

Knowledge By Imagination – How Imaginative Experience Can Ground Factual Knowledge

Fabian Dorsch

Forthcoming in: *Teorema*, 2016.

ABSTRACT. In this article, I defend the view that we can acquire factual knowledge – that is, contingent propositional knowledge about certain (perceivable) aspects of reality – on the basis of imaginative experience. More specifically, I argue that, under suitable circumstances, imaginative experiences can rationally determine the propositional content of knowledge-constituting beliefs – though not their attitude of belief – in roughly the same way as perceptual experiences do in the case of perceptual knowledge. I also highlight some philosophical consequences of this conclusion, especially for the issue of whether imagination can help us to learn something from fictions.

KEYWORDS: imagination; imaginative experience; sensory imagination; visualising; factual knowledge; epistemic/rational grounds; basing relation.

Our engagement with fictions is primarily imaginative in nature (Gregory Currie, 1990; Stock, 2013; Walton, 1990). When we read a novel, look at a picture, think through a thought experiment or invent a game world, we imagine what is fictional in the situations concerned. Minimally, we do so by means of imaginative thoughts (i.e. propositional imaginings). But often, these are also accompanied by imaginative experiences, such as episodes of visualising, auditory imagining, and so on. For instance, we may not merely imagine that Sherlock Holmes lives in Baker Street 221b, but we may also visualise how his apartment might look like from the out- or inside – presumably on the basis of both how it is described in the stories and our knowledge of how the exteriors and interiors of houses looked like in Victorian London. Similarly, imaginative experience may be central to imagining the appearance of a depicted person (e.g. how she moves around in the depicted space), to understanding a thought experiment (e.g. when we visualise the path of ‘Newton’s cannonball’), or to envisaging the world of a computer game.

One important aspect of whether we can learn from our engagement with fiction is therefore whether we can acquire knowledge on the basis of imaginative experience. There has been much discussion about whether imaginative experiences can be a source of knowledge for *modal* or *conditional* truths.¹ By contrast, not much attention has been paid to the issue of whether they can also provide us with access to contingent facts about reality – that is, whether they can ground *factual* knowledge. Our canonical access to such facts is perceptual in nature. Hence, my aim in this paper is to investigate whether imaginative experiences are capable of grounding factual knowledge in roughly the same way as perceptual experiences. My conclusion will be that they are indeed capable of this (at least to a considerable extent), both in response to fact and in response to fiction.

In the first section, I spell out in more detail what experience-based factual knowledge amounts to. In particular, I focus on the idea that beliefs are grounded in experiences only

if they are rationally determined by those experiences. In addition, I discuss under which conditions such experience-based beliefs might count as constituting knowledge.² In the second section, I describe two examples that I take to involve the acquisition of knowledge on the basis of imaginative experience. These examples centrally involve imaginative agency that we deliberately constrain in such a way that it mimicks the behaviour of certain aspects of reality. The third section argues that the resulting imaginative experiences, because they are produced in a way that imitates how reality behaves, satisfy the conditions under which experiences count as grounding knowledge.

The fourth section clarifies that imaginative grounds – in contrast to perceptual grounds – need to be supplemented by ancillary beliefs about their good epistemic standing in order to generate knowledge. More specifically, while perceptual experiences can rationally determine both the attitude and the content of beliefs, imaginative experiences possess this power only with respect to belief contents, thus needing the help of ancillary beliefs with respect to belief attitudes. While the fifth section addresses certain objections to my main conclusion that the two examples do involve knowledge grounded in imaginative experience, the sixth and final section outlines certain philosophical consequences of this conclusion for the nature of experiential knowledge, the epistemic role of imaginative thoughts and, especially, the possibility of learning from fiction.

I. Perceptual Knowledge

Let us start with the question of what it means for knowledge of contingent facts to be grounded in perception. In order to provide an answer, we need to identify two sets of conditions: one concerning the issue of when perception-based beliefs count as constituting factual knowledge; and another concerning the issue of when beliefs count as based on, or grounded in, perception. I discuss these sets of conditions in reverse order.

Perception-Based Beliefs. It is widely accepted that, in the absence of knowledge-defeating circumstances, perceiving an a as being F puts us in a position to acquire knowledge that a is F . By looking out of the window and seeing the rain falling, we can come to know that it is raining. The resulting propositional knowledge counts as *perceptual* to the extent to which it is grounded in, or based on, perception (rather than something else).

The kind of grounding involved is, in a certain sense, *direct* (a qualification which I will, however, drop in what follows). For example, when a friend of us sees the rain and informs us about it via mail or phone, or when we conclude just on the basis of seeing the wet street that it rained during the last hours, we do not acquire perceptual knowledge, but only testimonial or inferential knowledge. Of course, perception plays a crucial role in these cases, too. But our acquisition of knowledge is merely an indirect result of perception, given that testimony or inference intervene in between and constitute the proper grounds of our knowledge.

Now, perceptual knowledge – like any form of propositional knowledge – is in part characterised by the fact that it requires belief. Knowing that it currently rains, for instance, implies believing that it currently rains. In the case of perceptual knowledge, the respective belief is grounded in a veridical perceptual experience. But a perceptual experience counts as the ground of (or as basing) a knowledge-constituting belief only if it is pivotal in the rational determination of that belief. The determination is rational in so far as the resulting

belief turns out to be rational, or rationally formed (without which it would not count as knowledge). When perceptual knowledge is concerned, the rational determination of belief happens presumably via processes like abstraction and conceptualisation (Evans, 1982, Ch. 6). More specifically, there are two distinct aspects of perceptual belief that are in need of rational determination by the underlying perceptual experiences.

First, which *content* the belief has – that is, which proposition is endorsed – has to be a matter of how the experience presents things in our environment as being.³ For example, we come to believe (and know) *that it rains* because we experience *the rain*. If, instead, we would have experienced sunshine, we would have formed a belief about sunshine. Moreover, given that the content of the belief is rationally (or evidentially) determined by how the experience presents things as being, the truth of the belief depends on the veridicality of the underlying experience. Our belief that it rains is true precisely because how we experience the weather as being (i.e. as being rainy) matches how it really is.

Second, which *attitude* we adopt towards the propositional content in question (i.e. the attitude of belief) has to be a function of what kind of experience is concerned (i.e. perceptual experience). We come to *believe* (and know) that it rains because we *see* the rain. Merely visualising rain would at best lead to some imaginative (or suppositional) thought about there being rain. So, while *what* we come to believe (and know) on the basis of perceptual experience is rationally determined by what we experience, the fact *that* we form a belief is rationally determined by the fact that we have a perceptual experience. A very similar division of labour pertains to inferences. While which conclusion we come to infer depends on the premisses and the logical or probabilistic relations between them and the various candidate conclusions, whether we come to believe or imagine the conclusion to be true is a function of whether we believe or imagine the premisses to be true.

The experiential grounding of beliefs and, in particular, the rational relation of determination involved is perhaps best spelled out in terms of nomological dependence. Accordingly, a belief is *rationally determined* by an experience just in case the following conditional is true, as long as the subject concerned is rational: the experience would have resulted in a propositional attitude with a different attitude or a different content if the experience would have been of a different kind or would have presented things as being different. And a belief is *grounded* in an experience just in case the attitude and content of the belief are rationally determined by the kind of experience concerned and by how it presents things as being.

One advantage of this characterisation of experiential grounding and rational determination in terms of nomological dependence is that it allows us to further specify the sense in which perceptual beliefs are *directly* based on perception. Consider again the two cases in which we come to believe that it has rained in response to listening to the perception-based testimony of our friend, or alternatively as the result of reasoning on the basis of ourselves perceptually experiencing the wetness of the street. In both situations, our belief that it has rained does not nomologically depend on the particular perceptual experience involved. Assuming that we are rational, we would still come to believe that it rains if our friend had seen sunshine instead of rain and lied to us, or if we would have learned that the street is wet by means of testimony rather than our own perception. By contrast, whether we come to believe that it rains on the basis of perception nomologically depends solely on whether the perceptual experience concerned is an experience of rain (again at least as long as we are rational). This is exactly why our belief is (directly) grounded in perception, rather than

testimony or inference.

Knowledge-Constituting Beliefs. But why do true beliefs, whose attitude and content are rationally determined by veridical perceptual experiences, constitute knowledge? There are many different plausible answers to this question; and here is certainly not the place to rehearse them all, or even to discuss some of them in any detail. Instead, I would just like to highlight some of the more popular or influential answers in order to give a broad idea of what might be responsible for the fact that certain perception-based true beliefs constitute knowledge. Once we have such an idea, we can apply it to imaginative experiences and their epistemic role in belief formation.

Some externalists have identified *reliability* as the crucial factor (e.g. Goldman, (1986)). Accordingly, a true belief counts as knowledge because it is formed in a reliable manner – that is, very roughly, in a manner that makes it more probable than not that it turns out to be true. Applied to perceptual knowledge, the idea is simply that letting the attitude and content of beliefs be determined by perceptual experiences is a reliable way of forming beliefs. That the impact of perceptual experiences on beliefs has this positive epistemic effect may then be explained by how perceptual experiences are related to, and originate in, the respective aspects of reality.

However, truth and reliability may not be enough for knowledge, as illustrated by Gettier's famous examples. One standard externalist way of trying to rule out the epistemic luck present in such cases is to demand that knowledge-constituting true beliefs also have to be *safe* (Pritchard, 2005). A true belief of ours is safe (or safely true) just in case we would also end up with a true belief in the closest possible worlds in which we would form our belief in the same way as in the actual one (e.g. on the basis of the same perception, recollection, testimony, inference, etc.). This means, in more informal terms, that the truth of the belief is so robust – or, indeed, non-accidental to such a degree – that it could not have been easily wrong and would survive the smallest changes in our epistemic situation.⁴

Internalists, on the other hand, insist that knowledge is not just a matter of how the beliefs in question are influenced by reality and linked to truth, but also a matter of whether we have *access* to these influences and links. The underlying thought is that our beliefs are of good epistemic standing only if we are in a position to know – or at least claim – that they are formed in a way that is conducive to non-accidental truth.⁵ The addition of this access condition is usually motivated by the observation that knowledge seems to be intimately connected to justification and responsibility – that we do not know if we cannot justify our respective belief to ourselves and others, or if we cannot take proper responsibility for the belief (e.g. by revising it in response to recognising that it lacks the required link to reality and truth).

More specifically, internalists may think that it is a necessary condition on knowledge that we are in a position to come to know (or claim) that our relevant beliefs are true in a reliable or safe way. Beliefs that are grounded in veridical perceptual experiences may then be said to be good candidates for knowledge because perception is a reliable and safe method of acquiring information, and because we have access to this close connection between perception and reality – for instance, by means of the track record of our past perceptual experiences.⁶

In the light of the preceding considerations, it is plausible to assume that experience-based true beliefs constitute knowledge (or at least come very close to constituting knowl-

edge) if, and because, they meet the externalist condition of reliability or safety and/or the internalist condition of access to reliability or safety. Moreover, there should be no problem with adding further conditions if necessary. For instance, to appease virtue-theorists, we can point to the additional fact that knowledge-constituting beliefs – like those based on veridical perceptions – are apt in the sense of being a successful manifestation of our epistemic skills. That is, they are not merely true and formed in a way that guarantees reliability, safety, and so on, but they are also true *because* they are formed in such a way Sosa, (2007).

Grounding vs. Merely Enabling Knowledge. A final important distinction concerns two different epistemic roles that perceptual and other experiences may play in the acquisition of knowledge. The first role is that of *grounding* knowledge: an experience grounds knowledge just in case it rationally determines the attitude and content of the relevant knowledge-constituting belief. But experience may also merely play the role of *enabling* knowledge. That is, they may contribute to the acquisition of knowledge without grounding it.

One way of enabling (but not grounding) knowledge is by ensuring that other mental episodes or states are in a position to ground knowledge. For instance, we cannot come to know that it rained yesterday by reading a respective news report without seeing the words on the paper or screen. But this perceptual experience does not ground our knowledge, not the least since it is concerned with the appearance and meaning of the printed marks, rather than with yesterday's weather. Instead, what grounds our knowledge is our episode of understanding the conveyed assertion that it rained yesterday. But since we would not be in a position to understand this assertion without seeing the words, our perceptual experience is part of what enables us to acquire knowledge about yesterday's weather on the basis of understanding the assertion at issue.

Defining the epistemic role of enabling knowledge in largely negative terms – namely as contributing to knowledge without grounding it – has the consequence that many different possible contributions may count as enabling knowledge. Returning to the previous examples, both our friend's perceptual experience of the rain and our own perceptual experience of the wet street play an enabling role, given that they help us to acquire knowledge – whether by allowing our friend to provide us with the relevant piece of testimony, or by supplying us with the central premiss for our inference – without actually grounding it (see the discussion above).⁷

2. The Two Examples

In order to extend to knowledge grounded in imaginative experience, the results of the preceding considerations about perceptual knowledge have to be generalised to *experiential* (i.e. experience-based) knowledge. This suggests that the following *experiential knowledge schema* provides an adequate characterisation of experiential (i.e. experience-based factual) knowledge: a true belief that *a* is actually and contingently *F* constitutes knowledge if its attitude and content is rationally determined by an underlying veridical experience of *a* as being *F* in a reliable and safe manner, which is furthermore accessible to us.

Due to its close connection to reality, perception is generally knowably reliable and safe. As a result, perceptual experiences can easily satisfy the above schema. Imaginative experiences, on the other hand, lack any comparably close link to reality. In particular,

they do not – unlike perceptual experiences – possess the function to inform us about our immediate surroundings. Hence, any attempt at showing that imaginative experiences, too, can conform to the experiential knowledge schema should not focus on the general nature of such experiences, but instead on particular instances that occur in special circumstances which ensure the satisfaction of the epistemic conditions outlined – that is, which ensure that, say, visualising an *a* as being *F* puts us in a position to come to know that *a* is *F* (in the absence of any defeaters).

Elsewhere (Dorsch, 2016b), I already argue that the standard examples of visualisation-based knowledge discussed in the literature do not satisfy the experiential knowledge schema. That is, they do not constitute cases in which imaginative experiences ground experiential knowledge of contingent facts. Instead, they involve knowledge of modal, conditional or otherwise unperceivable facts; or knowledge based on introspection rather than imagination; or knowledge that is merely enabled by, but not grounded in, imaginative experience; or any combination thereof. Instead of rehearsing these cases, I would like here to put forward two other examples that, in my view, do involve imaginative experiences which ground knowledge of contingent aspects of reality in a way very similar to knowledge-grounding perceptual experiences.⁸ In other words, it is my contention that the imaginative experiences in those examples play more or less the same grounding role – expressed by the experiential knowledge schema – that comparable perceptual experiences would have played if they had occurred instead.

The first kind of case sometimes occurs when we want to purchase a larger item of furniture, or something similar.⁹ What might keep us from buying a particular dining table, say, might be that we are worried about whether it would fit through the door of our living-room. So, while still being in the furniture shop, we might decide to close our eyes and to start to visualise the table in front of, or next to, the door, thereby mentally rotating the table until its legs are roughly parallel to the head of the door, and the longer side of the table in an approximately vertical position (or, for that matter, in any other suitable position relative to the door). This imaginative visual experience of the door and the table next to each other may then enable us to visually compare the relative sizes of the two objects and, say, to come to know in a non-inferential manner that the door is wider than the length of the legs of the table, and higher than the length of the top of the table. In short, we come to know that the door is bigger than the table.

Of course, we could have acquired the same piece of knowledge by moving the table to our flat, positioning it in the same way in front of the door and then making our visual comparison of size while looking at the resulting arrangement of the two objects. But this would have required much more energy and resources (not the least taking the risk of buying the table without knowing for sure that it will fit) and therefore might not have been a reasonable thing to do in light of our doubts about whether the table is not too big for the door. Visualisation offers a much easier – even though more fallible – way of acquiring exactly the same piece of propositional knowledge.

The second case involves auditory, rather than visual, imagination – partly in order to illustrate how relatively easy it is to identify further counterexamples in other sense modalities. Assume that we would like to set a given tune to new words (e.g. on the occasion of our best friend's wedding). We write down a little poem and then would like to check whether its length matches that of the melody. One way of finding out is to begin to auditorily imagine singing the words to the tune and see which of the two comes to an end first (if any). In

this way, we may end up with an episode of auditory imagining that presents the moment in time at which, say, the words finish, while the melody still continues. By endorsing the content of this experience, we may come to learn that the tune lasts longer than the poem (unless you, say, slow down with the words). Again, we could have acquired the same kind of knowledge by singing out loud the words to the tune and listening to our own song. But doing so ‘in our head’ may not only be more convenient, but also less embarrassing for us.

Significantly, what the two examples have in common is that they constitute *mental projects*. It is characteristic of such projects that they are purposive instances of mental agency (Dorsch, 2015). In the current case, the overall purpose is to find something out about the world (e.g. whether the table is smaller than the door). For this reason, the projects in question should count as cognitive: they aim at the acquisition of knowledge. But they differ from other cognitive projects (like the project of calculating a sum in our head) in that they make essential use of imagining. We do not want to discover the relation in size between the door and table by putting them next to each other and looking at them, but rather by visualising them together and reading off their relative sizes from our resulting visual experience. Accordingly, our aim is to acquire knowledge by means of, and on the basis of, sensory imagination.

Perhaps the most important aspect of our engagement in the projects defined by this aim is that we *ourselves constrain* our own imaginative agency. When we move around a large table in real life, we are subject to limits established by gravity, the rigidity of solid objects, and similar factors. For instance, we cannot simply lift up the table without any tools or the help of other people; nor can we flatten or otherwise compress the table at will. By contrast, when mentally rotating a table, we are free to imagine it as raising up into the air, or as shrinking in size. Hence, if we want to simulate the real behaviour of tables when mentally rotating one, we need to set up our own constraints that correspond to the constraints that the external world establishes with respect to our ability to move around tables in reality. Indeed, without these constraints in place and observed by us, we would not be able to achieve our aim of acquiring knowledge grounded in imaginative experience.¹⁰

3. Imaginative Knowledge

But why should we accept that our conclusions in the two examples do constitute such knowledge by satisfying the experiential knowledge schema? One central aspect of the answer is that our respective beliefs are *true*: the door is in fact bigger than the table, and the tune longer than the poem. But, of course, truth in these matters does not imply knowledge. We also need to consider whether our beliefs are also of good epistemic standing – in particular, whether they are knowably reliable and safe.

First of all, there is no reason to doubt that our beliefs can be *reliable*. Their reliability is a function of three factors: (i) the reliability of the perceptions or episodic memories, with which we start our imaginative projects; (ii) the reliability of our imaginative modifications of the objects concerned, at least with respect to their relevant features; and (iii) the reliability of our relevant background knowledge that we use in order to choose the necessary constraints on our imaginative modifications.

Consider again the first example. We begin with our perception of the table and our recollection of the appearance of the door. In particular, we see the size of the table and

recall the size of the door. Then, we visualise the two objects as being together in the same space, thereby making sure that how large we present them together as being stays true to how we see or recall them individually as being. Finally, we change their location and orientation relative to each other, while keeping their sizes constant. What guides us in our project of visualisation and mental rotation is our background belief that objects like tables do not change in size if they are moved around.

Assuming that we have acquired this belief in a reliable manner, and that our perceptual and mnemonic capacities are also sufficiently truth-conducive, the crucial issue is whether we can visualise, combine and mentally rotate the objects in a way that is reliable with respect to the relative sizes of the door and, especially, the table (though not necessarily with respect to other features, such as their colours). That is, the main question is whether we are sufficiently likely to satisfy our own constraint, namely to modify the position and orientation of the table without diminishing or increasing the size that it is visually presented as having relative to the size that the door is visually presented as having.

Of course, we can always get it wrong in particular cases. For instance, it may happen that we slightly inflate the size of the table in our imagination while turning it upside down – with the result that we might end up with the wrong conclusion. Whether we are reliable will also depend on the relevant margin of error, which is again partly determined by the importance of getting it right. Moreover, there may very well be people that are generally unable to keep the seen or recalled sizes of objects constant while mentally rotating them. But there are also people who are – whether by nature or by training – very competent at visualising and imaginatively modifying the spatial aspects of objects, whether they are architects, carpenters, surveyors or designers.¹¹ And we have no good reason to rule out that people like these are capable of keeping the size of (relatively simple) objects constant while mentally rotating them – at least under suitable conditions (e.g. when they are focussed, not tired, etc.).

Similar considerations apply to the other case. Our initial perception or recollection (i.e. of the tune) and our relevant background knowledge (e.g. concerning facts about how words and melodies relate to each other in songs) can again safely be assumed to be due to reliable processes. It is worthwhile to point out that the background knowledge need not be propositional, that is, involve belief. When we auditorily imagine the progress of both the tune and the lyrics, we need not rely on knowledge about songs that we could easily put into propositional form. Rather, it suffices – and may even be required – that we have some experiential grasp of how music and words proceed in relation to time and rhythm. So, the issue is anew whether we are reliable when it comes to ‘singing’ a made-up song in our head under relevant self-imposed constraints. But that certain people – notably professional singers or composers – are very good at this task should be uncontroversial.

Then, our beliefs in the two examples are not only true and reliable, but also *safe*. In the closest possible worlds, the table would be slightly bigger or smaller. If it would be smaller, we would have ended up with the same true belief, namely that the door is larger than the table. If the table would be bigger, we would also still form this true belief, at least if the difference in size with respect to the door would still be substantial enough (e.g. more than ten centimetres for each side). So, the truth of our belief is safe as long as the original gap in size is large enough. Our belief would lack safety only if a slightly bigger table would be so close in size to the door that we would not be able to tell any more which of the two is larger, and thus would have to refrain from forming a belief on the basis of visualising. But,

in such cases, the sizes of the two objects are already so close together in the actual world that we are very likely to withhold belief there as well. Besides, for the purpose of deciding whether visualising can ground knowledge in an experiential way, it suffices to just focus our attention on cases in which the sizes of the door and of the table are sufficiently different (relative to our relevant skills of visualisation and discriminatory capacities).

Comparably, if the poem would match the tune in duration if it had one additional word, we would come up with the true belief that the two are of equal length; while other small changes in the length of the poem would lead to the same true belief as in the original case, namely that the melody is longer. Because of these counterfactual truths, we have every reason to assume that, if our beliefs in the two cases are indeed true, they are so non-accidentally, and not just due to the kind of epistemic luck characteristic of Gettier and similar cases.

Finally, we have relatively easy *access* to the fact that our respective beliefs are reliable and safe. In each of the two examples, we are engaged in deliberate imagining and are in a position to know what we are intentionally doing. In particular, we are aware of the constraints on imagining that we have chosen to conform to – for instance, to mentally rotate the table without changing its size, or to set the words of the poem to music in a standard way. And we are able to know, on the basis of past experience, that our attempts at imagining in conformity with these or very similar constraints tend to lead to non-accidentally true beliefs. On the assumption that we are also in a position to know that our underlying perceptual, mnemonic and other capacities are truth-conducive, we enjoy access to the reliability and safety of our imagination-based conclusions.

Having a true belief that meets both the externalist conditions of reliability and safety and the internalist condition of access to reliability and safety is perhaps already sufficient for having knowledge. But even if not, it can be expected that the beliefs in the two examples also satisfy any further conditions on knowledge that may be put forward. For instance, our beliefs are likewise *apt* in the sense of being a manifestation of our epistemic skills and our skill of imagining under self-imposed epistemic constraints (Sosa, 2007). That is, they are true precisely because we make sure that they are formed in a reliable manner, namely in strict conformity to the truth-preserving constraints that we have imposed ourselves on our imaginative project. Similarly, our beliefs are also *sensitive* to truth in that we would not have formed them in the nearest possible worlds in which the table would be larger than the door, or the tune would be shorter than the poem. For, in these worlds, we would either refrain from drawing any conclusions (e.g. if the table would be just slightly bigger than the door) or would come up with the opposite belief (e.g. if the difference in size would be more substantial).¹²

4. The Rational Independence of Attitude and Content

However, that our conclusions in the two examples are true and formed in a knowably reliable and safe manner does not yet suffice to show that the experiential knowledge schema is indeed satisfied. They also have to be rationally determined by the underlying imaginative experiences. And one class of epistemological views is likely to challenge this additional claim.

The views in question assume that the (*prima facie*) justificatory power of perceptual

experiences is primarily a matter of their phenomenologically salient belief-like attitude (or perceptual endorsement, judgement-like character, etc.).¹³ One way of spelling out this idea is to say that we are justified in believing that there is a green apple when seeing one because, as part of our perceptual experience, the apple seems to be immediately present – that is, right there before our eyes, as part of our current environment. Another way of making roughly the same point is to claim that our perceptual experiences provide us with justification because they purport to be non-neutral about how our surroundings are like. By contrast, imaginative experiences lack this immediacy or non-neutrality, and thus also the justification coming with it. When we visualise a green apple, it does not seem to be part of our environment; and our visual experience neither entitles, nor rationally moves us to believe that there is a green apple before our eyes.¹⁴

The views under consideration are certainly right in claiming that episodes of visualising lack the belief-like attitude that, in the case of perceptions, is responsible for the rational determination of the attitude of perceptual beliefs. Indeed, this is just a special case of the general feature of imaginings that they cannot help to rationally determine an attitude of belief. Consider, again, the parallel case of imaginative thoughts. When we reason through a certain inference in a rational way, but merely imagine – rather than believe in – some of the premisses to be true, then we also end up merely imagining – rather than believing – the conclusion to be true. In other words, if one or more of the determining attitudes are imaginative, the same will be true of the determined attitude. For example, on the basis of merely imagining that the Earth is flat, we cannot rationally come to believe that we will fall off the Earth if we just sail long enough towards its borders.

But this by no means implies that the lack of a belief-like attitude prevents imaginative experiences from being experiential grounds for belief. While it deprives them of the capacity to give rise to an attitude of belief and to play the *full* grounding role of perceptions, imaginative experiences can still be responsible for which proposition we end up endorsing in belief. In other words, the imaginative experiences in question satisfy the experiential knowledge schema with respect to the determination of content, though not with respect to the determination of attitude.

What is crucial here – and sometimes overlooked – is the fact that the rational determination of the content of propositional knowledge happens independently of the rational determination of its belief attitude. Take again the case of inferential reasoning. Which conclusion we end up with is determined by different factors than which attitude we adopt towards this conclusion. The first is determined by the premisses and the logical or evidential relations between them and the conclusion, while the second is determined by our attitudes towards those premisses. And propositional attitudes are characterised precisely by the fact that different attitudes and different propositions are more or less freely combinable.

Moreover, this independence in rational determination is also present in experiential, non-inferential cases – and even allows for cases in which the content and the attitude of a given belief are determined by distinct mental episodes. A good example is our experience of realist portraits. When Henry VIII looked at Holbein's portrait of Anne of Cleves (see FIGURE 1), he was able to acquire knowledge about her visual appearance, and not only recognitional knowledge enabling him to recognise her at their first meeting, but also propositional knowledge – such as the insight that she had brown eyes. That he endorsed the proposition *that Anne's eyes were brown* (and not that they were green, say) was

determined solely by how his experience of the picture presented the eyes of the depicted woman as being. By contrast, that he came to *believe* this proposition (rather than merely entertaining or imagining it) was exclusively determined by his ancillary belief that Holbein's painting was an accurate portrait of Anne – a belief that could not be grounded in his experience of the picture (i.e. visual depictions do not tell us whether they are accurate).¹⁵ So, when we form experience-based beliefs about the visual appearance of depicted people or objects, the rational determination of the content of our belief and the rational determination of its attitude are independent of each other and due to different factors: the first to our pictorial experience, and the second to our ancillary belief about the accuracy of the portrait (and the fact that it is a portrait in the first place).



FIGURE I. Hans Holbein the Younger, *Anne of Cleves*,
Detail (1539), The Louvre, Paris.

The same happens in the two examples involving imaginative experiences. While these experiences rationally determine the content of the resulting knowledge-constituting belief, the attitude of that belief is due to the ancillary belief that the imaginative experience concerned is veridical in a reliable or safe manner. This is why the lack of a belief-like attitude does not deprive imaginative experiences of their potential to ground knowledge in an experiential way. Because the rational determination of the content and the rational determination of the attitude of beliefs are independent of each other, to an extent that they may even involve very different mental episodes or states, an experience without a belief-like attitude may still be central to the determination of the content of a given belief, even though it cannot play any role in the determination of its attitude.

The only concession to be made is that imaginative experience can play only part of the grounding role of perceptual experience, namely the part concerned with the determination of content. In parallel to the pictorial case, the attitude of the resulting belief is, by contrast, determined by our beliefs about the accuracy of how our imaginative experience visually presents things as being. When we come to know that the door is bigger than the table, we endorse this proposition (and not another) because we visualise the door to be bigger than the table as part of our imaginative project; and we endorse it in belief (rather than supposition) because we believe that, due to our deliberate attention to our self-imposed constraints, our imaginative manipulation of the location and orientation of the table relative to the door has reliably and safely preserved the veridicality of the original episodes of perception and memory that we have started with – at least with respect to the size of the door and table, and within the relevant margin of error. The same applies to the other example.

To sum up, our imaginative experiences in the two examples partly ground our knowledge because they rationally determine the propositions that we come to know, while our attitude of belief towards those propositions is the result of our knowledge that our imaginative experiences are the product of a reliable and safe instance of imagining. The experiential knowledge schema is thus satisfied with respect to the rational determination of the contents of our beliefs by the imaginative experiences.

5. Further Objections

Wrong Kind of Ground? It might be objected that, although our beliefs in the examples do constitute knowledge, they are not grounded in the imaginative experiences concerned, but in some other mental states or processes. But this objection would be misguided. That we endorse the proposition that the door is larger than the table (and not, say, the proposition that the door is smaller than the table) is not rationally determined by our perception of the table, nor by our recollection of the door, given that neither presents both the table and the door in relation to each other. Instead, what is operative is the final imaginative experience of our project of visualising the two objects together, while mentally rotating the table into a position suitable for size comparisons. Correspondingly, our conclusion that the tune lasts longer than the poem is not (or at least need not be) based on our introspective insight that our episode of auditorily imagining the first lasts longer than our episode of auditorily imagining the second, but instead on our imaginative experience of the tune going on even after the recital of the poem has come to an end. That is, we compare the different durations of what we imagine, and not of our imaginative experiences themselves.

Wrong Kind of Knowledge? Similarly, it might be insisted that the kind of knowledge that we acquire is not propositional knowledge of contingent facts that we could also procure on the basis of perception, but rather modal, conditional, recognitional, or introspective knowledge.

It may very well be that our imaginative projects may enable us to come to know that it is *possible* to move the table through the door, or to learn that the melody *would* outlast the words if we were to sing them together, or to *auditorily recognise* the difference in length (which is a non-propositional form of knowledge or capacity). But this does not mean that we do not also acquire factual propositional knowledge that is open to perception as

well. That the door is bigger than the table is a fact about the actual world, not a modal or counterfactual truth. Correspondingly, we can see that the door is larger than the table, even if we cannot see possibilities or conditional connections. The same is true of the other example which is concerned with the hearable duration of certain series of sounds.

In addition, the kind of knowledge in question is not introspective. We do not come to believe that the door is bigger than the table because we first come to introspectively believe that our imaginative experience presents the door as being bigger than the table and only then draw our conclusion with the help of the ancillary belief that our visual experience is reliably and safely veridical. More specifically, while the ancillary belief is responsible for the fact that we endorse our conclusion in belief, which specific conclusion we draw is just a matter of abstracting from, and conceptualising, the content of our imaginative experience. There is no need for forming an additional introspective belief about this content, just as there is no such need in the case of perceptual belief (Martin, 1992).

Apriori Extraction vs. Empirical Acquisition of Information. A further objection claims that imaginative experiences cannot play the same epistemic role as perceptual experiences, even if only partially, because imagination – unlike perception – is not a source of knowledge. However, while it is certainly true that imagination does not provide us with new evidence, it is important to note that the acquisition of the kind of knowledge in question does not require the acquisition of new information. What our imaginative agency does in the two examples is to extract information that is already contained in the total evidence available to us, but which has not yet been accessible to us given the specific way in which it has been distributed over several distinct mental episodes or states. Although we see the size of the table and recall the size of the door, we cannot, simply on this basis, recognise that the door is larger than the table. For the way in which the two sizes are presented prevents us from visually comparing them in the required way, because we do not have the right spatial perspective on the table and also do not experience the two objects in the same space. This is why the visual imagination (or some comparable real life action) is needed, by allowing us to adopt a more suitable point of view on the table and to merge this point of view with the one we already have on the door in our recollection of it.

The role of the imaginative experience is thus very similar to the role of deduction in the discovery of previously unknown consequences of certain empirical observations. When we see, on one occasion, that some blue car is longer than some red car and, on another, that the red car is longer than some white car, we can conclude – without having to take look at the blue and the white car together – that the blue car is longer than the white car. In some sense, our reasoning is empirical: our beliefs in its two premisses are based on perception. But, in another sense, our reasoning is apriori: once we believe the two premisses, we can draw the conclusion without the need for further empirical evidence. In the same way, our imagination-based acquisition of factual knowledge counts as empirical in one respect (it is also based on empirically gained knowledge), and as apriori in another (it extracts new information on the basis of our empirical knowledge without the need for further empirical evidence).

Particularity vs. Generality. An final doubt might arise with respect to the reference of the crucial imaginative experiences in the two examples. While some philosophers have argued that perceptual experiences possess only a general content (i.e. a content of the form ‘there

is some *x* that is *F*'), others have maintained that their content is particular (i.e. of the form 'a is *F*').¹⁶ Proponents of the particularist view may now insist that imaginative experiences lack the particularity of perception and thus cannot play the same epistemic role as the latter. In particular, our imaginative experience would at best put us in a position to learn that some *kind* of table of a certain size (i.e. tables with the size of the table in the shop) is smaller than some *kind* of door of a certain size (i.e. doors with the size of the door at our home); while we would need a further inferential step to conclude that the specific table in the shop is smaller than our particular door at home.

I am actually quite sympathetic with the idea that perception is particular, but imaginative experience is not (Dorsch, 2010a; Dorsch, 2010b; Dorsch, 2017b). In my view, imaginative experiences become referential in a similar way as depictions. Because how they present things as being does not nomologically depend on how some real things look like (e.g. even if we intend to visualise or paint a particular person, say, we are free to choose to 'alter' the appearance of the person when visualising or painting her), they may actually lack any referent. For instance, we can visualise or depict a type of man, without thereby visualising or depicting any particular man (Wollheim, 1998, p. 223). This illustrates that being a non-perceptual visual experience is not sufficient for referentiality. What is missing is some factor external to the occurrence of non-perceptual visual presentation – such as an additional thought or intention of the subject or artist concerned (e.g. what Peacocke, (1985) calls 'S-imagining'), some artistic conventions (e.g. if we depict a saint by depicting a man or woman with a certain attribute), some relevant fictional story (e.g. when we visualise someone with the appearance of Sherlock Holmes, our experience may 'by default' refer to this fictional character), or some other contextual aspects (Dorsch, 2017a, Part III).

Accordingly, I agree that there is a difference in how perceptual experiences and imaginative experiences refer to particular objects. But, in the two examples, the context established by the cognitive projects in question does fix the referents of our imaginative experiences in a suitable way. For instance, because we rely on our perception of the particular table and our recollection of the particular door, and because we visualise the two together with the explicit aim of visually comparing *their* actual sizes, it is ensured that our resulting visual experience is about *them*, despite the fact that it lacks the particularity present in perception.

This difference in referentiality highlights the fact that the claim that imaginative experience may play part of the same epistemic role as perceptual experience does – and should – not mean that there is no difference between perception- and imagination-based factual knowledge. In fact, we already came across another important difference, namely that imaginative experiences can only determine the content of knowledge, but not its attitude of belief. This reflects not only the fact that the two kinds of experience differ in some essential aspects, but also the fact that the opponents of the view that imaginative experience may ground knowledge in a perception-like manner defend more than the (trivial) claim that there are some epistemically relevant differences between the two kinds of experience.

6. Some Philosophical Consequences

The two examples show that imaginative experiences can, under the right circumstances, play the same epistemic role as perceptual experiences with respect to the rational determination of the propositional content of the belief concerned. More specifically, visualising a as being F , say, can ground knowledge that a is F if we know the imaginative experience to be sufficiently veridical and formed in a suitably constrained way that ensures reliability and safety (as well as aptness, sensitivity, etc.). But this is not the only interesting conclusion that we can draw in response to the examples.

I already noted three other important aspects of them. First, the examples illustrate – just like cases of knowledge based on pictorial experience – how the content and the attitude of beliefs are independently determined and may come apart with respect to the determining mental episodes or states involved. Second, they also show that, despite the partial overlap in epistemic role of perceptual experiences and suitably constrained imaginative experiences, there are important differences between the two, notably in their particularity and in their impact on attitude determination. Third, the examples highlight the epistemic – and, more generally, philosophical – significance of mental agency, given that imaginative experiences can partially ground knowledge only if they are the outcome of suitably constrained imaginative agency.

But accepting that imaginative experiences can satisfy the experiential knowledge schema and ground contingent propositional knowledge about the external world promises to be relevant for other philosophical issues, three of which I would like to briefly highlight: the nature of experiential knowledge, the epistemic role of imaginative thoughts and, most importantly in the current context, the possibility of learning from fiction.¹⁷

Experiential Knowledge. While the content of the knowledge that we acquire in the examples is determined in a non-inferential way by the sensory (e.g. visual) content of our imaginative experience concerned, its attitude is determined inferentially on the basis of our ancillary belief that we produced this experience in a reliable and safe (i.e. truth-preserving) way. This shows that the justification of experiential knowledge – that is, knowledge the content of which is the result of abstraction from, and conceptualisation of, sensory experience – can be partly inferential. If challenged, we should defend our belief about the door and table both by reference to our imaginative visual experience of them (the sensory element) and by reference to the reliability and safety of our imaginative project and the underlying perceptual or mnemonic experiences (the inferential element). In other words, experiential knowledge and inferentiality are compatible with each other – contrary to what is sometimes thought. This is in fact another consequence of the rational independence of attitude determination and content determination as part of the epistemic relation of grounding.

Imaginative Thoughts. In this article, I have argued that imaginative experiences can, under suitable circumstances, ground factual knowledge. What is striking is that, in contrast, imaginative thoughts can neither inferentially ground, nor constitute knowledge about contingent aspects of reality.¹⁸ That they cannot themselves be knowledge should be obvious, given that knowledge involves belief, while imaginative thoughts are different from, and independent of, belief. But imaginative thoughts are also incapable of (fully or partially) grounding factual knowledge. For instance, as noted before, inferences cannot lead us from

imagined (or supposed) premisses to believed conclusions (Greg Currie and Ravenscroft, 2003, Ch. 1).

That imaginative thoughts cannot ground knowledge is an indirect consequence of, and thus explained by, the fact that the attitude (or commitment) of belief – which is essential to judgements and beliefs, but lacking with imaginings and suppositions – is open to rational determination. In particular, once we recognise that we have sufficient rational support for believing a given proposition, we will come to adopt an attitude of belief towards that proposition (assuming that we are rational). Now, just like imaginative experience, imaginative thoughts cannot contribute to the rational determination of an attitude of belief. Hence, in order to serve as an inferential ground for knowledge, they need to be accompanied by some ancillary belief about their veridicality and good epistemic standing – in this case, that their propositional content is true and that they are formed in a reliable or safe manner (or whatever ensures good epistemic standing). But if we indeed take the propositional content of one of our imaginative thoughts to be non-accidentally true, we will (if we are rational) end up developing an attitude of belief towards the proposition in question. And any inference relying on this proposition as one of its premisses will take our newly acquired belief, and not our preceding imagination or supposition, as its starting-point. In short, we can rationally endorse a conclusion on the basis of some premiss only if, and partly because, we (come to) believe that premiss – even if we merely imagined it to be true beforehand.

Learning from Fiction. I started off this investigation with some brief considerations about the role of imagining in our engagement with fictions. The preceding discussion of how it is possible that we can acquire factual knowledge on the basis of imaginative experiences has two main consequences for the question of whether we can learn from fiction.

The first is simply that we can give a positive answer to this question, namely at least with respect to factual knowledge of the kind involved in the two examples introduced earlier. While watching a movie, we may first see the depiction of a doorway of a certain house or room and then, at a later moment, a depiction of a particular table. On the basis of these two experiences, we may visualise the door and table together and mentally rotate them until we discover that the door is bigger than the table. What we acquire is both particular factual knowledge (i.e. the table that was used as a prop for the movie is smaller than the door used as a prop) and general factual knowledge (i.e. tables of this size fit through doors of this size).

Of course, there is an important difference to the initial case: we now do not start our imaginative project with perceptions and recollections, but with pictorial (or cinematic) experiences. But there is no reason to assume that this matters epistemologically. For we know that cinematic depictions usually do not distort the sizes of the objects filmed, and that we are normally quite good at estimating the sizes of objects that are depicted in movies. Also, in this particular example, the resulting knowledge is perhaps not very useful to us. But this need not be so. We may be the owners of the two props and, for some reason, wish to move the table through the door. Or the table used in the film belonged to a historical person (or is an exact replica of the table of that person); and we have a genuine interest in coming to know whether the table is smaller than the door of the equally historical building concerned (e.g. because it is alleged that the table was used in that room to write a famous document).

The example under consideration might strike one as irrelevant because it does not really matter whether the film concerned is fictional or not. Indeed, it may be questioned whether we really learn anything *from fiction*. After all, it has been argued that photographs and films are transparent to the depicted objects (Walton, 1984), meaning that the relative sizes, which we visually experience and acquire knowledge about, turn out to be part of reality. For, if movies are indeed transparent, the sizes pertain first and foremost to the real props that were filmed, and only derivatively to any fictional table or door in the cinematic world. But, again, we can slightly change the example to accommodate this worry. The easiest way to do this is to assume that the movie in question is an animation that accurately portrays the relative sizes of types of object (i.e. tables of *this* size and doors of *that* size), and perhaps even of particular objects (i.e. *this* table and *that* door).

A final question is whether the fiction at issue has to be a sensory one. Instead of experiencing (moving) depictions of a table and a door, we might perhaps just read very detailed and illustrative descriptions of two such objects. Maybe certain authors are indeed capable of evoking in us visual images of such accuracy with respect to relative size that we are in a position to acquire the same kind of knowledge that we would have been able to acquire if we had watched a movie instead (or, indeed, seen the objects in real life). One problem, though, with this idea is that it is unclear whether descriptions of lengths can really be sufficiently precise if they are unit-free, or involve only units of incommensurable quantities (if they were to measure the two sizes in comparable units, we would already know which one is smaller, thus depriving our visual imagination of any epistemic function). In any case, there are at least *visual* fictions which put us into a position to acquire factual knowledge by engaging with them through our sensory imagination.

The second repercussion of the possibility of imagination-based knowledge for the issue of whether we can learn something from fiction is that the role of the imagination has to be rather limited in any fiction-based knowledge acquisition. For the reasons already spelled out earlier in this section, imaginative *thoughts* can at best play an enabling role. Imaginative *experiences*, on the other hand, may rationally determine the content of our knowledge, but not its attitude of belief. This determination by the sensory imagination restricts the kind of knowledge concerned to *perceptual* knowledge. That is, imaginative experiences can only ground knowledge of perceivable facts. Whenever fiction enables us to acquire other kinds of knowledge, imaginative experiences are – just like imaginative thoughts – limited to an enabling role.

This is in particular true of modal and moral knowledge, both of which figure prominently in the literature on learning from fiction.¹⁹ Assuming that the respective kinds of truth are not perceivable (e.g. we cannot literally see that something is necessary or immoral), they also cannot be imagined sensorily. At most, we can *infer* from the fact that we can visualise something, say, that it is possible (Martin, 2002b, p. 414); or, from the fact that we react with horror or shame to visualising a certain action, that this action is immoral. But, in both cases, what rationally determines the content of our knowledge-constituting belief is not the content of our visual imagination. That we judge the situation to be possible (rather than impossible) is determined by the content of our introspective judgement, namely that we are able (rather than unable) to visualise the situation. Similarly, that we judge the action to be immoral (rather than moral) is simply determined by the nature of our emotional response.

This is not to deny that most – if not all – cases, in which we acquire knowledge on the

basis of our engagement with fiction, do centrally involve imagining. But they usually do so, not because imagining *grounds* our respective knowledge, but rather only because it *enables* it – most notably because properly engaging with fiction is simply a matter of imagining what is fictional in the world concerned. In other words, even though learning from fiction is facilitated by imagining, it is not very often grounded in the imagination.²⁰

Notes

¹ See, for instance, Williamson, (2008, Ch. 5), Ichikawa and Jarvis, (2012), Balcerak Jackson, (2016a), Williamson, (2016), Strohminger, (2016) and the texts in Gendler and Hawthorne, (2002) and in Kind and Kung, (2016).

² Much of the following discussion is focused on the beliefs that are involved in propositional knowledge. For reasons of simplicity, I thereby assume that these beliefs partly constitute the instances of knowledge in question. But nothing important depends on this assumption, as long as it is accepted that knowledge involves and implies belief in one way or another – which even defenders of knowledge-first views usually agree on (see e.g. Williamson, (2000)).

³ Given that perceptual experiences present us with many different objects and features, which of these we come to form a belief about may also depend on our interests, the salience of features, and other contextual factors.

⁴ Often, what is said to be safe is not truth (or true belief), but knowledge. But what is meant by this is that the safety of truth is a necessary condition on knowledge. Safety may also be defined for methods of belief formation: a method of belief formation is safe just in case it would also lead to a true belief in the closest possible worlds whenever it actually leads to a true belief. See Williamson, (2000, Ch. 5) and Pritchard, (2005) for discussion.

⁵ See e.g. Bonjour and Sosa, (2003), Wright, (2004) and Pritchard, (2005) for discussions and defenses of the access condition.

⁶ See Alston, (1993, Chs. 1f.), who argues that, if perception is indeed reliable, then we can recognise the reliability of particular perceptual experiences (though not of perception as a whole) on the basis of their track record (see also Uebel, (1995)).

⁷ Balcerak Jackson, (2016b) identifies two other enabling roles of imagining, namely to formulate hypotheses which may then be empirically tested, and to allow us to reason through inferences in order to discover the logical or probabilistic connections between the premisses and the conclusion (see also Dorsch, (2016b)).

⁸ I already mention two other examples involving visual comparison and visual recognition, respectively in (Dorsch, 2012, Ch. 4).

⁹ Martin, (2002b, p. 414) and Hopkins, (2011, § 2) discuss very similar examples, albeit with a focus on, respectively, modal or conditional knowledge, rather than factual knowledge.

¹⁰ After having first introduced the idea of deliberate, self-imposed constraints on imagining and their epistemic role in Dorsch, (2005), I discuss it in much more detail in Dorsch, (2012, Ch. 4.7). Kind, (2016) later takes up and defends this idea, too.

¹¹ Indeed, empirical evidence suggests that there are gender differences with respect to mental rotation tasks (Kaufman, 2007).

¹² See Williamson, (2000, Ch. 7) and Pritchard, (2005) for discussions of sensitivity and its relation to safety and knowledge.

¹³ Two examples of such views are Pryor's dogmatism (Pryor, 2000; Pryor, 2004) and Chudnoff's presentationalism (Chudnoff, 2013, Ch. 3). It is less clear to me whether they also include Huemer, (2001, Ch. 5)'s or Tucker, (2013)'s versions of phenomenal conservatism. My own view is that, while perceptual experiences do not receive their *justificatory* force from their distinctive phenomenal character (which, for instance, imaginative experiences lack), their character is still crucial for their *motivational* force (Dorsch, 2017b).

¹⁴ See, e.g., Martin, (2002b) and Dorsch, (2010b) and Dorsch, (2017b) for more detailed phenomenological descriptions along these lines of the difference between seeing and visualising. Chudnoff, (2013) provides an equally compelling, but slightly different description in terms of a (seeming) awareness of the experienced objects and features as those elements of reality that render the experience veridical – again an aspect that is not part of the phenomenal character of visualising, say.

¹⁵ According to Scarisbrick, (1968), the portrait was treated as an accurate depiction of Anne even after her arrival at the court (e.g. Holbein's status at court did not change, which it presumably would have, had he been found out about embellishing the looks of Anne). This suggests that the portrait was indeed accurate.

¹⁶ See the debate between, say, Dretske, (1995) and Tye, (1995), on the one hand, and Burge, (1991) and Martin, (2002a) and Martin, (2002b), on the other.

¹⁷ The possibility of imagination-based factual knowledge has also an impact on the viability of certain philosophical theories of imagining. For instance, this possibility threatens to undermine the *Epistemological Account* of imagining, given that it claims that the fundamental nature of imagining has to be spelled out partly in terms of its inability to ground propositional knowledge about the external world (O'Shaughnessy, (2003); see Dorsch, (2012, Part II) for discussion). On the other hand, the *Dependency Account*, which identifies imagining with the representation or simulation of perceptions, judgements and other cognitive episodes (Hume, (1739/2007), Peacocke, (1985), Greg Currie and Ravenscroft, (2003) and Martin, (2002b)), has no obvious answer to why imaginative experiences lack a belief-like attitude (after all, recollections do possess one, despite also being identified with representations of perceptions), and why the mental activity involved in the examples of imagination-based factual knowledge count as *imaginative agency* (see Dorsch, (2012, Part III) and Dorsch, (2016a) for discussion). In Dorsch, (2012, Part IV), I argue that the *Agency Account* of imagining, according to which imagining is essentially a mental action in which we control (at least to some extent) what we are imagining, is best placed to explain these and other central aspects of imagining (this view is also defended in Wittgenstein, (1984), Scruton, (1974) and McGinn, (2004)).

¹⁸ Of course, if it is true that introspective knowledge is grounded in the mental episodes or states introspected (Peacocke, 1998), then imaginative thoughts can at least be grounds for introspective knowledge.

¹⁹ See, for instance, Nussbaum, (1990), Gregory Currie, (1995), Carroll, (2002), Stokes, (2007) and some of the contributions to Kind and Kung, (2016). Mikkonen, (2013) provides a nice overview of the debate on learning from fiction and argues that fiction enables us to acquire philosophical knowledge, which should be treated similarly to modal and moral knowledge in this context.

²⁰ Acknowledgements.

Bibliography

- Alston, William (1993). *The Reliability of Sense Perception*. Ithaca: Cornell University Press.
- Balcerak Jackson, Magdalena (2016a). "Justification by Imagination". In: *Perceptual Memory and Perceptual Imagination*. Ed. by Fabian Dorsch and Fiona Macpherson. Oxford: Oxford University Press.
- (2016b). "On Imagining, Supposing and Conceiving". In: *Knowledge Through Imagination*. Ed. by Amy Kind and Peter Kung. Oxford: Oxford University Press.
- BonJour, Laurence and Ernest Sosa (2003). *Epistemic Justification: Internalism vs. Externalism, Foundations vs. Virtues*. Oxford: Blackwell.
- Burge, Tyler (1991). "Vision and Intentional Content". In: *John Searle and His Critics*. Ed. by Ernest Lepore and Robert Van Gulick. Oxford: Blackwell, pp. 195–213.
- Carroll, Noël (2002). "The wheel of virtue: Art, literature, and moral knowledge". In: *The Journal of Aesthetics and Art Criticism* 60.1, pp. 3–26.
- Chudnoff, Elijah (2013). *Intuition*. Oxford: Oxford University Press.
- Currie, Greg and Ian Ravenscroft (2003). *The Recreative Mind: Imaginations in Philosophy and Psychology*. Oxford: Oxford University Press.
- Currie, Gregory (1990). *The Nature of Fiction*. Cambridge: Cambridge University Press.
- (1995). "The moral psychology of fiction". In: *Australasian Journal of Philosophy* 73.2, pp. 250–259.
- Dorsch, Fabian (2005). *Imagination and the Will*. London: UCL Discovery. URL: <http://discovery.ucl.ac.uk/1300296/>.

- Dorsch, Fabian (2010a). "The Unity of Hallucinations". In: *Phenomenology and the Cognitive Sciences* 9.2, pp. 171–191.
- (2010b). "Transparency and Imagining Seeing". In: *Philosophical Explorations* 13.3, pp. 173–200.
- (2012). *The Unity of Imagining*. Berlin: De Gruyter, p. 485.
- (2015). "Focused Daydreaming and Mind-Wandering". In: *Review of Philosophy and Psychology*.
- (2016a). "Hume". In: *Handbook of Philosophy of Imagination*. Ed. by Amy Kind. London: Routledge.
- (2016b). "Non-Cognitivism about Visualising". Under review.
- (2017a). *Imagination*. London: Routledge.
- (2017b). "The Phenomenal Presence of Reasons". In: *Phenomenal Presence*. Ed. by Fiona Macpherson, Martine Nida-Ruemelin, and Fabian Dorsch. Oxford: Oxford University Press.
- Dretske, Fred (1995). *Naturalizing the Mind*. Cambridge (Mass.): MIT Press.
- Evans, Gareth (1982). *The Varieties of Reference*. Oxford: Oxford University Press.
- Gendler, Tamar and John Hawthorne (2002). *Conceivability and Possibility*. Oxford: Clarendon Press.
- Goldman, Alvin (1986). *Epistemology and Cognition*. Cambridge, Mass.: Harvard University Press.
- Hopkins, Robert (2011). "Imagination and Observation". Manuscript.
- Huemer, Michael (2001). *Skepticism and the Veil of Perception*. Lanham, Md.: Rowman & Littlefield Publishers.
- Hume, David (1739/2007). *A Treatise of Human Nature: a Critical Edition*. Ed. by David Fate Norton and Mary J Norton. The Clarendon edition of the works of David Hume. Oxford: Clarendon Press.
- Ichikawa, Jonathan and Ben Jarvis (2012). "Rational Imagination and Modal Knowledge". In: *Nous* 46.1, pp. 127–158.
- Kaufman, Scott B. (2007). "Sex Differences in Mental Rotation and Spatial Visualization Ability: Can they be accounted for by differences in working memory capacity?" In: *Intelligence* 35.3, pp. 211–223.
- Kind, Amy (2016). "Imagining Under Constraints". In: *Knowledge Through Imagination*. Ed. by Amy Kind and Peter Kung. Oxford: Oxford University Press.
- Kind, Amy and Peter Kung, eds. (2016). *Knowledge Through Imagination*. New York: Oxford University Press.
- Martin, M. G. F. (1992). "The Rational Role of Experience". In: *Proceedings of the Aristotelian Society* 93, pp. 71–88.
- (2002a). "Particular Thoughts and Singular Thought". In: *Royal Institute of Philosophy Supplement* 51, pp. 173–214.
- (2002b). "The Transparency of Experience". In: *Mind and Language* 17.4, pp. 376–425.
- McGinn, Colin (2004). *Mindsight*. Cambridge (Mass.): Harvard University Press.
- Mikkonen, Jukka (2013). *The cognitive value of philosophical fiction*. London: Bloomsbury.
- Nussbaum, Martha C (1990). *Love's knowledge: Essays on philosophy and literature*. Oxford: Oxford University Press.
- O'Shaughnessy, Brian (2003). *Consciousness and the World*. Oxford: Oxford University Press.

- Peacocke, Christopher (1985). "Imagination, Experience and Possibility". In: *Essays on Berkeley*. Ed. by Howard Robinson and John Foster. Oxford: Clarendon Press.
- (1998). "Conscious Attitudes, Attention and Self-Knowledge". In: *Knowing Our Own Minds*. Ed. by Crispin Wright, Barry C. Smith, and Cynthia Macdonald. Oxford: Clarendon Press, pp. 63–98.
- Pritchard, Duncan (2005). *Epistemic Luck*. New York: Oxford University Press.
- Pryor, James (2000). "The Skeptic and the Dogmatist". In: *Nous* 34, pp. 517–49.
- (2004). "What's Wrong with Moore's Argument?" In: *Philosophical Issues* 14, pp. 349–378.
- Scarbrick, J. J (1968). *Henry VIII*. Berkeley: University of California Press.
- Scruton, Roger (1974). *Art and Imagination*. London: Methuen.
- Sosa, Ernest (2007). *A Virtue Epistemology: Apt Belief and Reflective Knowledge, Volume 1*. Oxford: Clarendon Press.
- Stock, Kathleen (2013). "Imagining and Fiction: Some Issues". In: *Philosophy Compass* 10.8, pp. 887–896.
- Stokes, Dustin (2007). "Art and Modal Knowledge". In: *Knowing Art: Essays in Epistemology and Aesthetics*. Ed. by Dominic Lopes and Matthew Kieran. Berlin: Springer.
- Strohming, Margot (2016). "The Epistemology of Modality". In: *Analysis*.
- Tucker, Chris, ed. (2013). *Seemings and Justification: New Essays on Dogmatism and Phenomenal Conservatism*. Oxford: Oxford University Press.
- Tye, Michael (1995). *Ten Problems of Consciousness*. Cambridge (Mass.): MIT Press.
- Uebel, Thomas (1995). "Book Review: 'The Reliability of Sense Perception' by William Alston". In: *Mind* 104.415, pp. 610–614.
- Walton, Kendall (1984). "Transparent pictures: On the nature of photographic realism". In: *Noûs* 18.1, pp. 67–72.
- (1990). *Mimesis as Make-Believe*. Harvard: Harvard University Press.
- Williamson, Timothy (2000). *Knowledge and Its Limits*. Oxford: Oxford University Press.
- (2008). *The Philosophy of Philosophy*. Oxford: Blackwell.
- (2016). "Knowing by Imagining". In: *Knowledge Through Imagination*. Ed. by Amy Kind and Peter Kung. Oxford: Oxford University Press.
- Wittgenstein, Ludwig (1984). "Philosophische Untersuchungen". In: *Werkausgabe (Bd. 1)*. Frankfurt a. M.: Suhrkamp, pp. 225–580.
- Wollheim, Richard (1998). "On Pictorial Representation". In: *The Journal of Aesthetics and Art Criticism* 56.3, pp. 217–226.
- Wright, Crispin (2004). "On Epistemic Entitlement: Warrant for Nothing (and Foundations for Free)?" In: *Proceedings of the Aristotelian Society* 78, pp. 167–212.