



## Imaginative Vividness

**ABSTRACT:** *How are we to understand the phenomenology of imagining? Attempts to answer this question often invoke descriptors concerning the ‘vivacity’ or ‘vividness’ of our imaginative states. Not only are particular imaginings often phenomenologically compared and contrasted with other imaginings on grounds of how vivid they are, but such imaginings are also often compared and contrasted with perceptions and memories on similar grounds. Yet however natural it may be to use ‘vividness’ and cognate terms in discussions of imagination, it does not take much reflection to see that these terms are poorly understood. In this paper, I review both some relevant empirical literature as well as the philosophical literature in an attempt to get a handle on what it could mean, in an imaginative context, to talk of vividness. As I suggest, this notion ultimately proves to be so problematic as to be philosophically untenable.*

**KEYWORDS:** imagination, vividness, vivacity, Hume, perception

How are we to understand the phenomenology of imagining? In attempting to answer this question, one sort of descriptor often invoked concerns the ‘vivacity’ or ‘vividness’ of our imaginative states. Not only are particular imaginings often phenomenologically compared and contrasted with other imaginings on the grounds of how vivid they are, but imaginings are also often compared and contrasted with perceptions and memories on similar grounds. Such comparisons are drawn explicitly in terms of vividness by authors such as Scruton (1974), Scarry (2001: ch. 1), and Thompson (2014); additional examples are discussed throughout Brann (1991).

To my mind, however, there is something deeply puzzling about these descriptors. As natural as it may be to use ‘vividness’ and cognate terms in discussions of imagination—and I myself have done so in the past (see, e.g., Kind 2001)—it does not take much reflection to see that these terms are poorly understood. In what follows, I attempt to get a handle on what it could mean, in an imaginative context to talk of vividness. Though I here focus on vividness with respect to visual imagination, I suspect a similar conclusion holds true for vividness with

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respect to imagination in other sensory modalities. As we will see, the notion of vividness ultimately proves to be so problematic as to be philosophically untenable. While most of the paper will be devoted to establishing this conclusion, in the final section of the paper I reflect on its upshot. Unsurprisingly, perhaps, it turns out that this unrecognized confusion surrounding imaginative vivacity has had pernicious consequences for our theorizing about imagination.

## I. Some Preliminaries

In thinking about the notions of vividness and vivacity with respect to imagination, there could hardly be a more appropriate starting point than Hume's *Treatise*. Distinguishing between ideas and impressions in the opening section, Hume notes the 'great resemblance' between them in all manners 'except their degree of force and vivacity' (Hume [1739] 1985: §1.1.1). Then, turning specifically to ideas of memory and ideas of imagination, he reemploys similar descriptors:

We find by experience, that when any impression has been present with the mind, it again makes its appearance there as an idea; and this it may do after two different ways: either when in its new appearance it retains a considerable degree of its first vivacity, and is somewhat intermediate betwixt an impression and an idea: or when it entirely loses that vivacity, and is a perfect idea. The faculty, by which we repeat our impressions in the first manner, is called the MEMORY, and the other the IMAGINATION. 'Tis evident at first sight, that the ideas of the memory are much more lively and strong than those of the imagination, and that the former faculty paints its objects in more distinct colours, than any which are employ'd by the latter. When we remember any past event, the idea of it flows in upon the mind in a forcible manner; whereas in the imagination the perception is faint and languid, and cannot without difficulty be preserv'd by the mind steady and uniform for any considerable time. (Hume [1739] 1985: §1.1.3)

Hume was not the first to treat imagination as something of a pale imitation of perception. A century earlier, for example, Hobbes had referred to imagination as 'decaying sense' (1651/1968: 88). But the Humean notions of force and vivacity have had particular resonance across the intervening centuries and into the present day. That's not to say that contemporary philosophers have embraced either Hume's claim that these phenomenological markers are what distinguishes imagination from memory or his claim that they are what distinguishes both memory and imagination from perception; indeed, philosophers tend to see both these claims as problematic.<sup>1</sup> And rightly so. Not only might imaginings sometimes be confused with memories, or vice versa, but there might also be imaginings that are yet

<sup>1</sup> For discussion and criticism of Hume's use of the notions of force and vivacity, see Govier (1972), Traiger (2008), and Dorsch (2016). For a contemporary discussion of memory, perception, and imagination that explores

more vivid or forceful than memories. Likewise, empirical studies have suggested that perceptions might on occasion be mistaken for imaginings (Perky 1910). But even while rejecting the idea that force and vivacity serve as distinguishing phenomenological marks, contemporary philosophers continue to employ these terms as phenomenological descriptors—whether in an attempt to characterize the ‘phenomenal force’ of perception or to compare the vivacity of different sorts of imaginings—and they remain sympathetic to the view that, at least typically, our perceptions are appropriately described as more vivid and forceful than our imaginings (for contemporary discussions of perception involving force, see Pryor [2000] and Siegel and Silins [2015]; contemporary discussions of vivacity will be cited in the following section).

Despite relying heavily on the notions of force and vivacity, Hume himself does not tell us much about what they are supposed to mean. Nor has the matter received much attention by Hume scholars; as Saul Traiger notes, ‘There are surprisingly few detailed interpretations of Hume’s notion of vivacity’ (2008: 61). Moreover, while Hume’s initial use of these terms suggests that they are meant to pick out two different (if complementary) phenomenological aspects of mental states, he later explicitly equates them:

An idea assented to *feels* different from a fictitious idea, that the fancy alone presents to us: And this different feeling I endeavour to explain by calling it a superior *force*, or *vivacity*, or *solidity*, or *firmness*, or *steadiness*. This variety of terms, which may seem so unphilosophical, is intended only to express that act of the mind, which renders realities more present to us than fictions, causes them to weigh more in the thought, and gives them a superior influence on the passions and imagination. Provided we agree about the thing, ‘tis needless to dispute about the terms. (Hume [1739] 1985: Appendix)

To contemporary ears, however, the term ‘force’ seems to pick out something phenomenologically rather different from ‘vivacity’—even if we do not have a precise handle on what exactly is being picked out (See Brann 1991:196–97). In a helpful discussion of Hume’s use of phenomenological descriptors for ideas and impressions, Trudy Govier argues that he could have overcome various objections and counterexamples to some of his epistemological claims had he divided the phenomenological descriptors into two categories. In the first category, we have terms that refer to a mental state’s ‘staying power’—here we find Hume using words such as *strong*, *forceful*, *vigorous*, *steady*, *solid*, and *firm*. In the second category, we have terms that refer to a mental state’s ‘clarity or amount of detail’—here we find Hume using terms such as *vivacious*, *vivid*, *lively*, and *intense* (Govier 1972: 45).

I have no interest here in getting enmeshed in matters of Humean exegesis, nor will I attempt to evaluate the proposal Govier makes on Hume’s behalf. Rather, I call upon her discussion largely as a starting point for fleshing out the notion of

whether and in what ways Hume’s insights might be appropriately modified so as to be salvageable, see Byrne (2010).

vivacity and situating it with respect to other phenomenological descriptors. For our purposes, two things are especially important. First, as we have just seen, Govier offers us a helpful suggestion for understanding the Humean notion of vivacity, namely, that it has to do with ‘clarity or amount of detail’. Returning to the passage cited at the start of this paper, Govier points us especially to Hume’s claim that memory, in contrast to imagination, ‘paints its objects in more distinct colours’; ideas of imagination are instead more ‘faint and languid’ (Govier 1972: 46; Hume [1739]1985: §1.1.3). I will consider this suggestion at greater length in [section 3](#), below.

The second point that I want to highlight in Govier’s discussion concerns the association she makes between the notions of vivacity and vividness. The claim of synonymy between these two notions may initially seem worrisome; in ordinary parlance, there’s a tendency to associate vivacity with liveliness and to associate vividness with brightness and intensity. For example, Dictionary.com lists ‘lively; animated; gay’ as the first definition for the adjective ‘vivacious’ and lists ‘strikingly bright or intense, as color, light, etc.’ as the first definition for the adjective ‘vivid’. But this does not tell the whole story. The second definition listed for ‘vivid’ is ‘full of life; lively; animated’, and as noted by the *OED*, both these terms trace back etymologically to the Latin *vivĕre* (to live). Moreover, like Govier, philosophers discussing imagination and related mental states tend to use these terms more or less interchangeably. To give just one representative example, consider this statement from C. Wade Savage: ‘It may be supposed that however similar an hallucination and a perception may be, no hallucination is as *vivid* as a perception, and if the subject will only pay close attention to his experience, its *vivacity* will show whether the experience is a perception or an hallucination’ (1975: 269, my emphasis). Going forward, I will follow this general practice and assume throughout my discussion that these descriptors are all aiming roughly at the same phenomenological aspect.

But what is this aspect, exactly? In the following two sections, I will attempt to flesh this out. In [section 2](#) I explore the psychological literature. Given the considerable attention psychologists have paid to individual differences in imagistic vividness, one might expect those discussions to elucidate what such vividness amounts to. Unfortunately, that expectation will not prove to be fulfilled. In [section 3](#), then, I attempt to tackle the issue head-on. Though the notion of vividness has been widely employed in the philosophical literature, there have been very few comprehensive attempts to spell out what it might mean. That said, the literature does contain various promising (if undeveloped) suggestions that seem well worth exploring. Upon fleshing out such suggestions, however, we can see that they fail to live up to their promise.

## 2. Vividness in the Psychological Literature

Perhaps the earliest psychological study focusing on imagistic vividness was conducted by Francis Galton in 1880. Though Galton is today remembered more widely for his development of eugenics, his work on mental imagery has had considerable influence in shaping subsequent discussion of imagistic vividness. In

what has become known as the ‘Breakfast Table Questionnaire’, Galton asked 100 adult men (and, later, an additional 172 schoolboys) to ‘think of some definite object—suppose it is your breakfast-table as you sat down to it this morning—and consider carefully the picture that rises before your mind’s eye’ (Galton 1880: 301). He then asked a series of specific questions, including ones focused on illumination, definition, and coloring:

1. Illumination.—Is the image dim or fairly clear? Is its brightness comparable to that of the actual scene?
2. Definition.—Are all the objects pretty well defined at the same time, or is the place of sharpest definition at any one moment more contracted than it is in a real scene?
3. Colouring.—Are the colours of the china, of the toast, breadcrust, mustard, meat, parsley, or whatever may have been on the table, quite distinct and natural? (Galton 1880: 302)

Reporting on the results of this survey, Galton took the answers to the questions about illumination and definition as indicative of vividness—he reported on his results under the heading, ‘Vividness of Mental Imagery’—and he classified the answers according to the degree of vividness they displayed. At the high end, respondents described their mental imagery as ‘brilliant, distinct, never blotchy’ and, at least in some instances, as being as clear and bright as normal perception. At the low end, respondents used terms such as ‘dim’, ‘indistinct’, ‘incomplete’, and ‘vague’.

Almost a century later, psychologist David Marks developed an influential measure of imagery vividness—the Vividness of Visual Imagery Questionnaire (VVIQ)—as part of an investigation of the relationship between the vividness of a subject’s imagery and the accuracy of that individuals’ ability to recall visual details (Marks 1973). Having instructed subjects to visualize a familiar person or scene, Marks asked them to answer a series of 16 questions about the color, shape, and contours of the pictured person or scene. Answers were given according to the following scale:

1. – ‘Perfectly clear and as vivid as normal vision’
2. – ‘Clear and reasonably vivid’
3. – ‘Moderately clear and vivid’
4. – ‘Vague and dim’
5. – ‘No image at all, you only “know” that you are thinking of the object.’

It is perhaps worth noting that Marks does not use the word ‘visualize’ but rather asks subjects to, e.g., ‘Think of the front of a shop which you often go to. Consider the picture that comes before your mind’s eye’ (Marks 1973: 24). Analogous questionnaires have been developed for imagination in at least some other sensory modalities, such as olfaction (VOIQ, the Vividness of Olfactory Imagery Questionnaire) and audition (CAIS, the Clarity of Auditory Imagery Scale;

see, respectively, Gilbert et al. [1998] and Willander and Baraldi [2010]). Since I am here limiting my attention to vividness with respect to visual imagination, I focus only on the VVIQ.

The VVIQ and a descendant version, the VVIQ-2, have been widely used, and there have been considerable scientific attempts to find correlations between people's performance on these questionnaires and their cognitive performance on other tasks—in particular, there has been considerable psychological study of the relationship between high imagistic vividness (as measured by the VVIQ) and accuracy of memory recall, speed of response, and other cognitive tasks (for discussion, see McKelvie 1995).<sup>2</sup> Such correlations have been taken as vindication of the VVIQ. But what exactly has been vindicated? Even assuming such correlations show that the VVIQ measures something functionally salient about individuals' subjective experience of their visual imagery, we have not been given any reason to believe that this functionally salient property has anything to do with vividness. The correlations cannot themselves provide any such reason, and they cannot themselves shed any light on whether the questionnaire accurately tracks anything about the vividness of such visual imagery as opposed to tracking something else. More to the point, we might naturally wonder how a survey instrument like the VVIQ can help teach us anything about the notion of vividness itself.

It does not take a philosopher to note the shortcomings here (though for two brief philosophical reflections on this sort of problem with the VVIQ, see Schwitzgebel [2011: 52] and Thomas [2009: 450]). Cesare Cornoldi and colleagues (1991:395) note that vividness 'has been defined only intuitively as if the rating instructions given to subjects were based on a primitive dimension that is immediately comprehensible though not wholly definable'. Likewise, calling vividness 'one of the most irritating concepts' in imagery research, Michel Denis (1995: 136) notes that discussion surrounding the VVIQ leaves this concept largely undefined. In his view, invoking other concepts such as clarity and liveliness—which are themselves poorly defined—'just postpones the issue one step further. A mixture of two intuitive features hardly makes the resulting concept clearer' (Denis 1995: 136).

To my mind, things are even worse than Denis makes out. For it is not at all apparent that the VVIQ means to define vividness in terms of clarity; in fact, it would be very natural to interpret the ratings as stated as suggesting that vividness is something separate from clarity, something to be conjoined with it (e.g., 'Perfectly clear *and* as vivid as normal vision'), rather than as an aspect of vividness. Indeed, psychologists themselves disagree about how best to interpret the notion of vividness employed by the VVIQ; some take it to have one component and some take it to have two components (for discussion, see McKelvie 1995: 236–38). Ultimately, however, what the VVIQ is measuring depends on how the subjects themselves interpret the notion of vividness, and we have no special reason to believe that they are all interpreting it in the same way or that any of them are even employing the notion consistently across their own introspective reports.

<sup>2</sup>The VVIQ-2 doubles the amount of questions asked from 16 to 32 and also reverses the scale so that a higher rating goes with a higher degree of vividness.

But perhaps this conclusion is too quick. There are two different studies here worth noting that have attempted to address this very issue, studies that have attempted to determine what notion of vividness underlies subjects' responses to the VVIQ. Cornoldi and colleagues (1991) suggest that there are six relevant factors: color, presence of a rich context, emergence of salient features, richness of detail, well-defined shape and contour, and the generality of the represented object. Drawing on this work, Shinsuke Hishitani and Shiho Murakami (1992) take these findings to suggest that we should understand vividness in terms of the amount of perceptual information contained in imagery. We find a related suggestion in discussions of vividness in the philosophical literature. I take up this suggestion, along with several others, in the following section.

### 3. What is Vividness?

As we turn to the philosophical literature in an attempt to get more clarity on the notion of vividness, our task is made more difficult by the fact that philosophers writing on imagination tend to use the term 'vivid' in two slightly different ways. On the one hand, sometimes philosophers use the term 'vivid imagining' to demarcate a particular subclass of a speculative mental state. Consider Tamar Gendler's influential article on imagination in the *Stanford Encyclopedia of Philosophy*:

A number of contemporary discussions of the imagination distinguish between *mere supposition* on the one hand, and *engaged* or *vivid imagination* on the other. Roughly, mere supposition is what is involved in simple cases of hypothetical reasoning, whereas vivid imagination is what is involved in aesthetic participation, engaged pretense, or absorbing games of make-believe. (Gendler 2011; emphasis in original)

On this understanding of the notion of vividness, being a vivid imagining is an all-or-nothing affair; a mental state either belongs to this class of vivid imaginings or it does not. Moreover, 'vivid' here is not being used as a phenomenological descriptor. These points can be seen more clearly, perhaps, when we consider that this same distinction is given different names by different philosophers, as Gendler notes. In distinguishing between what he calls *enactment-imagination* and *suppositional-imagination*, for example, Alvin Goldman seems to be making a similar kind of distinction among speculative mental states (Goldman 2006). Just as 'enactment' is a nonphenomenological term, so too in this context is 'vivid'. Rather, in this first sense 'vivid' is a term used to designate a subclass of speculative mental states by means of certain functional characteristics they have, such as motivating action, giving rise to emotional responses, generating imaginative resistance, and so on.

It's a second, different sense of 'vivid' that is of interest to us here. In this sense, philosophers use the term to characterize and distinguish among the imaginings that are classed as engaged/vivid/enactment imaginings. Among the members of this class, some are more vivid than others. Moreover, this second sense of 'vivid'

is a phenomenological one; it characterizes and distinguishes imaginings from one another on experiential grounds.

The philosophical literature is rife with accounts of vivid imagining in the first sense of the term (see, e.g., Currie and Ravenscroft 2002; Goldman 2006; Nichols and Stich 2003). Such accounts attempt to explain the nature of imagination—in particular, the nature of a particular subclass of speculative mental state identified as vivid imagination. Considerably less attention has been paid, however, to accounting for vividness in the second sense of the term. While terms such as ‘vivid’<sup>3</sup> and its cognates are used to describe our imaginative experience, there have been relatively few attempts to provide an analysis of what this description means.<sup>3</sup> That’s the question I aim to tackle here.

Insofar as it seems plausible to say that imaginings vary with respect to vividness and also to say that our imaginings are typically (if not always) less vivid than our perceptual experiences, how should we understand the notion of vividness being deployed?

In what follows, I consider several different proposals for answering this question. In evaluating these proposals, I will be guided by four independent desiderata. First, there is the coherence desideratum: the suggestion must itself be coherent. In explaining the poorly understood notion of vividness in terms of some other concept, that concept in turn should be well-defined. Second, there is what might be called the *applicability* desideratum. The concept or concepts invoked to explain vividness and differentiate it from perceiving (and other relevant mental states) must be applicable to both imagining and perceiving (and other relevant mental states). Third, there is what might be called the *phenomenal difference* desideratum. The suggestion must point to something that at least typically phenomenally distinguishes our imaginative experiences from our perceptual experiences. And finally, the fourth desideratum is what I’ll call *adequacy*. It is not enough to offer a coherent suggestion applicable to both perceiving and imagining that picks out a phenomenal difference between these two experiences. Not just any phenomenal difference will do. Rather, the difference must be a phenomenal difference that seems relevant to vividness itself, that is, it captures something relevant to what we might mean by *vividness*.

The first proposal to be considered stems from a promising suggestion we encountered earlier in Govier’s discussion of Hume. For Govier, vividness concerns the ‘clarity or amount of detail’ contained in an idea. Govier suggests that Hume is onto this notion in the opening passage of *Treatise* I.I.3 when he claims that memory ‘paints its objects in more distinct colours’ than imagination; according to Govier, ‘The expression “paints its objects in more distinct colours” concerns the clarity and precision of the idea’ (Govier 1972: 46). Once again setting aside matters of Humean exegesis, we can consider the suggestion itself:

<sup>3</sup> One important exception is McGinn (2004); I discuss McGinn in more detail below. Critical discussions of vividness occur in Wittgenstein ([1948] 1980) and Budd (1989) though both Wittgenstein and Budd are more concerned to show that vividness is not a useful way to distinguish perceptual experience from imaginative experience than they are to show that there is something inherently problematic with the notion of vividness, as I’ll argue here.



CLARITY OR DETAIL: Imaginative vividness consists in the clarity or the amount of detail of the imagining.

Note that it's not clear from what Govier says whether she takes 'amount of detail' to be a gloss on the notion of clarity or whether she intends for it to be understood as a distinct property. In general, however, the clarity of a representation can come apart from its level of detail. A photograph of a dog might contain a high level of detail despite being slightly blurry while a child's line drawing of a dog might be not at all blurry but yet contain very little detail. Thus, I'll treat these two dimensions as distinct and assume that Govier intends to offer us a disjunctive definition. In assessing its plausibility, then, it will be helpful first to consider the two disjuncts individually:

CLARITY: Imaginative vividness consists in the clarity of the imagining.

DETAIL: Imaginative vividness consists in the amount of detail of the imagining.

In evaluating the first of these two claims, it's worth recalling that the notion of clarity was heavily featured in Galton's original 'Breakfast Table Questionnaire' and is also emphasized in the rating scale of the VVIQ. But its frequent invocation does not by itself settle the issue of its relationship to vividness.

Clarity is relatively well understood when it comes to perception; we have a coherent sense of what it means for one perceptual experience to be clearer than another. When I first wake up in the morning before my aging eyes have had time to adjust, my perceptual experience of my bedside clock is slightly fuzzy or blurry. When I look at it again moments later once I'm more fully awake, my perceptual experience is no longer fuzzy; this later perceptual experience has a higher degree of clarity compared to the earlier one. Likewise, after an afternoon swim, my perceptual experience when I first get out of the pool is fuzzier than my perceptual experience once the water is no longer in my eyes. Moments later, my perceptual experience has considerably more clarity.

Clarity is also relatively well understood when it comes to photography; we have a coherent sense of what it means for one photograph to be clearer than another. A photograph slightly out of focus has less clarity than a photograph completely in focus. Or consider editing a photograph using a digital photography program such as Lightroom. As the instruction manual notes, increasing the clarity setting 'adds depth to an image by increasing local contrast' (Adobe 2015: 161). More specifically, this setting adjusts the midtones in the photo; increasing the clarity setting will make the midtone edges more distinct, and this makes the whole photograph look sharper. Interestingly, it's a different setting—the saturation setting—that allows users to make changes to 'the color vividness or purity of the color' (Adobe 2015: 163).

Do these facts about clarity derived from perception and photography apply to imagination? If so, then that would suggest that when we say that one imagining has more clarity than another or that an imagining has less clarity than a perceptual

experience, we are claiming that the imagining is slightly out of focus or slightly fuzzy or that it needs fine-tuning to make it sharper. To my mind, however, these descriptions do not ring true. When I imagine someone or something—as when I imagine my spouse while he’s away—it does often seem natural to describe my imaginative experience as less clear than a typical perceptual experience of him. But my experience in imagining his face isn’t fuzzy in the way my first-thing-in-the-morning perceptual experience of the clock is fuzzy, and it is not like a photograph whose edges need sharpening. Neither of these descriptions seems to capture the respect in which my imagining lacks clarity. And it is hard to know exactly what words would capture this lack.

Although variations of clarity are well understood when it comes to photography and perception, that understanding does not easily transfer over to imagination. This proposal thus falters when it comes to the coherence desideratum. In fact, when we push the point, this proposal also seems to run into trouble with respect to the applicability desideratum. Given the discussion above, it is no longer obvious that clarity is the right notion to use when describing imaginings; or at least, this is not the same notion of clarity that we use in other visual contexts. Whatever it means for imaginings to lack clarity, this seems to be quite different from what it means for perceptions to lack clarity. Even if CLARITY were able to meet our other two desiderata, its failure with respect to our first two desiderata makes it hard to see how it could give us an adequate explanation of imaginative vividness. But if CLARITY is problematic that means that the disjunctive definition CLARITY OR DETAIL is likewise problematic (and the same problem would infect a corresponding conjunctive definition CLARITY AND DETAIL as well).

Of course, even if we reject both CLARITY and CLARITY OR DETAIL we can still consider DETAIL on its own. Does it do any better? This kind of requirement is perhaps what psychologists like Hishitani have in mind when they try to cash out vividness in terms of the degree of perceptual information contained. Perhaps it is also what philosopher Alex Byrne has in mind when he suggests that imaginative content is typically ‘degraded’ in comparison with perceptual content (Byrne 2010: 19).

We might start our investigation of DETAIL by reflecting again on perception and photography. Do some of our perceptual experiences have a higher level of detail or convey more perceptual information than others? In exploring this issue, we should first set aside those cases in which differences in detail seem to be due solely to differences in clarity. When my perceptual experience of the clock is sufficiently fuzzy that I can’t read the time, that perceptual experience is less detailed than one in which I can read the time. In this case, however, the reason that the first experience has less detail or carries less perceptual information than the second seems to be entirely a function of the difference in clarity between them. And we have already noted that these kinds of cases do not seem to capture what we are after.

Even having set aside those cases, however, there is still reason to be careful here, since the level of detail of a perceptual experience depends at least in part on the level of detail in the perceived scene. While the clarity of a representation depends solely on facts about the representation itself, how detailed the representation is seems to depend both on facts about the representation and on facts about what is being

represented. There is, perhaps, less detail to take in when I am viewing an empty classroom than when I am viewing the same room full of students. Likewise for the respective photographs. Of course, we can also imagine classrooms both empty and full, and although there is an analogous sense in which the first imagining will have a lower level of detail than the second, it is hard to see how this difference in level of detail could be relevant to imaginative vividness.

What about a perceptual experience of a dimly lit room or a photograph of that same room? Both of these might reasonably be said to be less detailed or to carry less perceptual information, than the corresponding perceptual experience and photograph in bright light. Here too, however, an analogous problem arises again because we can imagine the same room in both dim light and bright light, and the distinction between these two imaginings does not seem to track what is meant to be captured by distinctions drawn in terms of vividness. Similar considerations suggest that we should be pessimistic about a related suggestion for understanding imaginative vividness that one encounters in both the psychological and the philosophical literature:

BRIGHTNESS: Imaginative vividness consists in the brightness of the imagining.

But though reflection on the ways that perceptual experience varies in detail does not suggest to us a plausible way of understanding *DETAIL*, the philosophical literature on imagination contains a related suggestion that seems promising. It has often been noted that imaginings can be indeterminate with respect to visual properties. Consider Daniel Dennett's example of the striped tiger (1969). Imagine a tiger. Presumably, the tiger you have just imagined has stripes. But how many stripes? Many people report being unable to answer the question. Their imaginings are indeterminate with respect to the number of stripes. Of course, tigers themselves always have a determinate number of stripes, and, likewise, when you see a tiger, your perceptual experience typically represents that tiger as having a determinate number of stripes. So in this way your imagining of a tiger is less determinate—and hence less detailed—than your perceptual experience of the tiger. The former carries less perceptual information.<sup>4</sup>

This indeterminacy is not an isolated phenomenon. To borrow another example of Dennett's: Imagine a tall woman wearing a hat. Once you have that image in mind, consider the following questions: What kind of hat was it? Were the woman's ears visible? Was she sitting or standing? Was she indoors or outdoors? Was she wearing shoes? Was she wearing a watch? I suspect that you were able to answer some of these questions—probably you knew whether it was a baseball cap or a floppy sunhat or a beret, for example—but I also suspect that there were other questions that you were unable to answer. You might protest that you could not answer the question about her shoes, say, because you only imagined her from the

<sup>4</sup> For a related example involving a speckled hen, see Armstrong (1968). For Dennett, the indeterminacy of mental images shows that they cannot be picture-like. Though I think he is correct in saying that mental images are often indeterminate, I do not think that fact supports this conclusion; see Kind (2001).

neck up. The same kind of ‘indeterminacy’ would affect your perceptual experience were she to be visible to you only from the neck up. But note that even if you imagined her from head to toe, your imagining likely did not contain sufficient detail to enable you to answer whether she was wearing a watch.

Understanding the notion of detail in terms of determinacy thus seems promising. Not only is determinacy reasonably well defined, but it applies to both perception and imagination. This proposal thus seems to satisfy our first two desiderata. It also does reasonably well with respect to our third desideratum about phenomenal difference as the notion of indeterminacy seems to get at something true about the difference between perceptual experiences and imaginings. Granted, it might not mark a sharp distinction between the two. Perceptual experiences might occasionally be indeterminate in various respects; if I am very far away from a tiger, for example, my perceptual experience might not represent it as having a determinate number of stripes. Pointing to cases like this, Colin McGinn (2004) suggests that we can better differentiate imagination and perception by focusing on a closely related property that is occasionally confused with indeterminacy, a property he calls saturation:

Every point in the visual field is such that some quality is manifest there, whereas this is not true of the image. The percept represents the world as dense, filled, continuous; but the image is gappy, coarse, discrete. I am speaking phenomenologically here: at every point of the phenomenal visual field you can find a manifested quality (even if that quality is on the borderline between two other qualities), but in the image there are points at which nothing is manifested—not even an indeterminate quality. I form an image of my mother’s face, but there are many points at which my image is utterly silent; I just select certain features as sufficient to make it an image of my mother, and I leave the rest blank. But if I see my mother’s face, there is no blank anywhere—there is phenomenological plenitude. . . . Thus the percept is saturated and the image unsaturated in this sense, there is a special ‘poverty’ in the image, to use Sartre’s terms. (2004: 25–26)

It is not clear to me that saturation is really a property distinct from indeterminacy as opposed to being a species of indeterminacy. But for our purposes here, we need not worry much about the issue. Discussions of the relation between perception and imagination (and other visual states such as hallucination) often take up the question of whether they are different in nature or only in degree and also the question of whether we can draw a sharp distinction between them. Indeed, these issues play a key role in discussions of Hume’s invocation of force and vivacity. But in attempting to make sense of the notion of imaginative vividness, we need not take a stance on these issues. Thus, the fact that indeterminacy does not draw a sharp distinction between perception and imagination does not preclude it from being useful for our purposes here. For indeterminacy to be an appropriate means of fleshing out *DETAIL*—for it to satisfy the phenomenal difference desideratum—it

need not be the case that perception is *never* indeterminate; we need it to be the case only that imaginings vary along the dimension of determinacy and that they are *typically* less determinate than perceptual experiences, a claim that McGinn grants.

Of course, in fleshing out *DETAIL*, one might want to throw considerations of saturation into the mix along with considerations of determinacy. An imagining that is unsaturated does present less detail than a perception that is saturated. Thus, insofar as McGinn's claims about saturation seem plausible—that is, insofar as it seems plausible that perceptual experiences are saturated in a way that imaginings are not and that imaginings vary from one another in their degree of saturation—it might be best to understand the notion of detail in terms of both determinacy and saturation.

Understanding *DETAIL* this way gives us a proposal that does very well with respect to our first three desiderata. Unfortunately, however, the proposal founders when it comes to our last desideratum, namely, the adequacy desideratum. In order for *DETAIL* to be an acceptable proposal, it is not enough for the notion of detail to be well-defined, and it is not even enough for imaginings to vary along this well-defined dimension. Rather, it must also be the case that variations in detail account for the kinds of variation that are meant to be picked out by characterizations in terms of vividness. Is it because of the indeterminacy of my tiger imagining that it is less vivid than my perceptual experience of a tiger? Is an imagining more vivid when—and only when—it is more determinate?

To my mind, the answers to both of these questions is no. My imagining of a solid black panther may be more determinate than my imagining of a tiger, but that does not seem to be what affects which imagining would typically be characterized as more vivid. Even if the number of stripes on the imagined tiger is indeterminate, I might still imagine it more vividly than I do the panther. Similarly, even if my imagining of the black panther is somehow fully determinate, it still seems that it might be reasonably characterized as less vivid to me than my perceptual experience of the panther. Perhaps this latter point is easier to accept when we focus on a case where it is more plausible that the imagining is fully determinate—perhaps a case when we compare seeing a solid white wall (which takes up one's entire visual field) with imagining that same white wall.

Granted, there may be other related notions that could be utilized instead. Perhaps, for example, what matters is not the amount of detail but the kind of detail. Consider scientific illustrations, e.g., the sorts that are often used in textbooks. Medical textbooks often utilize anatomical drawings rather than photographs and so do botany textbooks. It is precisely by leaving out some details that the drawing manages to be more helpful than the photograph. By eschewing maximal detail, the drawing manages to make the details that are included more salient. Perhaps vivid imagining works the same way, i.e., perhaps we could capture vividness in terms of salience or relevance of detail rather than in terms of amount of detail. But here we are going to have to explain what makes some details more salient or relevant than others, and it is hard to see how to do that in a way that does not beg the question. I suspect that similar worries will arise for other alternatives in this general vicinity. As promising as *DETAIL* initially seems, its failure to satisfy the adequacy desideratum makes it an untenable proposal.

Are there other suggestions we might try? Does vividness perhaps derive from color, one of the relevant factors delineated by the psychologist Cornoldi? Following Govier, we took Hume's remark that memory 'paints its objects in more distinct colours' than the imagination to relate to the clarity of imagining, but perhaps we should take it more literally—maybe it is the colors themselves that matter. Likewise, though we earlier rejected BRIGHTNESS, perhaps its intuitive force derives from the relation between brightness and color vibrancy. And as we also saw earlier, references to vividness in the context of digital photography often relate directly to color saturation and color vividness. Of course, using the notion of color vividness in a definition of imaginative vividness only pushes our problem back a step, and we would have to figure out how such a notion could be extended to nonvisual imaginings, but perhaps there is still something relating to the color intensity of our imagining that matters to vividness.

COLOR: Imaginative vividness consists in the color intensity of an imagining.

Unfortunately, however, quick reflection suggests that COLOR fares no better than the other suggestions we have considered. Like DETAIL, COLOR falters with respect to the adequacy desideratum. Imaginings in black and white are typically characterized as just as vivid or even more vivid than imaginings in color. Try to imagine the shower scene in *Psycho*, for example, the knife coming at Marion Crane (Janet Leigh) as she screams in horror. Now try to imagine changes to that scene—Marion ducks as the knife comes toward her, and she then attempts to flee. When I carry out these imaginings, I can do so in a way that would normally be characterized as vivid, but these imaginings are in black and white. When I imagine my great-great-grandmother, who died before I was born, I might imagine her in black and white, perhaps in the style of old photographs, but the fact that my imagining is in black and white seems completely irrelevant to whether the imagining would be characterized as vivid or not.

Before concluding this part of our discussion, I will consider one more proposal, one that takes vividness to consist in an amalgam of all the features we have discussed so far. According to this suggestion, vividness emerges through an appropriate combination of clarity, detail, brightness, color, etc.—or perhaps a combination of the six relevant features highlighted by psychologist Cornoldi (color, presence of a rich context, emergence of salient features, richness of detail, well-defined shape and contour, and the generality of the represented object)—where what matters is that enough of these rise above a certain threshold even if others remain below it. Just as digitally editing a photograph to make it more vivid might involve fine-tuning it along several different dimensions, so too must an imagining be appropriately fine-tuned. Let us call this suggestion COMBO:

COMBO: Imaginative vividness consists in a combination of relevant features, with at least some of them rising above a certain threshold.

The exact proposal here would need to be fleshed out quite a bit; we need to know quite a bit more about the different tuning knobs, so to speak, and their relation to one another. It might be that an imagining still has to rise to a certain minimal level along each of the various dimensions in order for the high degree of one dimension to be able to make up for a deficiency along another dimension. Or it might be that these dimensions do not receive equal weightings. Some of them might be more important to vivacity and thus have higher thresholds. And so on. But COMBO certainly sounds initially plausible. It explains, for example, why a very clear and detailed black-and-white imagining can be very vivid even though it lacks color or why a very colorful and bright imagining can be very vivid even though it is significantly indeterminate. More generally, by considering all of these relevant features as an amalgam, COMBO avoids many of the objections that have arisen when such features are considered in isolation from one another.

It is hard to assess COMBO's plausibility, let alone rule it out, in the absence of a more fully fleshed-out proposal, and I have not yet found one in the relevant psychological or philosophical literature. For example, though Cornoldi determines that some of his six highlighted features affect a subject's vividness ratings more than others, he reports that the 'main result' of the research team's experiments regarding vividness was that 'all of the six identified characteristics contributed in some way to the vividness of the image' (Cornoldi 1991: 308). Obviously, much more would need to be said to flesh out a definition like COMBO. Likewise, Budd suggests that to take vividness 'at face value' is to take it as 'a function of the degree of apparent, brightness, saturation of colour, definiteness of outline, clarity and sharpness of focus, and so on' (Budd 1989: 104). Again, simply providing this kind of laundry list is really not enough to tell us anything meaningful about vividness. But doing anything more, such as fleshing out a proposal of this sort in any rigorous way, would be an enormously difficult undertaking. I also suspect that it is unlikely to bear fruit. There is simply not enough content to the notion of vividness for it to withstand precisification in this way. Though we can identify an assortment of individual features that in various ways underlie our judgments of vividness and though we have a reasonably good handle on at least some of those individual features, it seems overwhelmingly likely that there is no way to analyze the concept of vividness into some combination of those features. Thomas's assessment of the empirical research on imagistic vividness seems to be in a similar vein: 'Perhaps different subjective image features such as clarity, apparent brightness, level of discriminable detail, stability of the image (whether it can be held in consciousness for a long time, or quickly fades), and so forth, in fact vary independently of one another, but tend to get indiscriminately lumped together as "vividness"' (Thomas 2009: 450).

In describing our imaginings, there is no question that we are inclined to differentiate them from one another on grounds of vivacity or vividness, and there is also no question that, at least typically, we are inclined to treat them as lower in vivacity or vividness than our perceptual experiences. When pressed to say more, we cling to metaphors—the imagining is like a faded photograph or an indistinct photocopy (metaphors like these are invoked in, e.g., Byrne [2011: 118] and McGinn [2004: 34]). If we then we push on these metaphors, if we try to

understand what they are really telling us about the notion of vividness, we come up largely empty. About the most we can say is that imaginings that are vivid are more perception-like than those that are not vivid, but here too, when pressed to say how they are more like perception, we again come up largely empty.

Might it not be that we are coming up empty because vividness is simply a primitive notion? Perhaps the reason we cannot find an acceptable analysis of the notion is simply that it is unanalyzable. While it is hard to know exactly how to argue against this kind of suggestion, I will note here simply that vividness does not seem to have much in common with other notions in which analysis bottoms out—even other such phenomenal notions. Rather, characterizations of vividness seem more like characterizations of detail, brightness, and so on—characterizations about which it seems reasonable to expect some explanation could be provided.

Ultimately, then, however natural it is to think in terms of vividness and vivacity when thinking about our imaginings, it is not clear that these intuitive notions can bear any real weight.

#### 4. Why it Matters

At this point, as so often happens in philosophical discussion, the “So what?” objection undoubtedly rears its head. So what if these notions are poorly understood? How does this matter for philosophical theorizing? Unless we are attempting to defend some kind of Humean taxonomy of ideas and impressions—which we are not—we may wonder how these reflections on the notion of vividness really matter. As I want to suggest in this final section, the unrecognized unclarity in the notion of vividness can have unfortunate consequences for attempts to understand both the nature and usefulness of imagination. I will here mention two such consequences.

First, while the literature on imagination contains numerous accounts of imagining, there continues to be disagreement about its basic nature. Such disagreement leads to various pernicious results, among them the fact that it often seems that there is not a single notion of imagination invoked across discussions of imagination in different philosophical contexts. What philosophers mean by imagination in discussions of aesthetics seems fairly different from what philosophers mean by imagination in discussions of modal epistemology, and both of these seem different again from what philosophers mean by imagination in discussions of empathy and simulation (for discussion, see Kind 2013). If we’re to have any hope of getting clear about whether and how imagination can play these many different roles, we need to be clearer about the nature of imagination. Granted, an account of the nature of imagination is different from an account of the nature of the phenomenology of imagining, and here we have been focused on the latter. But insofar as there are natural connections between the two, continued reliance on unclear (or at least, not well understood) notions such as vividness in discussions of the phenomenology of imagination will likely have adverse effects on our attempt to get clearer on the nature of imagination.



To help elucidate this point, consider one very specific example. When philosophers invoke imagination in discussions of our engagement with works of fiction, it is typically considered important that imagination has the power to produce affective responses. But imagination seems to lack this power when it comes to modal epistemology. In short, we get emotional about literature in a way we do not about thought experiments. In attempting to account for this difference, one might be tempted to rely on an explanation that involves vividness—the more vivid the imagining, perhaps, the more likely it is to generate emotion, and imaginings in connection with literature tend to be more vivid than imaginings in connection with modal epistemology. But if the argument of this paper is correct, then it is not clear that the notion of vividness could bear this kind of argumentative weight.

The second consequence I will here mention relates to the first. For in thinking about potential uses of imagination and in thinking about what we can do with imagination, we are often guided by comparisons between imagination and perception. Imagination might be thought to play a role in modal epistemology and in games of make-believe, for example, because we cannot literally perceive unactualized possibilities or the pretend bears (for a survey of the role imagination plays in modal epistemology, see Kung [2016]; for a seminal discussion of the role imagination plays in games of make-believe, see Walton [1990]). In these contexts we must rely on something other than perception and, more generally, imagination is thought to operate in contexts where perception would not be applicable. But this same guiding tendency also suggests that imagination does not—indeed, perhaps that even cannot—operate in contexts in which perception *is* applicable. In particular, when it comes to gaining knowledge about the world, a domain in which perception features prominently, it often seems that imagination has no role to play.

To my mind, this is a mistake, and I have argued elsewhere that imagination has more epistemic significance than is typically thought (Kind 2016; Kind, forthcoming). Here is not the place to rehearse those arguments; for our purposes here what is important is how a focus on imaginative vividness contributes to the denigration of the epistemic significance of imagination. In short, the more we think of imagination as a pale reflection of perception—as a defective or degraded version of it—the more we will be disinclined to think that it can teach us anything about the world. It is not hard to see how the notion of vividness feeds into this. Were we to have some adequate understanding of the notion of vividness and of how the content of visual imaginings differed from the contents of our perceptual experiences, then we could address the matter head-on. But absent that, a confused and poorly understood notion of vividness simply muddies the waters. Though such a notion conveys the suggestion that imagination falls short of perception, it fails to give us a real sense of the way in which imagination falls short, and hence the notion fails to give us a real sense of whether the way in which imagination falls short is epistemically significant.

Granted, there are some ways in which imagining falls short of perception that have nothing to do with vividness. In particular, imagination is subject to the will in a way that perception is not, and it is therefore not world-sensitive. This lack of world-sensitivity—the fact that imaginings can depart, even wildly, from the

world as it is—goes a long way toward explaining why imagination is thought to be epistemically irrelevant. But insofar as there remains a stubborn opposition to the epistemic usefulness of imagination even once arguments about its world-insensitivity are addressed, I suspect that other factors—factors such as vividness—are likely to be playing some role. To give just one example of where we might see this dynamic come into play: Sartre ([1940] 2010) relies on what he calls the *poverty* of the image in making his argument against the epistemic relevance of imagination. While he means this poverty to be capturing the *uninformativeness* of the image (an uninformativeness that derives from the relation of imagination to the will), it has sometimes been interpreted as a claim about the vividlessness of imagination (see, e.g., Scarry 2001).

To reappropriate a Humean phrase we have encountered more than once throughout our discussion here, it is our understanding of the notion of vividness that is faint and languid. As this paper has suggested, the notion of vividness is poorly understood; perhaps even worse, it seems recalcitrant in the face of analysis. To make philosophical progress on our understanding of imagination, then, we would thus do best to retire our reliance on this notion entirely.

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