulate visual experiences. Let me explain this.

Perceptual imaginings in Currie and Ravenscroft's sense mimic "characteristic ways of presenting information, with their attendant phenomenology" (72). It is unclear what these "characteristic ways of presenting information" exactly are. But let's assume, charitably, that imaginings, as I understand them, are perceptual imaginings in this sense. They share characteristic ways of presenting information with perception, because they also present objects in spatially perspectival ways relative to a point of view, for example. Moreover, as I argued more extensively in chapter 1, section 1.5, if they have presentational phenomenology of some sort, it is at least similar to the presentational phenomenology in perception. While in imagination objects are presented as existing now in the imagined scenario in perception, objects in perception are presented as existing here and now. The notion of attendant phenomenology that Currie and Ravenscroft use is arguably related to the notion of presentational phenomenology I used earlier.

On Currie's and Ravenscroft's view, perceptual imaginings simulate the role of perception in inferential processes. Perceptual imaginings are:

distinctively visual ways of representing and transforming information, and visual imagery enables us to represent and transform in just those visual ways. To get more or different information about some thing while

looking at it, we may have to move towards it, or rotate it, or view it in a different part of the visual field. Visually imagining things is partly characterized by being a form of imagining that mirrors these modes of transformation. (71)

While this is correct for the nature and function of some visual imaginings, I claim that it is not all there is to the nature and function of visual imagination. Not all visual imaginings are used or ought to be used to simulate visual perception in Currie and Ravenscroft's sense. Let me explain this further.

On Currie's and Ravenscroft's view perceptual imaginings simulate the role of perception in inferential processes. 'Inferential processes' refers to transitions from one mental state to another, and not to transitions from one belief to another, which is often how it is used in philosophy. Perceptual imaginings are "distinctively visual ways of (...) transforming information" (ibid.). Interestingly, while perceptual imaginings are at times suited to be used in inferential processes in the way indicated here, they are also often times not suited and moreover, it is unclear whether this is the primary function of them. In visual imagination, we might rotate objects to understand their geometrical properties.¹⁹³ But often times visual imagination is not used for these kinds of transformations. In perceptual trial-and-error planning I might picture different ways of how to cross a river by stepping on stones. While this is still perceptual imagination in the sense that it involves distinctively visual ways of representing acts of stepping on stones, it does not involve distinctively visual ways of transforming information. It involves the representation of alternatives to act without actual performances of these

¹⁹³ For more on this see the literature on mental rotation for example Peters et al. (2006), Shepard & Metzler (1971) and Vandenberg & Kuse (1978).

acts. Vision typically requires the performance of the acts in order for it to represent them visually. In this important respect, visual imagination is different from visual perception. One general function of imagination seems to be to represent to us alternative scenarios. Yet when they are represented in imagination, visual transformations are not performed on them. In many cases we are interested in representing causal relations, for example. If I had accepted a position in the Middle East, would I be able to speak Arabic by now? Visual imagination plays important roles in counterfactual reasoning. It seems that while it can be granted that visual imaginings involve distinctively visual ways of representing information, it is not the case that they typically also transform information in the way that perception does. Relatedly, a closer look at the cognitive roles imaginings play indicates that imagination does not always have the function to simulate perceptual experiences (or mental states or processes, more generally). While some visual imaginings are aimed at representing visual experiences, this is not the case for all visual imaginings. Whether they do, depends on the cognitive purpose at hand. Perceptual imaginings play a variety of cognitive roles, one of which might be simulation of perceptual experiences in the way outlined. It is false that imagining always is simulation of experiences (or mental states or processes more generally). While some imaginings might simulate perception or its role in inferential processes, not all imaginings are of this kind.

In chapter 2, section 2. 1 I argued that imaginings are quasi-scientific models. On my view, the function of such models is not confined to modelling perceptual experiences or mental states, or their role in inferential processes, even though it might be one of its functions. Mental models that rely on imaginings can be of abstract geometrical relations, of distributions of Malaria infections across populations over

time, or just of metaphysical possibilities. To see this, let us visually imagine a map, for example. Let's imagine a map that represents occurrences of malaria infections in infants across the African continent in a given calendrical year. The color red indicates that 90% to 100% of the infants in one geographical area are infected, while the color orange indicates that 70% to 89% are infected, for example. Here, the colors represent on the basis of a stipulation, which alters the overall content of the imagining. In these cases, we do not intend to simulate perceptual experiences of maps, for example. Moreover, for the cognitive purposes at hand we are not interested in the role perceptual experiences of maps would play.

This example brings us to the next point. Currie and Ravenscroft's view does not seem to adequately capture the nature of the contents of imagination. On the view I fleshed out in chapter 1, section 1. 2, imagery is not all there is to imagination. Visual imagery is not all there is to visual imagination. Visual imagination often also involves conceptual contents. Currie and Ravenscroft do not distinguish visual imagination from visual imagery, it seems. When discussing the nature of the contents of visual imagination they at times inadvertently switch to discussing the nature of the contents of imagery. Consider for example:

we have seen many ways in which perceptual imaginings and same-mode perceptions are alike. But in one important regard we have simply assumed that they are alike: in regard to content. We have assumed, that is, that a visual image can have the same content as a visual experience.

(100)

They argue further that perception and imagery (i.e. perceptual imaginings as they understand them) have the same kinds of contents, namely non-conceptual contents.¹⁹⁴ Moreover, they claim that visual imagery is non-conceptual “not in the sense of having an especially non-conceptual content, but in the sense of being a state, the functional role of which does not require of its possessor the kind of discriminatory and inferential powers that in turn depend on concept possession.” (106)

On my view, it is an important property of imaginings that they involve both imagistic and conceptual contents, which influence each other. This allows the contents of imaginings to have the requisite flexibility to be useful in a vast array of cognitive tasks. Moreover, conceptual stipulations are important components of mental models, in the same way that they are important components of scientific models also. The functional role of imaginings also requires of imaginers “the kind of discriminatory and inferential powers that in turn depend on concept possession” (ibid). This is something Currie and Ravenscroft deny, unfortunately.

In chapter 4 I will explain in what ways even simulating perceptual experiences requires conceptual contents. Currie and Ravenscroft’s program seems to be mistaken also in this domain. In the current section I primarily aim to show that a definition of sensory imagination in terms of a simulation of sense perception does not adequately capture the nature and function of sensory imagination.

3. 5 Phenomenal Similarity

¹⁹⁴ To be clear, they intend to argue against the view that “imagery has conceptual content and so fails to be like perception, which has non-conceptual content” (101). The worry is an objection to their view: “How could one kind of state have another as counterpart when they don’t even have the same kinds of contents?” (101)

3. 5. 1 The Counterfactual Correspondence Thesis

In the previous sections I criticized views on imagination that strongly appeal to perception. Yet, to be fair, it is natural for philosophers of mind to characterize the sensory nature of imagination by reference to perception. One central motivation for this is the apparent phenomenal similarity between perception and imagination. Earlier in this chapter I argued that the project of defining the sensory nature of imagination by appeal to imagined perceptual experiences fails. The challenge is to account for the phenomenal character without appealing to experiences in the way (*DET*) suggests. In this section, I discuss a thesis that Martin also endorses which is weaker than (*DET*). This thesis has the potential to meet the challenge just outlined, but is acceptable both to defenders and deniers of (*DET*). This thesis defines the phenomenal properties of imagination not by appeal to imagined experiences and experiencers, but by appeal to counterfactual experiences and experiencers instead. Let me introduce this thesis now. Right before Martin introduces (*DET*), he states something interesting:

When I visualize an apple, I imagine how it would look. This suggests a certain correspondence between the objects of vision and the objects of visualizing: If I succeed in visualizing things a certain way, then the way I visualize them to be is the way that they would look if veridically perceived. The Dependency Thesis, as I shall call it, claims more than this: to sensorily imagine ϕ is to imagine experiencing ϕ . (2002: 40)

Martin suggests that the following correspondence holds between visual imagination and perception. We can call it the Counterfactual Correspondence Thesis for Visual Imagination, or (*CC-vis*):

(*CC-vis*) *S* succeeds in visualizing ϕ only if the way *S* visualizes ϕ to be is the way that ϕ would look if veridically perceived.

It is specific to visual imagination, but can be extended to all sensory modes:

(*CC*) *S* succeeds in visually/auditorily/tactilely/etc. imagining ϕ only if the way *S* visually/auditorily/tactilely imagines ϕ to be is the way that ϕ would look/sound/feel/etc. if veridically perceived.

Note that (*CC-vis*) and (*CC*) are normative theses. They describe a necessary condition for what counts as a successful case of imagining. (*DET*) is instead a constitutive thesis on the nature of sensory imagination. In what follows, I distinguish a normative and a constitutive version of the Counterfactual Correspondence Thesis. I discuss both the normative and the constitutive versions in separation. I start my discussion with the constitutive version as I am interested in whether it can be a suitable alternative to (*DET*). I then turn to the normative version and evaluate how it relates to the normative theses on imagination I presented in chapters 1 and 2. Here are the constitutive versions of (*CC-vis*) and (*CC*):

(CCC-vis) S visualizes ϕ only if the way S imagines ϕ to be is the way that ϕ would look if veridically perceived

(CCC) S visually/auditorily/tactilely/etc. imagines ϕ only if the way S imagines ϕ to be is the way that ϕ would look/sound/feel/etc. if veridically perceived.

So for example, to imagine an apple visually is to imagine it to be the way it would look if it was veridically perceived – round, red and shiny, for example. To imagine a piece of glass tactilely is to imagine it to be the way it would be if it were touched 0 smooth, for example. On the face of it, (CCC) looks promising as an alternative to the stronger (DET). (CCC) gives an account of the sensory nature of imagination that appeals to perceptual experiences, but does not fall prey to the objections that (DET) faces. It does not imply that experiences or experiencers are imagined. In imagining ϕ , the subject S merely imagines ϕ in the way that ϕ would be experienced, without ϕ being experienced in the imagined scenario. This way, imaginings are not necessarily *de se* at the point of view from which things are presented in the way that perceptual experiences are. A virtue of (CCC) is that it is not only endorsed by defenders of (DET), like Martin, but is compatible with views that reject (DET), such as Noordhof. Noordhof (2002), states at one point that “[i]magining an ϕ may involve imagining something which reveals what it would be like to have an experience of ϕ ” (2002: 443).

Let me make a few remarks to clarify (CCC). Martin speaks of a way objects would look in imagination. Visualising is defined by appeal to a way that things would look. We can say that S imagines ϕ in the same *phenomenal* way as if experienced. This

could make (CCC) better suited to capture our first observation, the intuitive phenomenal similarity between sensory imagination and perception. (CCC) can now be interpreted as a thesis either on phenomenal sameness or phenomenal similarity, depending on which view you prefer. As philosophers tend to agree that imaginings are typically merely phenomenally similar to perceptions, let us focus on similarity in what follows. Consider:

(*CCC-sim*) *S* visually/auditorily/tactilely/etc. imagines ϕ only if *S* imagines ϕ in a way that is phenomenally similar [in the relevant ways] to how ϕ would look/sound/feel/etc. if veridically perceived.

I now clarify (*CCC-sim*) further and evaluate it. Martin's thesis states merely a necessary condition on an imagining being sensory (visual/auditory/tactile/etc.). Let me elaborate on the counterfactual element. The sensory nature of imaginings is defined not by appeal to experiences but by appeal to counterfactual experiences of some sort. Phrases such as 'as if experienced' and ' ϕ would look' indicate counterfactuals. We can apply the Lewisian and Stalnakerian analysis of counterfactual claims to (*CCC-sim*).¹⁹⁵ Consider the counterfactual 'If A, then B'. In a Lewisian semantic framework, roughly speaking, to evaluate the truth-value of this counterfactual, we analyze whether in every world that is closest and most similar to our world in which A is the case, B also is the case. We can apply such an analysis to our case. Let us explicate (*CC-sim*) as follows (for ease of explication I use 'sensory' as a shorthand for the distinct sensory modes):

¹⁹⁵ See Lewis (1973a), (1973b), (1975), (1981).

(*CF*) S sensorily imagines ϕ only if S 's imagining ϕ is phenomenally similar to that of every perceptual experience of ϕ in the closest possible world(s) in which ϕ is so experienced.¹⁹⁶

To evaluate whether (*CF*) holds, we can check whether in the world that is closest and most similar to our world in which there is a perceptual experience of ϕ such that ϕ is experienced in a particular phenomenal way, this way is similar to how S imagines ϕ .¹⁹⁷

We now encounter an obstacle, since as it is formulated, (*CF*) does not specify the nature of the experiencer. It leaves open whether the experiencer is color-blind or an alien creature with a sensory apparatus that is very different from our own. But this makes it vulnerable to objections. For example, the claim that S sensorily imagines ϕ only if S 's imagining ϕ is phenomenally similar to that of every perceptual experience of ϕ in the closest possible world(s) in which ϕ is experienced by a color-blind person is false for many instances of imagining. Such experiences of ϕ are arguably phenomenally quite different to sensory imaginings ϕ . A color-blind person might visually experience a red apple as being grey, while S visually imagines a red apple as red. It would be misleading to say that S visually imagines a red apple only if it is phenomenally similar to how a color-blind person would perceptually experience it, i.e. as grey. In response to this objection we can appeal to normal perceivers, perceiving under normal conditions. We can reformulate (*CF*) as follows:

¹⁹⁶ Again, (*CF*) has mode-specific versions. It is necessary for an imagining of ϕ to be a visual imagining of ϕ that it is phenomenally similar to that of every visual experience of ϕ in the closest possible world(s)... . It is necessary for an imagining of ϕ to be an auditory imagining of ϕ that it is phenomenally similar to that of every auditory experience of ϕ in the closest possible world(s)... . And so on.

¹⁹⁷ To be clear, (*CF*) is not confined to the Lewisian analysis of counterfactuals.

(Normal) S sensorily imagines ϕ only if the phenomenal character of S 's imagining ϕ is similar to that of every perceptual experience of ϕ in the closest possible world(s) in which it is experienced by a normal perceiver under normal conditions.

(Normal) is also not immune to objections. The notion of 'normal' in this context is notoriously hard to define. But this is a common problem not specific to this view and it is not in principle without a solution. More relevantly, *(Normal)* turns out false, if a subject S sensorily imagines ϕ and the phenomenal character of S 's imagining is similar to that of an impossible perceptual experience or if it is not similar to any possible experience. More specifically, either such an imagining is not a sensory imagining or *(Normal)* is false.

Let us discuss this problem by appeal to examples. Consider Lewis' (1997b) example of the colour killer yellow. I introduced this example already in chapter 1, section 1. 5. 3, in the context of discussing the view that it is the function of imaginings to represent possible experiences. There exists a creature, a yellow killer, a predator that kills by disrupting "the colour vision of anyone who sets eyes on it; and it disrupts all other brain processes as well, thereby causing instant death." (333) This predator's color is a "special shade of yellow, 'killer yellow', [which] is fatal. (...) This colour does not typically cause colour experiences. It never does, and never could so long as we retain our vulnerability to it" (ibid).¹⁹⁸ It is impossible for someone to ever perceive anything in this color, as killer-yellow is a color that instantly kills you, if you perceive it. Nevertheless, suppose that one can imagine a killer-yellow banana. The special shade of

¹⁹⁸ Lewis attributes this example to Kripke, who, Lewis recalls, had mentioned it or a related case in lectures.

yellow disrupts color vision but is not fatal or disruptive if it is imagined instead. For this example, we cannot give a counterfactual account, since the counterfactual perceptual experience is impossible.

Consider also the following example: a special shade of yellow exists, which we call the invisible-yellow, as is it the shade of color that happens to become instantly invisible, if it is perceived by us. One can imagine an invisible-yellow banana, but it would always become instantly invisible, upon being perceived. For this example, we cannot give a counterfactual account of the sensory nature of the imagining either, as the perceptual experiences are also impossible. There are no perceptual experiences of killer-yellow or invisible-yellow in any possible world that the imagining could be phenomenally similar to.

To deal with our counterexamples, one option might be to hold subject *S* and her sensory apparatus fixed across possible worlds. Let us consider the case of color-blind perceivers. Arguably, the example of the colour-blind perceiver shows that the counterfactual thesis ought to focus on how the subject *S* herself with her sensory apparatus would perceive something. Normal people vary in how they experience something. For example, you might be color-blind, and I have color-grapheme synaesthesia. To capture such differences, we can amend the counterfactual thesis as follows:

(Normal-Subj) *S* sensorily imagines ϕ only if the phenomenal character of *S*'s imagining ϕ is similar to that of every perceptual experience of ϕ in the closest possible world(s) in which it is experienced by *S* under normal conditions.

But unfortunately (*Normal-Subj*) still cannot deal with killer-yellow and invisible-yellow. Under normal conditions, *S* dies upon perceiving killer-yellow, for example. There are no possible worlds in which killer-yellow is experienced by *S*.

I just presented counterexamples to (*Normal*), which put significant pressure on the viability of the counterfactual correspondence thesis. What is my response to such objections? In my view, counterfactual theses of this kind remain vulnerable to objections. Even more so, further objections can be construed. This ideally requires search for a better alternative to a counterfactual thesis. In the next section, I develop an alternative thesis that fleshes out the relationship between imagination and perception in terms of dispositions. We can call such theses Dispositional theses. I present one version of a Dispositional thesis in the next section. I argue that it has the advantage of not being afflicted by problems (*DET*), (*Normal*) and related counterfactual theses face.

3. 5. 2 The Dispositional Thesis

In this section I develop a thesis that appeals to dispositions in accounting for the phenomenal similarity between imagination and perception. It has the advantage that it is not subject to the counterexamples that counterfactual theses of the phenomenal similarity, such as (*Normal*) face.

To start, consider the following case: I look at a dark brown table in front of me. What I see is plausibly causally influenced by reflectance properties of surfaces and by properties of light sources. The dark brown table has certain surface reflectance properties, which play a causal role in what I see and how I see it. We visually

experience objects, such as a table, among other things, because objects reflect and emit light in systematic ways. Here is what I consider to be a plausible intuitive assumption: objects, such as a table, have dispositions to trigger perceptual experiences in us. For example, the object in front of me is disposed to trigger a perceptual experience of a shade of dark brown in me upon being looked at by me.¹⁹⁹ If this intuitive observation is correct, we can use it to formulate a thesis that explains what it is for a subject to imagine something sensorily, without appealing to counterfactual conditionals, but to perceptual experiences nevertheless. Here is a version of this thesis. Let us call it the Dispositional Thesis, (*DIS*), for short:

(*DIS*) *S* sensorily imagines ϕ only if *S* is in an imaginative state with phenomenal character *P* and it is also the case that ϕ s are disposed to cause visual experiences of character *P* in beings with *S*'s sensory makeup.

Again, as in (*DET*) and related theses, ' ϕ ' stands for objects, such as apples and properties such as redness, for example. According to (*DIS*), *S* sensorily imagines ϕ only if *S* is in an imaginative state with phenomenal character *P* and ϕ is disposed to cause visual experiences of character *P* in beings with *S*'s sensory makeup. This necessary condition has two parts. First, it requires that *S* is an imaginative state with phenomenal character *P*. Second, it requires that ϕ s are disposed to cause visual experiences of character *P* in subjects with *S*'s sensory makeup. The second part of the

¹⁹⁹ Which perceptual experiences objects are disposed to trigger exactly and how they do so is complex, but we do not need to flesh it out in detail.

necessary condition provides a novel characterization of the nature of the perceptual experiences which does not rely on counterfactual situations, but on dispositions. To be clear, the Dispositional Thesis is neutral with respect to an account of dispositions. It does not suggest, for example, that dispositions ought or ought not to be analyzed in terms of counterfactual conditionals. As it is formulated, *(DIS)* captures the intuition that whenever we imagine sensorily, we imagine something such that what it is like to imagine it is identical to what it is like to perceive it. We can adjust this to capture phenomenal similarity as follows:

(DIS-sim) *S* sensorily imagines ϕ only if *S* is in an imaginative state with phenomenal character *P* and it is also the case that ϕ s are disposed to cause visual experiences of character *P** in beings with *S*'s sensory makeup, where *P* and *P** stand in a specific similarity relation to each other.

(DIS-sim) appeals to dispositions in accounting for the phenomenal similarity between sense perception and sensory imagination. I now examine whether appeal to *(DIS-sim)* provides a solution to the examples of invisible-yellow and killer-yellow.

First, consider the case of invisible-yellow. Invisible-yellow is a shade of yellow that happens to become instantly invisible, if it is perceived by someone. You can imagine an invisible-yellow banana, but it would always become instantly invisible, upon being perceived. We cannot give a counterfactual account of the phenomenal character of an imagining of this banana, as the perceptual experiences are impossible. There are no perceptual experiences of invisible-yellow in any possible world that the

invisible-yellow and it is also the case that an invisible-yellow banana is disposed to trigger visual experiences of phenomenal character invisible-yellow* in beings with *S*'s sensory makeup.

In my opinion, something analogous can be said for the yellow killer. Recall that according to this example there exists a creature whose color is a “special shade of yellow, ‘killer yellow’, [which] is fatal. (...) This colour does not typically cause colour experiences. It never does, and never could so long as we retain our vulnerability to it” (ibid). It is impossible for you to ever perceive anything in this color, as killer-yellow is a color that instantly kills you, if you perceive it. Again, the creature is disposed to trigger visual experiences of yellow in us, but this disposition vanishes, as soon as it is triggered. If this creature is perceived by us, we immediately die. The disposition to trigger experiences of yellow in us is never manifest. It is another finkish disposition. We can now amend (*DIS-sim*) to account for killer-yellow as follows:

(*DIS-killer*) *S* sensorily imagines a killer-yellow creature only if *S* is in an imaginative state with the phenomenal character of killer-yellow and it is also the case that a killer-yellow creature is disposed to trigger visual experiences of phenomenal character killer-yellow* in beings with *S*'s sensory makeup.

We now have a thesis that accounts for the phenomenal character of imagination by

appeal to perception, but is not subject to the counterexamples the counterfactual theses in the previous section faced. If both invisible-yellow and killer-yellow are analyzed in terms of dispositions, they cease to be counterexamples.

You might wonder whether it is in fact true that killer-yellow and invisible yellow are disposed to trigger visual experiences of any sort. You might worry that if killer-yellow never triggers experiences in subjects, it is unclear whether it could have a disposition in the first place. This is a fair concern. In our discussion, we presupposed that we are dealing with dispositions in the first place. In my view, we can use the concept of an impossible disposition to deal with these cases. Let me briefly explain this. In metaphysics, philosophers have (though controversially so) argued that there can be dispositions which are impossible to be manifest. Something can be disposed to behave a certain way without ever being able to manifest that disposition. Nolan and Jenkins (2002) distinguish two kinds of impossible dispositions: “Firstly, it could be that the circumstances under which an object is disposed to act a certain way are impossible circumstances (so the object could never get a chance to manifest its disposition). Secondly, it could be that the thing the object is disposed to do is itself impossible” (733). Killer yellow and invisible-yellow can be interpreted as an example of the first kind of impossible disposition. It is impossible for killer-yellow to trigger yellow experiences in experiencers, because in order to do so, experiencers would need to be alive yet killer-yellow instantly kills them. The circumstances under which killer-yellow is experienced are impossible, as it requires experiencers to be alive. Similarly, the circumstances under which invisible-yellow are experienced are impossible, as it requires it to not turn invisible. It is impossible for invisible-yellow to trigger yellow experiences in experiencers because in order to do so, they would need to cease to be

invisible. Yet they become instantly invisible upon being perceived by someone. Therefor the disposition is impossible to manifest.

In sum, in order to analyse the phenomenal similarity between perception and imagination by appeal to perceptual experiences, a Dispositional Thesis such as (*DIS-sim*), is to be preferred over a Counterfactual Thesis, such as (*Normal*), for example. The Counterfactual Correspondence Thesis and the Dispositional Thesis state necessary conditions on what it is to imagine sensorily. They characterize the phenomenal character of imagination by appeal to the phenomenal character of perception. They leave open what kind of phenomenal similarity relation holds between perception and imagination. For these reasons, they are weak enough to be compatible with all other views on the nature of sensory imagination I have presented so far: Dependency accounts, imagining as experiential-perspective taking, simulationist accounts of imagination and my preferred two-fold view of the contents of imagination which I introduced in section 1. 2 in chapter 1.

3. 5. 3 The Normative Thesis

In the previous sections I discussed constitutive theses on the phenomenal character of imaginings. Recall that Martin initially introduces his thesis on visual imaginings not as a constitutive, but as a normative thesis. He suggests that the following norm holds for visualizing φ :

(*CC-vis*) *S* succeeds in visualizing φ only if the way *S* visualizes φ to be is the way that φ would look if veridically perceived

It is specific to visual imagination, but can be extended to all sensory modes as follows:

(CC) S succeeds in visually/auditorily/tactilely/etc. imagining ϕ only if the way S visually/auditorily/tactilely imagines ϕ to be is the way that ϕ would look/sound/feel/etc. if veridically perceived.

(*CC-vis*) and (CC) describe a necessary condition for what counts as a successful case of imagining. (*CC-vis*) states a necessary condition on what it is to visualize. I now evaluate this norm and compare and contrast it with theses on the normativity of imagination developed in chapters 1 and 2.

First, note that according to (*CC-vis*) successful visualization requires that it is identical to (or very much like) veridical perception in terms of its phenomenal character. Arguably, the phrase ‘ S visualizes ϕ to be the way that ϕ would look if veridically perceived’ can be interpreted as ‘ S visualizes ϕ to be phenomenally the way that ϕ would look if veridically perceived’. If I visualize ϕ successfully, then the phenomenal character of visualizing ϕ is identical to (or very much like) veridically perceiving ϕ .

Second, the thesis is compatible with the view that visualizing ϕ and veridically perceiving ϕ typically differ in terms of their phenomenology. According to (*CC-vis*) such cases are unsuccessful cases of visualizing. It is arguably not compatible with the view that imagination and perception differ categorically in their phenomenology. Defenders of the view that imagination has attitude-specific phenomenology, such as Husserl (1913/1982), Kriegel (2015) and Sartre (1940/2004) would probably reject

(*CC-vis*) for this reason. If imagination has attitude-specific phenomenology, it is impossible to comply with the norm (*CC-vis*). It is impossible for imaginings to be phenomenally identical to (or very much like) veridical perception. In this case the norm is redundant, to say the least.²⁰¹ Let us assume that what it is like to imagine ϕ can be identical to what it is like to veridically perceive ϕ and what it is like to visually imagine ϕ can be identical to what it is like to see ϕ . We are now ready to evaluate (*CC-vis*).

I claim that (*CC-vis*) does not capture the normativity of visualizations. It is not necessary for successful visualization that it is phenomenally identical to veridical perception. If you stipulate a notion of successful visualization in line with (*CC-vis*), this notion is not suited to capture the nature of our human capacity of visualizing. There might be other creatures who we want to say can visualize and for whom it is suited. This is because it is not part of the function of our capacity to visualize to exactly mimic or simulate veridical perceptual experiences in terms of their phenomenology.²⁰²

First, a remark on the legitimacy of (*CC-vis*) as a norm. Depending on the complexity of the content of the imagining and due to cognitive limitations, one can argue that it is difficult for ordinary subjects to imagine ϕ as vividly for example as they would perceive ϕ . For this reason, it is unclear whether ordinary imaginers can be ideal imaginers in the sense of (*CC-vis*), i.e. whether they can in fact comply with the norm, given their cognitive limitations. It might be that (*CC-vis*) cannot be satisfied by

²⁰¹ We encountered an analogous problem a few times before in this dissertation: If it is impossible for imaginings to be about impossibilities, they cannot fail to satisfy the possibility norm (chapter 1, section 1. 3). If it is impossible for imaginings to be about mind-independent objects instead of perceptual experiences, they cannot fail to satisfy the norm that they ought to be about perceptual experiences (see the discussion on Balcerak-Jackson's view in chapter 1, section 1. 5. 3 and this chapter, section 3. 3). In each case, due to their redundancy, it is unclear whether the norms hold in the first place.

²⁰² Note that by saying that there are possible creatures for which (*CC-vis*) holds I have agreed to the claim that the function of imagination is not essential or necessary to it.

ordinary imaginers, but only ideal imaginers. This casts doubt on the norm itself. Second, and more importantly, it is unclear whether this notion of an ideal imaginer according to which the 'ideal' is measured in terms of how phenomenally alike imagination is to perception, is in line with what we know about the function of imagination so far. Whether someone is an ideal imaginer arguably depends on whether she uses imagination in line with its function. It is a plausible assumption that ideal imaginers are to be identified with imaginers who use imagination exactly in accordance with its function. Yet any individual complying with (*CC-vis*) does not thereby seem to use imagination in accordance with its function. This casts doubt on (*CC-vis*).

In section 3.4 I discussed a prominent simulationist account of imagination. I argued in chapter 2 that it is not the primary function of imagination to simulate perceptual experiences. Something similar applies to the phenomenology of imagination in my view. In imagination, due to its sensory nature, we can represent observable objects and properties. Phenomenal properties that are instantiated in perception can also be instantiated in imagination. Yet in imagination phenomenal properties can be combined in novel ways. In imagination, arguably, objects and properties can be represented that cannot be perceived. This is because imagination contents can be recombined at will and also involve an interplay between conceptual and image contents. These properties make imaginings systematically distinct from perceptions. Moreover, they seem to be importantly related to the function of imagination. In any case, it is not the primary function of imagination to simulate the exact phenomenology of perception.

Consider my view according to which imagining is quasi-scientific model construction. For most purposes of imaginings, it is not necessary that the

phenomenology of imagining is identical to or very much like the phenomenology of perception. For example, I want to know whether the couch I just ordered would fit through the doorway. It is not necessary that I imagine the texture of the couch in as much detail as I would do if I perceived it. If I want to know how many windows my living room has, it is not necessary that I imagine the fine patterns of the light on the curtains, which would be part of my perceptual experience.

For most cognitive purposes it is not necessary that an imagining is as detailed or as vivid as perception typically is. Typically, only certain elements of what the image is about are relevant to the cognitive task at hand. This is a problem for (*CC-vis*). According to (*CC-vis*), I succeed in visualizing the couch only if how I imagine it to be is phenomenally identical to or very much like how the couch would look if it was veridically perceived. But this is not a necessary constraint on the imagining, given the epistemic purpose at hand. Someone might argue, moreover, for the stronger claim that the couch ought not to be imagined in exactly the way it is perceived. One ought not to do so, since it would be distracting, it would be unnecessarily cognitively demanding.

On my view, there are instances of imaginings for which the norm (*CC-vis*) holds. Whether it does, depends on the cognitive purpose the imagining ought to fulfil. For example, if I intend to use imagination to prepare myself for what I consider will be a very distressing experience at the dentist, it can be psychologically useful to imagine it as accurately as I expect it to be. This enables me to prepare for it mentally in better ways than it would if I imagined a faint resemblance of the expected experience instead. In sum, while (*CC-vis*) is a norm that does not seem to capture the function of visual imagination, it can nevertheless hold for individual cases of visualizing, depending on the cognitive purposes they are used for.

3. 6 The Phenomenal Model of Normativity

Let us assume that the intuitive observation is correct and the phenomenology of imagination and perception are importantly alike. I now focus on the relationship between phenomenology and normativity. What follows from the phenomenology of imagination for the normativity of imagination? If perception and imagination are alike in their phenomenal character does this suggest that they are alike in their normative character also? What is the relationship between the normativity of imagination and its phenomenal character? In chapters 1 and 2 I argued for the view that imagination is only subject to purpose-dependent norms that are not inherent to the attitude of imagining. I accept the view that perception is intrinsically subject to a norm of veridicality. Given that imagination and perception differ in their normative character, what are we to make of their phenomenal similarities? In the current section I will now argue that the phenomenology of imagination is no evidence for the normativity of it in the way that the phenomenology of perception might be evidence for the normativity of perception. This also build on material I presented in chapter 1, section 1. 5. 6.

Some claim that there is a constitutive relationship between the normativity of a mental state and its phenomenal character. The view that the phenomenology of a mental state is tied to its normative character enjoys popularity for perception in particular.²⁰³ On the view that the phenomenology of perception is tied to its normative

²⁰³ It is less clear whether an analogous view holds for other mental states. Cohen (1992) argues that believing *p* has a specific feel to it according to which *p* feels true, for example. One reason why it is less clear whether an analogous view holds for other mental states, is that it is less clear in the first place whether other mental states have a specific phenomenology. It is unclear whether and to what degree beliefs have a specific phenomenal character. One important exception is imagination. It is generally

character, its phenomenology is considered to be evidence for its cognitive function and the normativity it is subject to. Call this the phenomenological model of normativity.

Here is one prominent version of the phenomenological model of normativity for perception: The first assumption is that perceptual states have a specific phenomenal feel to them. There is something it is like for subjects to perceive that p instead of believing that p or desiring that p . Second, let us assume further that on this version of the phenomenological model of normativity perception has presentational phenomenology. In section 1.5 in chapter 1 I already introduced the view that perception involves so-called presentational phenomenology.²⁰⁴ Third, let us assume that the phenomenology of perception is intimately linked to the cognitive function of perception. If perception has presentational phenomenology, this is evidence for it having the cognitive function to present our immediate surrounds to us, for example. This in turn is evidence for perception being subject to the norm of veridicality. This view is in line with a common assumption about the function of perception according to which it has the function to veridically represent our immediate perceivable surrounds to us. As the cognitive function of a capacity in turn determines its normativity, perception is subject to an intrinsic attitude-specific norm according to which for any subject S , and any perceiving of p , it is impermissible for S to perceive p if and only if p is false. In other words, there is a norm on subjects such that subjects ought to perceive veridically. If they do not perceive veridically, a mistake of some kind has been made. Assume now that the phenomenal model of normativity holds for perception and that

agreed upon that imaginings have a phenomenal character. There is something it is like to visually imagine a red panda cub, for example.

²⁰⁴ See for example Chudnoff (2012) and Chudnoff (forthcoming) for more on this.

the phenomenology of imagination and perception are importantly alike. Can we infer from this that an analogous phenomenal model of normativity holds for imagination?

According to the view I discussed in chapter 1, in section 1. 5., imagining p , if brought to consciousness, necessarily involves it phenomenally seeming to the imagining subject that p is possible. And that it phenomenally seems to her that p is possible is considered evidence for the view that imaginings are subject to the norm of possibility. I argued there that this view is false because its first premise is false: it is not the case that necessarily, whenever I imagine p it phenomenally seems to me that p is possible. I argued further that if there is attitude-specific phenomenology of imagination (which there might not be), the following holds instead: necessarily, whenever I imagine p , it seems to me that p is the case in the imagined scenario.²⁰⁵ The view Currie and Ravenscroft hold, which I introduced in the current chapter in section 3. 4, according to which sensory imagination shares the phenomenology of perception in that it has ‘attendant phenomenology’ yields further support for my view on the phenomenology of imagination.

If what I say is correct concerning the phenomenology of imagination and its normativity, then it is not the case that an analogous phenomenal model of normativity holds for imagination. The phenomenology of imagination does not seem to be constitutively linked to the normativity of imagination in the way that the phenomenal model of normativity for perception suggests. If it was linked, the presentational (or attendant, if you wish) phenomenology in imagination would have to be considered *prima facie* evidence for p being present in the imagined scenario. But this would be a

²⁰⁵ Recall the view I introduced in the current chapter in section 3. 4 that Currie and Ravenscroft hold according to which sensory imagination has ‘attendant phenomenology’. This view is arguably in line with my view on the phenomenology of imagination.

peculiar thing to claim. That p is present, so to speak, or the case, if you wish, in the imagined scenario is already implied by the imagining being about p . The phenomenology of imagining p would yield prima facie defeasible evidence for the imagination content being p . But given that the imagination content is p we don't need this additional evidence. We don't ask ourselves whether p is the case in the imagined scenario. We do not require evidence from phenomenology for this. Furthermore, the function of imagination is not to yield information about what is the case in the imagined scenario. In these respects, imagination differs from perception. What follows from this for the phenomenal similarities between perception and imagination? We can conclude that the fact that imagination and perception share phenomenological properties is to be explained without appeal to similarities in normativity or function of the two capacities.

3.7 Concluding remarks

In this chapter I focused on the nature of sensory imagination and its relationship to perception. In it I critically discussed prominent views that flesh out the nature of sensory imagination by appeal to perceptual experiences.

In the first part (section 3.2) I focused on Martin's Dependency Thesis. While this thesis is already faced with criticisms in the literature, I provided further reasons why it does not yield the correct view of the sensory nature of imagination. For one thing, I claim that while perceptual experiences are typically *de se* at the point of view from which objects are experienced, typical sensory imaginings are not *de se* in this way. The spatial point of view in imagination from which things are represented is

usually not represented as mine (see section 3. 2. 1. 2. 2). My arguments in this section are considered to also fill gaps in existing criticisms of Dependency Accounts. Furthermore, I argue that the Dependency Thesis does not yield the correct view of the nature of imagery (section 3. 2. 2) and that there is no conceptual evidence for its truth (section 3. 2. 3).

In the second and third part (sections 3. 3 and 3. 4) I critically discussed two further views that define sensory imagination by appeal to perception. Balcerak-Jackson's (2015) view that imagining is experiential perspective-taking (section 3. 3) and Currie and Ravenscroft's (2002) simulationist account of imagination (3. 4). Both, I argue, are compatible with rejecting the Dependency Thesis and for this reason might be viable alternatives views on the nature of sensory imagination. I argued nevertheless that both stand in conflict with my own view of the contents and function of imagination which I presented in chapters 1 and 2.

The fourth part of this chapter (section 3. 5) is concerned with fleshing out the phenomenal character of imagination by appeal to the phenomenology of perception. I evaluated two candidates, the Counterfactual Correspondence Thesis and the Dispositional Thesis. While the Counterfactual Correspondence Thesis is superior to the Dependency Thesis, it cannot deal with counterexamples to it, counterexamples of the kind counterfactual analyses in general face. I offered the Dispositional Thesis as a way out, as it appeals to dispositions instead of counterfactual situations in fleshing out the phenomenal similarity between perception and imagination.

The main focus of this chapter are constitutive theses on imagination. Yet, as I am interested in the normativity of imagination in this dissertation, throughout these chapters I also discussed normative counterparts of the constitutive theses. In Chapter 1

(section 1. 5. 3) I discussed a normative version of the Dependency Thesis. In the current chapter (section 3. 5. 3) I discussed the normative version of the Counterfactual Correspondence Thesis. I argued in both cases that they are to be rejected as attitude-specific norms on imagination, even though they can hold for individual instances of imagining, depending on the purpose of the imagining. In the next chapter I will present in more detail an account of sensorily imagining perceptual experiences.

Chapter 4. Imagining Perceptual Experiences

4. 1 Introduction

While accounts of the phenomenal character of imagination, such as the Dispositional Thesis, can appeal to the similarity of imaginative to perceptual experiences, many properties of imagination are not found in perceptual experiences. The function of imagination is distinct from the function of perception, for example. Imaginings are not subject to norms intrinsic to them, as is perception, but to norms relative to purposes of use. While the phenomenology of perception might be constitutively linked to its normativity, this is not so for imagination. Imaginings are used as quasi-scientific models in reasoning for a variety of cognitive purposes, while perception informs us about our immediate perceivable surrounds.

Moreover, the nature of the contents of imaginings differs from perception. Overall contents of imaginings typically outstrip their image contents. Imaginings involve not merely image contents but also conceptual contents. I argued previously that this feature of imagination is neglected in views that favor Dependency Accounts or simulationist accounts of imagination, it seems.

In this chapter I explore the implications of my view of imagination further with a particular focus on imagining perceptual experiences. More specifically, I present my account of how we sensorily imagine perceptual experiences. This account puts an emphasis on the role of conceptual contents in imagination and this way highlights a

systematic difference between perception and imagination. In the current chapter I also focus on imagining perceptual experiences in sensory modes that are not visual. I aim to show that a view of imagination that allows for conceptual stipulations is better suited to account for how ordinary subjects imagine perceptual experiences in different sensory modes than a view which does not appeal to them. This in turn I consider to be a further reason to endorse a view of the contents of imagination that appeals to conceptual stipulations. I also use the example of imagining perceptual experiences to show how imagining can be a type of model construction. I present the implications of this for the normativity on imagining perceptual experiences. This chapter aims to both illustrate my view on the nature and normativity of imagination and yield further reasons for its endorsement.

4. 2 The Simple View

To start, consider the following three examples of visual imaginings:

- 1 Rob visually imagines seeing a red panda
- 2 Rob visually imagines hallucinating a red panda
- 3 Rob visually imagines a red panda, which is not being experienced (i.e. neither seen nor hallucinated).

According to our Dependency Thesis (*DET*), the content of the imagining in 3 is impossible. (*DET*) implies that whenever Rob imagines red pandas, he necessarily

imagines experiencing red pandas. Any instance of Rob visually imagining a red panda is a case misdescribed contents, as it is necessarily either an instance of 1 or 2.²⁰⁶ Yet, intuitively, not all sensory imaginings are of experiences. Some are of objects and properties. Intuitively, 1 and 2 are imaginings of a perceptual experience from Rob's point of view. 3 is an imagining not of an experience, but merely of a red panda. In addition, it is true in the imagined scenario that the red panda is not experienced. The red panda is imagined visually without the imagining being of a visual experience.

In my view, any plausible account of sensory imagination ought to do justice to these intuitions. Moreover, as imaginings of type 1 are used for different cognitive purposes than 2 and 3. For this reason, it is a desideratum of any adequate theory of sensory imagination to be able to explain the differences in content between imagining 1, 2 and 3.

How are we to account for visual imagination without imagined visual experiences? We can explicate what it means for Rob to imagine the red panda *visually*, based on the results of the previous chapter. Loosely speaking, according to *(CC)*, the red panda is imagined visually in the sense that it is imagined similarly to how it would look or how it would be visually experienced by an experiencing subject, if there was an experiencing subject in the scenario. According to *(DIS)*, Rob visually imagines a red panda only if Rob is in an imaginative state with phenomenal character *P*, and it is also the case that red pandas are disposed to cause visual experiences of character *P** in beings with Rob's sensory makeup.

²⁰⁶ The version of *(DET)* discussed in Chapter 3 leaves it undetermined whether the experience Rob imagines is a hallucination or an act of veridical perception. Martin is a disjunctivist. On his view, only veridical experiences have contents and therefore all sensory imaginings are imaginings of veridical experiences. Example 3 is either an impossible imagining or a misdescription of example 1.

In this chapter I argue that the distinction between imagining experiences (examples 1 and 2) and imagining objects and properties (examples 3) necessarily involves a difference in the conceptual content of an imagining. The same holds for the difference between imagining seeing a red panda (example 1) and imagining hallucinating a red panda (example 2). As a starting point, consider this simple argument. We refine it in what follows:

- P1 Imaginings 1, 2 and 3 differ in overall content.

- P2 Imaginings 1, 2 and 3 do not differ in image content.

- P3 A difference in overall content either is a difference in image content or in conceptual content or both.

- C Imaginings 1, 2 and 3 differ in conceptual content.

The rough idea behind it is the following: Imagining 1 and 2 are imaginings of experiences, while 3 is not an imagining of an experience. According to P1 this difference is manifest in the overall content of the imagining. Given that it does not come down to a difference in image content, it comes down to a difference in conceptual content between the imaginings. The difference in content between imagining hallucination (example 2) and veridical perception (example 1) is also a difference in conceptual content. This argument, while too simple, represents the gist of

my line of reasoning. I now go through the premises step by step, before I further refine premise two.

Let us consider the first premise: Intuitively, the content of an imagining can be characterized as that which is true in the imagined scenario.²⁰⁷ I imagine that there is an elephant sitting on a swing, if and only if it is true in the imagined scenario that there is an elephant sitting on a swing. Let me briefly describe the differences between the contents of imaginings 1, 2 and 3.

According to imagining 1, it is true in the imagined scenario that there is a red panda. There also is an act of seeing. The seeing entails that there is an appropriate causal (or explanatory, if you wish) link between the act and the red panda, given that we are concerned with veridical perception. There is a subject doing the seeing, the subject is the imaginer herself, and the person doing the seeing has a first person perspective onto the red panda. Everything is presented from the first-person perspective of the subject doing the seeing. According to imagining 2, it is true in the scenario that there is an act of hallucinating a red panda, a subject doing the hallucinating, this subject is the imaginer herself, and the person doing the hallucinating has a first-person perspective onto the hallucinated red panda. The act of hallucinating entails that there is no appropriate causal (or explanatory) link between the act and a red panda. There need not be a red panda in the scenario. According to imagining 3, it is true that there is a red panda in the scenario. There is no act of hallucinating or seeing or any other experience in the scenario. There is no experiencing subject in the scenario.

²⁰⁷ See for example Yablo (1993) for introducing a characterization of imagination content along those lines.

Nobody is perceptually experiencing the red panda in the way that it is imagined, as red and fluffy, for example.²⁰⁸

Consider the second premise: Imaginings 1, 2 and 3 do not differ in image content. It is widely accepted that we use tokens of the same image type in multiple imaginings. This is sometimes called the Multiple Use Thesis, or MULT, for short.²⁰⁹ Martin (2002), for example, asks us to visualize an apple and then to visualize a perfect wax replica of an apple by using the same image each time. On his view, the same image is used in two different imaginative projects. Peacocke (1985) asks us to visually imagine a suitcase and then a cat that is occluded by the suitcase. He suggests that “the same conscious subjective image [of a suitcase] will serve to meet” (19) what he calls ‘two requests of imagination’. It is a feature of these examples that the imaginings are phenomenally indistinguishable to the imaginer. What it is like to visually imagine a suitcase and what it is like to visually imagine a cat behind a suitcase are phenomenally identical.²¹⁰ What it is like to undergo the first is identical to what it is like to undergo the second. Arguably, the shared image content of visualizing a suitcase and visualizing a cat that is occluded by a suitcase involves primary properties, such as shape, such as the square shape of the suitcase, and secondary properties, such as the color brown (of the suitcase), spread out in three-dimensional space.

²⁰⁸ In section 1. 5. 6, chapter 1, I introduced intentionalism as a plausible position on the relationship between content and phenomenal character. I endorse sensory mode-specific intentionalism. On this view visually phenomenal properties supervene on visually intentional properties, for example. From this it follows that it is part of the content of an imagining that the panda is red and fluffy. But whether this is so, depends on your view of the nature of visual contents, generally speaking.

²⁰⁹ It is featured in discussions in Martin (2002), Noordhof (2002), Peacocke (1985), Stock (manuscript), among others. For most recent discussion of MULT see Noordhof (2018).

²¹⁰ Martin (2002): “one might imagine red apples, perfect wax replicas of apples, the skins of such apples with the cores hollowed out or a cunning illusion of the presence of apples, while visualizing in the same way” (39).

It is a natural thought that MULT also applies to our three example imaginings. It seems that Rob can use the same mental image type in each of the three examples. Suppose it is an image of a red panda cub sitting on a tree branch. Rob imagines seeing a red panda cub sitting on a tree, he imagines hallucinating a red panda cub sitting on a tree and he visually imagines a red panda cub sitting on a tree branch. The shared image content of visually imagining a red panda and visually imagining hallucinating or seeing a red panda might be certain primary properties, such as shape or roundness of the ears of the red pandas, and secondary properties, such as the color red (of the animal) and green (of the tree), spread out in three-dimensional space. What it is like for Rob to imagine seeing a red panda, to imagine hallucinating a red panda and to imagine an unseen panda visually is phenomenally indistinguishable to him.

Let us consider the plausibility of this. Consider imagining 1 and 2 first. According to traditional philosophical accounts of hallucination, some cases of hallucinations are phenomenally indistinguishable from some cases veridical perceptions.²¹¹ Suppose that it is true per definition that what it is like to imagine seeing a red panda (example 1) does not differ phenomenally from what it is like to imagine hallucinating a red panda (example 2). Hallucinating a red panda is defined as being phenomenally indistinguishable from seeing a red panda.

Now consider the relationship between imagining visually experiencing a red panda and visually imagining a red panda. *Prima facie*, the transparency of experiences suggests that imagining experiences of red pandas (examples 1 and 2) and visually imagining a red panda (example 3) are phenomenally indistinguishable. It is not part of the image content that an imagining is of an experience. In this respect the experience is

²¹¹ For more on this notion of hallucinations, see for example Crane and Craig (2017) and MacPherson and Platchias (2013). Hallucinations as they are commonly experienced are not like this.

like the occluded cat in Peacocke's example. Nothing in the image of the suitcase suggests that the imagining is of a cat. It is not visualized and it is not directly visually detectable. Similarly, nothing in the image of the red panda suggests that the imagining is of an experience. To be clear, the explanation as to why an experience is not represented in the image differs from why the cat is not represented in the image, in Peacocke's example. The cat is stipulated to be behind a suitcase, which is a contingent property of the cat. It is merely a feature of this instance of imagining a cat and other imaginings of cats represent cats visually. What it is like for Rob to imagine seeing a red panda might just be what it is like for him to visually imagine a red panda. In other words, the difference between imagining perceptual experiences and imagining mind-independent objects and properties lies not in the phenomenology of the imaginings.

4. 3 Refining the Simple View

There is something quite right about the simple argument. Nevertheless, it is too simple. Premise 2 is false. I argued previously, in section 3. 2. 1 in chapter 3, that the Dependency Thesis, (*DET*), fails also because there typically is a difference in phenomenology between imagining experiences and imagining objects. In typical cases, all three imaginings are not phenomenally indistinguishable. Typically, what it is like to imagine experiencing a red panda (example 1 and 2) differs from what it is like to visually imagine a red panda (example 3). Loosely speaking, when you imagine seeing or hallucinating a red panda you imagine yourself seeing or hallucinating a red panda, but when you imagine a red panda, some might say, you imagine how a panda would look to someone. Examples 1 and 2 are imaginings of experiences from the point of

view of an experiencing subject. What it is like to imagine experiences from the point of view of an experiencing subject involves a specific *de se* phenomenology, which is lacking in cases where you visually imagine mind-independent objects, such as example 3. In chapter 3, section 3. 2. 2, I introduced the concept of phenomenal content. While the phenomenal content of imagining 1 and 2 might be the same, the phenomenal content of 3 typically differs from 1 and 2. Only the former two also involve a representation of the self at the point of view from which things are presented. The question how to flesh out exactly the property of representing the self in this way is interesting, but one that I will leave unanswered for the time being.

4. 4 Imagining Experiences as Model Construction

On my view, imaginings are often used as quasi-scientific models. Imagining perceptually experiencing something can also be a case of imagistic model construction. But before we get into this topic, let us look in more detail at the role of conceptual contents in imaginings of perceptual experiences first. Let me elaborate on the role of conceptual stipulations in imaginings of experiences. I claim that the phenomenal content of typical cases of imaginings of experiencing red pandas differs from the phenomenal content of typical cases of visually imagining red pandas. Moreover, they necessarily differ in terms of their conceptual contents. This is because whether an imagining is of an experience or not is conceptually supplied.

How are we to flesh out the view that imaginings are about experiences in virtue of their conceptual contents? For Peacocke (1985) and Martin (2002), there is no difference in overall content between visually imagining a tree and imagining visually

experiencing a tree.²¹² Yet for them, there is a difference in overall content between imagining veridically perceiving and imagining hallucinating a tree. For Peacocke, the difference between imagining visually experiencing a tree and imagining veridically perceiving a tree is a supposition, or what he calls an S-imagining. In the second case “the imaginer [does] not merely imagine from the inside an experience as of a tree, but also that he S-imagines as a condition on the same imagined world that the experience is a [veridical] perception of a tree” (28). So for Peacocke, while all imaginings are of experiences, whether they are veridical experiences or hallucinations is S-imagined, or supposition-imagined in addition. Peacocke (1985) explains that ‘S-imagining is not literally supposing, but shares with supposition the property that what is S-imagined is not determined by the subject’s images’ (25). The notion of an S-imagining is left intuitive, but, in my view, it can be understood as conceptual content, which alters the overall content of the imagining. It can refer to images also. In Peacocke’s terminology, we can say that according to my view, imagining perceiving something is to imagine it and various properties of it and to S-imagines that you are perceiving it.

For Martin (2002), the difference between imagining hallucinating something and imagining a veridical perception is explained by appeal to the notion of an imaginative project. “[W]hen one takes on the project of sensorily imagining visual hallucination as opposed to visual perception, what one has to do is imagine the situation as for the perceptual situation. One’s appreciation of its hallucinatory status will not come from some phenomenologically distinctive element of what one has imagined, but rather the further cognitive gloss one puts on it all.” (417) For Martin, whether imaginings are of veridical experiences or hallucinations depends on a ‘cognitive gloss’ that the imaginer

²¹² “The world in which an S-imagined condition is imagined to hold is always one in which there is an experience which the subject imagines having from the inside.” (26)

puts on it. It is less clear what the notion of a cognitive gloss refers to. It might refer to conceptual imagination content or a belief one has about the imagination content.

Kung (2010) introduces a distinction between two different kinds of conceptual content in imagination. On his view, so-called basic qualitative content comes already categorized by conceptual content that is assigned to it. One kind of conceptual content is label content. Examples of label content are object categorizations such as <head> or identifications such as <Elvis Presley>. The second kind of conceptual content is stipulative content, or content that is determined by stipulations. Kung further distinguishes between background and foreground stipulations. On his view, “[b]ackground stipulations do not reference anything in the mental image; they fill in background information about the imagined situation (e.g., what day it is). Stipulations that make claims about objects in the mental image that are not depicted by the image we will call foreground stipulations” (625). How are we to understand this view? Recall the example of the red panda cub in the zoo which I introduced at the beginning of chapter 3. I imagine the little red panda cub whose brother was rejected by his mother at birth. It is a foreground stipulation that he has a brother who was rejected by their mother at birth, since this stipulation references the red panda cub himself that is depicted in the image. It also is not represented in the image. Yet it is a background stipulation that there is a red panda cub in the zoo who rejected her own offspring. This background stipulation does not reference anything in the image, as long as it is not specified that this red panda cub also is the mother of the depicted red panda. Kung’s elaborations on foreground and background stipulations remain somewhat cursory. The example demonstrates that the distinction between background and foreground stipulations does not seem to be very deep. While it is a background stipulation that

some red panda mother rejected her offspring, it is a foreground stipulation that the mother of this red panda cub rejected her offspring. While it might be a background stipulation that it is Tuesday in the scenario, it is a foreground stipulation that the red panda cub exists on a Tuesday, and so on.

Kung claims that so-called basic qualitative content comes already categorized by conceptual content that is assigned to it. While we can make sense of the notion of basic qualitative content, it is unclear what it means for content to come already categorized by conceptual content that is assigned to it. Who assigned it, for example, was that a theorist or was it assigned by nature? That the visual imagining of a red panda is of an experience – is that a foreground or a background stipulation?²¹³ Does the stipulation that it is an experience we are imagining reference anything in the mental image? Does it make a claim about the objects in the mental image? Or does it fill in background information about the imagined situation? Whether it is an experience cannot be represented in the image directly. In that sense, it is a background stipulation. Yet it is a foreground stipulation in the sense that the stipulation makes a claim about the object in the mental image, namely that it is experienced (and possibly, in the case of a hallucination, that it does not exist). This further suggests that the distinction between foreground and background stipulation might not be particularly illuminating or theoretically fruitful for our research question. While Kung's view is interesting, it is not clear how helpful it is for current purposes.

Let us get back to the idea that imaginings are quasi-scientific models. This view has many similarities with Kung's approach, yet I believe it is to be preferred, not only

²¹³ Kung does not explain how to account for the difference between visually imagining a red panda and imagining visually perceiving a red panda, for example. This is unfortunate as Kung is interested in accounting for the difference between imagining from the inside and imagining from the outside. For this an account is relevant of how experiences are represented.

because it yields the correct picture of the normativity of imagination. I now present the semantic properties of imaginings that are models of perceptual experiences in a bit more depth.

In chapter 2, section 2.3.6, I suggested that representation in imagination is similar to representation in scientific models. Imaginers are intentional agents who intend to use imaginings to represent parts of the world or possible worlds for specific cognitive purposes. At times, depending on the purpose, imaginings are also used to represent perceptual experiences from the first-person perspective. For such purposes, subjects ought to use images that share phenomenal contents with the actual target perceptual experiences they intend to reconstruct. Subjects can specify for each imagining token which similarities to actual perceptual experiences are intended and for what purpose. As I indicated before, this view implies that the overall contents of imagination can be determined by stipulations and typically involve conceptual contents. Subjects stipulate that imaginings are of perceptual experiences. They might further specify that they are of hallucinations or veridical experiences, for example. Recall Kung's notion of assigned content. On my view, subjects can assign conceptual contents to imaginings, in similarity to how scientists can assign contents to their models. They can be assigned to objects represented in the image and to the overall contents. On my view, in visualizing an apple, an imagining is assigned the function to represent an experience. For example, suppose that the phenomenal image content is redness. The imagining can then be assigned the function to represent phenomenal redness. Phenomenal redness is not represented imagistically, of course. It is part of the conceptual content. Also, in some cases imaginings 'come already categorized by conceptual content that is assigned to it', in Kung's terminology. This can be the case

when imaginings were previously assigned by the imaginer to represent something and contents are stored in memory and then retrieved again for further usage. For example, I might stipulate that a round red object represents a red blood cell. I use this image to represent how a red blood cell binds oxygen molecules. Later, I use the same image to represent how a red blood cell releases oxygen molecules in a body tissue cell. In this example the assigned content, namely that it is a red blood cell, is retrieved and used for a different purpose. Kung introduces the concept of label content, yet it is unclear what this is. On my view, imaginings can involve assigned content, as I just described, which is conceptual content that is assigned to what the imagining represents, and it is assigned, at least typically so, by the imaginer herself. We can call this label content, if we wish.

I intend to leave it open whether imaginings can also involve conceptual image contents, which are analogous to conceptual contents in perception. Whether the categorization <head> is assigned content or part of the conceptual image content depends, in my view, on your account of image content. For example, it depends on whether your account implies that image content involves conceptual content next to phenomenal content. I wish to stay neutral on this question, also as I intend my account of imagistic mental modelling to be compatible with views on either side of this debate on conceptual content.

Let us focus more closely on imaginings of perceptual experiences in particular. What is the relationship between the phenomenal properties of the imagining and the phenomenal properties such imaginings are about? The phenomenal properties of the imagining represent phenomenal properties of experiences. This representation relation is established through the conceptual stipulation that the imagining is about an

experience. Yet imaginings that aim to represent perceptual experiences are not always accurate. I already claimed earlier that imagining ϕ is typically not phenomenally identical to perceiving ϕ . Phenomenal properties instantiated in visual experiences of apples are merely similar to the phenomenal properties instantiated in visual imaginings of apples. This similarity is a matter of degree, where some imaginings are more similar to their target perceptions than others.

We can define phenomenal similarity in terms of a sufficiently large set of instances of identity of phenomenal property types that are instantiated in imagination or perception respectively. The larger the set, the more similar a state is to another. The set is large for example, when we imagine this sensation as vividly as if it was real. In imagining colors, the phenomenal character type redness that is employed when imagining phenomenal redness can be identical to the phenomenal redness type that is imagined. But the overall phenomenal character of the imagining can still differ, as many other phenomenal character types that are imagined are distinct from the ones that would be perceived. In some cases of imagination, the information richness, i.e. how many propositions are true in the imagined scenario, approaches the information richness of cases of ordinary perception. But typically, the information richness, in this sense, is much less in imagination than it is in ordinary perception.

Consider as an example imagining a specific bodily sensation. Suppose, I imagine that my thigh is itchy. We stipulate that it is not an intense, but a short sensation of itchiness. Let's say that I imagine feelings of pain such as this one, but I do not imagine exactly how it feels like to be in pain. What it is like for me to imagine having a short sensation of itchiness in my thigh might be phenomenally quite different from what it is like for me to have a short sensation of itchiness in my thigh. I might

imagine my thigh being itchy by imagining a sensation which only shares some phenomenal properties with the ordinary experience of my thigh being itchy. These imaginings are inaccurate in the sense that they do not veridically represent the experience.

These differences in phenomenal similarities between perception and imagination are likely to differ relative to sensory modes. It is likely that humans are better at visual imagination than imagination of bodily sensations. It might be that there are fewer phenomenal similarities between experiencing bodily sensations and imagining experiencing bodily sensations than there are between seeing an apple and visually imagining an apple, for example.²¹⁴ To what extent this asymmetry exists is difficult to evaluate as philosophers of imagination (and perception) tend to focus on visual imagination (and perception) in constructing theories of sensory imagination (and perception, respectively), while other sensory modes often receive marginal treatments.

How are we to account for inaccurate imaginings of this kind? While views that focus on capturing the phenomenal similarities between perception and imagination, such as the Dependency Thesis or the Dispositional Thesis, have trouble dealing with inaccurate imaginings of this kind, an account that appeals to conceptual stipulations and assignments, such as my view, is, I think, suited to integrate and explain them in an empirically adequate way. Recall our discussions of constitutive theses on sensory imagination in chapter 3. (*DET*), (*CC*) and (*DIS*) presuppose that sensorily imagining ϕ is phenomenally similar to perceptually experiencing ϕ . According to (*DET*), sensorily

²¹⁴ We can speculate on why it is the case. One could argue that imagining pain sensations is cognitively more demanding than visual imagination, as experiences of pain sensations are usually unpleasant and might trigger further states of emotion. One can also argue that imaginings of visual experiences play a bigger role in counterfactual reasoning than imaginings of pain sensations. In deliberating over which adverse effects a car accident would have had, we do not tend to imagine what it is like to feel the pain that is caused by the injury, for example.

imagining ϕ is necessarily imagining sensorily experiencing ϕ . Sensorily imagining that your thigh is itchy is necessarily imagining sensorily experiencing your thigh being itchy. According to *(CC)* *S* sensorily imagines a thigh being itchy only if the phenomenal character of *S*'s imagining a thigh being itchy is similar to that of every perceptual experience of a thigh being itchy in the closest possible world(s) in which it is experienced by *S* under normal conditions. According to *(DIS)* *S* sensorily imagines that her thigh is itchy only if *S* is in an imaginative state with phenomenal character *P* and it is also the case that possible instances of thighs being itchy are disposed to cause visual experiences of character *P** in beings with *S*'s sensory makeup, where *P* and *P** stand in a similarity relation to each other.

We can now formulate the following objection to *(DET)*, *(DIS)* and *(CC)*: Sensorily imagining ϕ can be phenomenally quite different from perceptually experiencing ϕ , without the imagining ceasing to be sensory on the one hand and about ϕ on the other. Moreover, such 'inaccurate imaginings' are not that uncommon. A view that appeals to conceptual contents can explain why such imaginings are nevertheless sensory imaginings on the one hand and about ϕ on the other without being very phenomenally similar to perceptually experiencing ϕ . This is an important advantage my view has over constitutive theses such as *(DET)*, *(DIS)* or *(CC)*. Let me explain this.

According to a view that appeals to conceptual stipulations, what is required for an imagining to be sensory is that the imagining has phenomenal content. But to sensorily imagine ϕ , it is not required that the phenomenal content be of ϕ or phenomenally very similar to ϕ or very similar to perceptually experiencing ϕ . In cases where the phenomenal similarity relation is weak, conceptual contents come to the rescue. This way we can account for inaccurate imaginings of bodily sensations, for

example. Consider the case of me imagining my thigh being itchy. I do this by imagining a sensation which does not share many phenomenal properties with the perceptual experience of my thigh being itchy. In this case, a conceptual stipulation can determine that the overall imagination content is ‘my thigh feels as if it was itchy’. The overall content of my imagining can then be imagining a sensation of itchiness in my thigh as a result. The phenomenal content, or phenomenal character, is stipulated to represent an itch in my thigh. In other words, the conceptual contents can compensate and/or correct for inaccuracies in the image contents. They can step in to compensate for the lack of similarity relations.

This view implies that there can be complex interactions between image contents and conceptual contents in imagination. Usually, when we are interested in imagining experiences, we are interested in imagining possible experiences. Yet to be clear, typical cases of sensory imagination in which conceptual contents come to the rescue do not create impossible scenarios. In our example of imagining an itch, I might have imagined a possible scenario in which I have a sensation is an itch in my thigh, but in this scenario my neurology has a different set-up such that I experience the sensation in a way that is not very similar to how I experience it in the actual world. It is nevertheless an imagining in which I have an itch in my thigh.

But what about cases where the content of the stipulation contradicts the image content? What are we to make of such cases? Here is an example. Let’s say you imagine a red object as red and stipulate that in the imagined scenario the image content is part of a visual experience of something green. The image content is supposed to represent the imagined experience from the perspective of the experiencing subject. In this example, the image content contradicts the content of the stipulation. The thought is that

in the imagined scenario, the experiencing subject experiences an object both as fully red and green at the same time, which is considered to be an impossible scenario.

It is a legitimate worry that my view entails that we often imagine something that is inconsistent or impossible, but I see this as an advantage of my view. On my view, imaginings can be about impossibilities or contradictions. As the content of the example imagining does not correspond to a set of possible worlds, it is unclear whether Possible Worlds Semantics can properly characterize the content of this mental state, but this concern is not specific to imagination and also not in principle without solutions. If this is an implication of my view, it does not provide enough reason to reject it, in my opinion.

Here, again, appeal to scientific representation can help us understand how representation works in imagination. Whether imaginings ought to be phenomenally similar to perceptual experiences and to which degree will depend on the specific use the imaginings are being put to. The purpose and/or the intention of the imaginer determines which phenomenal properties ought to be similar and in which cases the conceptual content can override the image content, so to speak. Moreover, contradictions in imagination contents ought to be avoided as they do not represent possible scenarios. For this reason, they are typically not epistemically or cognitively useful.

Appeal to scientific models highlights the following further relevant property of representation in imagination: In scientific models, the model objects can have properties that are intrinsically representational, but which are not part of the model itself. For example, I might use a red ball to represent an atom. But it is not part of the model that the atom is red. The scientist herself typically determines which properties of

the model object will be used to represent the target phenomenon. There are cases where the model object has an intrinsically representational property, but it is not part of the model. If the modelled atom is now stipulated to be green, this does not stand in conflict with what the model object represents. This is a case where there is no inconsistency in what is represented. In imagination, such cases are possible also. It might further be that some purported cases of inconsistent or impossible imaginings can be explained away this way. While the imagining might intrinsically represent redness, this need not be part of the model, i.e. that which the imagining is aimed to represent or used for representing. If in such a case I stipulate that the represented object is perceived as green, no inconsistency arises.

Before I close this section, I would like to make a brief remark on the relationship between my view and a simulationist account of imagination. In chapter 3, section 3. 4, I introduced a prominent simulationist account of imagination. In my view, we can use accounts of the nature of simulation to explain features of imagistic models of perceptual experiences. Let me give you an example. Currie and Ravenscroft appeal to the concept of what is called cognitive conservation. On their view, it is a necessary condition for imaginings to be simulations of perceptual experiences, that they are “cognitively conservative beyond the input stage” (94). What is cognitive conservation? In order to secure cognitive conservation, “[w]hen you simulate S’s reasoning or decision-making, you should appeal to just the same theories or beliefs or information that S appeals to in [her or] his reasoning or decision-making” (92). Typically, perceptual imaginings are not cognitively conservative at the input stage because the imaginer uses information to generate the right perceptual imaginings in the first place, which lies outside the information required to model the perceptual experiences. For

example, if I would like to know how many windows there are in my house, “I cannot get the right inputs for visualizing my house – inputs that come from visual memory – unless I know what my house is like.” (93) This condition of successful simulations of perceptual experiences can, in my view, be integrated into my account of imaginings as imagistic models. At least, it provides an explication of what a simulation is which is compatible with my view. This nevertheless should not distract from the fact that Currie and Ravenscroft only paint an incomplete picture of the nature of sensory imagination, as they for example neglect the role assignments and conceptual stipulations play in determining the contents of imaginings – an important property also of imagistic simulations of perceptual experiences.²¹⁵

4. 5 The Normativity of Imagining Experiences

What follows from this view on the nature of representation in imagination for the normativity of imagining perceptual experiences? If I intend to imagine veridically perceiving a red panda, my imagining is correct to the extent that it aids the completion of the intention. But imaginings are not merely subject to hypothetical norms of this kind. Imaginings are used for many cognitive purposes. I argued that imaginings and their contents are subject to correctness conditions which are determined by their purposes of use. This also applies to imaginings of perceptual experiences.

Consider as an example Jackson’s thought experiment of Mary the scientist.

Mary has lived all her life in a black-and-white room and knows all the scientific

²¹⁵ Note that Currie and Ravenscroft themselves are unsure whether appeal to the notion of cognitive conservation is adequate to capture simulation, or else whether perceptual imaginings have “the capacity to be simulative” (94) as they call it. “We cannot say with any confidence that visual and other forms of perceptual imaginings pass the relevant test of cognitive conservation, that they are cognitively conservative beyond the input stage.” (94)

information there is concerning color perception. But she has never perceived colors herself. One day she steps out of her black-and-white room and sees something red, for the first time. Let's put ourselves in her shoes and imagine perceiving something red from her perspective. One epistemic purpose of the thought experiment arguably is to gain a deeper understanding of the relationship between scientific information concerning color perception and first-person experiences of color. For this reason, it can be argued that it is a necessary condition on the imagining that it is in fact an imagining of a perceptual experience of something red from the first-person perspective. Merely imagining a red object, visually represented would be incorrect and not sufficiently suited to the cognitive task at hand. Interestingly, given what I argued for in the previous section, this requires of the imagining to involve the correct conceptual content. My imagining is correct only if I have successfully stipulated that the visual imagining of the red object also is a perceptual experience. It would not be enough to merely visually imagine a red object.

For some cognitive tasks in which subjects are asked to imagine perceptual experiences, it will instead be sufficient to form imaginings that have phenomenal contents which overlap with phenomenal contents of perceptual experiences. In other words, subjects at times might be asked to imagine the contents of perceptual experiences, without being asked to imagine perceptually experiencing something. In these case, it is not a necessary part of the overall imagination content that the imagining is about a perceptual experience, i.e. that it involves conceptual contents.

In chapter 2, section 2. 3. 5, I distinguished personal from subpersonal purposes. Some purposes to imagine are consciously accessible to subjects, while others are not.

Furthermore, purposes can be those of cognitive subsystems which are not under voluntary control. We can also apply this to imaginings of perceptual experiences.

Consider for example the case of involuntary imagery as a result of posttraumatic stress disorder. Let us consider the following scenario: A person who got raped on the street and is traumatized as a result is walking through a forest at night. He hears a rustle next to him in the wood and as a result of his posttraumatic stress disorder this triggers an imagining in him of a person that is approaching him from the side. He panics as a result and continues walking much faster than he would have otherwise. It is unclear whether in this example it cognitively makes a difference to the subject whether he imagined perceptually experiencing something or imagined the content of a possible perceptual experience. Imagining the content of a perceptual experience without also imagining that it is a perceptual experience from the first person perspective might be sufficient for her to walk faster, as this alone can trigger an emotional response. In other words, for him to walk faster than he would have done otherwise it was sufficient to merely imagine the content of a possible experience instead of imagining perceptually experiencing something. In which contexts, and for what purposes, imaginings of the contents of perceptual experiences are better suited than imaginings that involve the conceptual stipulation that experiences are imagined is an interesting question. I will leave a more in-depth discussion of this topic for another occasion.

4. 6 Objection: Cognitive Demandingness

Let me discuss an objection to my view. My view implies that imaginings that are of perceptual experiences involve the employment of concepts, while this is not

necessarily the case for imaginings of mind-independent objects and properties. To imagine perceptual experiences themselves, what is required at least is concept possession of 'perceptual experience'. This suggests that imaginings of perceptual experiences are cognitively sophisticated. Yet, so the objection, this is an implausible implication of my view. Children and other individuals, who do not possess the concept of a perceptual experience are able to imagine perceptually experiencing something. In pretend play, for example, children might imagine what it is like to drink hot tea without being able to employ the concept of an experience. My account therefore is not empirically adequate.

Here is my response. Children and other individuals, who do not possess the concept of a perceptual experience and/or are not able to apply the concept to the imagination content, nevertheless imagine contents of perceptual experiences. We need to distinguish between imagining a perceptual experience in the sense of merely imagining the content of a perceptual experience and imagining a perceptual experience in the sense of imagining the content of an experience and stipulating that it is a perceptual experience in addition. Children imagine perceptual experiences in the latter sense. They imagine the contents of experiences. For many cognitive purposes this will be sufficient. One example is pretend play in children. Yet a case can be made that it can also be sufficient in philosophical thought experiments. Consider for example the philosophical example of imagining what it is like to be a bat. It can be argued that in such a case imagining the content of the perceptual experience is enough given the epistemic purpose of the imagining. Contrary to what I claimed above, it can be argued that this applies to imagining what Mary sees when she exits her black-and-white room. Furthermore, in cases of merely imagining the contents of perceptual experiences,

subjects are able to form the belief that what they are imagining are experiences on the basis of an inference. For example, they might remember and recall experiences they have had and then use them in imagination. In such cases a belief that the content of the imagining is the content of an experience can play the cognitive role that the conceptual stipulation that is part of the imagination content would have played otherwise.

4.7 Concluding remarks

In this chapter I presented my view on how we sensorily imagine perceptually experiencing something. Imaginings are sensory in nature as they have phenomenal image content. Moreover, imaginings that are of perceptual experiences of ϕ and imaginings that are of ϕ without being of perceptual experiences typically have similar image contents, but do not share the exact same image type. They are not phenomenally indistinguishable. I argued that the difference between imagining perceptual experiences and imagining objects sensorily is a difference in the conceptual content of an imagining. Whether an imagining of ϕ also is of an experience of ϕ is conceptually supplied. The same holds for the difference between imagining a hallucination and a veridical perception. I also argued that conceptual contents step in in cases where imaginings of perceptual experiences are not accurate.

I claim that imagining perceptually experiencing something are often cases of imagistic model construction. This view involves a specific understanding of representation in imagination which I elaborated on further in this chapter. For example, on this view, imaginings can be inconsistent, a property I do not consider to be a reason

to reject this view. In the final section I deflected the objection that my account of imagining experiences is cognitively too demanding to be empirically adequate.

5. Concluding remarks

The topic of this dissertation is the nature and normativity of sensory imagination. While imaginings play a plethora of cognitive roles in reasoning, its nature and function is not very well understood and much less so than other mental attitudes, such as belief, desire or perception. I develop a novel account of the normativity of imagination in chapters 1 and 2, and focus on the contents and the phenomenology of imagination in chapter 3. In chapter 3 I critically evaluate the appeal to perception in existing views on the nature of sensory imagination. In chapter 4, I bring together findings of the previous chapters and apply them to the case of imagining perceptually experiencing something. This is designed to further illustrate and corroborate the viewpoints advanced in the previous chapters.

This dissertation highlights the uniqueness of the mental attitude of imagining in many ways. Unlike beliefs, desires and perceptions, imaginings are not subject to intrinsic attitude-specific norms. Instead, they are subject to norms relative to purposes of use. An analogy to scientific models and scientific representation helps us understand the nature of their normative and their semantic properties. Unlike beliefs, desires and perceptions, imaginings involve conceptual stipulations, which can alter their overall contents and are in principle subject to the will. Even though perception and imagination are phenomenally similar, Chapter 3 shows the difficulty of cashing out the phenomenal character of imagination by appeal to perceptual experiences. Moreover, the phenomenal character of imaginings and perceptual experiences typically differs at

least in terms of its *de se* properties. Chapter 3 further shows that theories that strongly appeal to perception in defining the nature of sensory imagination tend to overlook the important role of conceptual stipulations play in imagination. Sensory imaginings are unlike all other mental attitudes in that their overall contents typically outstrip their image contents. This also affects how we imagine perceptual experiences themselves. In chapter 4 I argue that conceptual stipulations are required whenever we imagine perceptually experiencing something. Often when we imagine having a specific bodily sensation, we imagine something that is only faintly similar to an actual bodily sensation of this kind. In these cases, we can stipulate that the imagining is nevertheless of this specific bodily sensation.

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