Imagistic Imagining Part I

Imagery, Attitude Imagining, and Recreative Imagining

3.1 Introduction

In Chapter 1 I introduced a distinction between two senses of 'imagine': imagistic imagining ("I-imagining") and attitude imagining ("A-imagining"). That distinction is a foundational piece of this book's larger framework for explaining imagination. The characterizations I've so far offered of each leave it open whether and to what degree they pick out the same set of mental states and processes. Earlier I simply stated my view on the matter: A-imagining and I-imagining share instances, yet neither's instances are a sub-set of the other's. Some, but not all, I-imaginings are also A-imaginings; and some, but not all A-imaginings are also I-imaginings. This suggests that we can't expect an explanation of one to be a full explanation of the other. Yet neither can we pursue entirely independent explanations of each; our account of one must be answerable to the constraints imposed by our account of the other.

It is not in itself a radical proposal that only *some* uses of mental imagery constitute cases of imagining in the A-imagining sense—at least, not insofar as my conception of A-imagining meshes with other conceptions of attitude imagining in the literature. But it's important to see what arguments can be made in defense of the claim, as it presents a direct challenge to at least one other influential proposal for what constitutes the broadest classes of imaginings. This is the idea that there is a class of "recreative" (Currie & Ravenscroft, 2002) or "enactive" imaginings (Goldman, 2006a) whose nature it is to "recreate," "simulate," or "stand-in" for some other, non-imaginative type of mental state. Within this class, there are sometimes said to be many different imaginative "counterpart" states that serve to simulate or recreate a wide variety of non-imaginative mental states (Arcangeli, 2018). Were there such a broad class of imaginings, both A-imaginings and I-imaginings would fall within it as sub-types. The notion therefore assumes a kind of unity to A- and I-imaginings that I reject. Influential though it is, the idea that imaginings are, in the broadest sense, "recreations" or "simulations" of

¹ Cf. Nanay (2016): "Propositional imagination can, of course, also involve the exercise of mental imagery, so these two categories are not meant to be exclusive" (p. 132, fn.1). See also Van Leeuwen (2013), Kind (2001), Williamson (2016), and Gaut (2003).

other kinds of mental states presents an impediment to understanding and explaining imagination. Or so I will argue here—most pointedly in section 3.7.

The first matter of business, however, is to explain in more detail the distinction between A-imagining and I-imagining that I briefly introduced in Chapter 1, and to argue that the extension of each notion only partially overlaps with that of the other.

3.2 Imagistic Imaginings and the Nature of Mental Imagery

Imagistic imaginings (or "I-imaginings") are cases of thought that involve mental imagery as a proper part. Mental imagery, at a first pass, is a kind of mental state that seems, to the person having it, to involve image-like mental states, or states that have sensory character, and where such states arise not from an external stimulus impinging on a sense organ but from endogenous causes of some kind. As earlier remarked, The Oxford English Dictionary also links imagining to mental imagery in its first definition of 'imagine,' which is, "To form a mental image of...to picture to oneself (something not present to the senses)" (Oxford English Dictionary, 2009). Imagistic imagining, and the mental imagery it involves, occurs when we describe ourselves as visualizing, or as having a mental image, or as "seeing an image with the mind's eye." It also occurs within other sense modalities, when we sing a song silently to ourselves, or imagine the smell of roses. To say that someone has made use of a mental image in thought may seem to involve a substantive, "heavy-duty" (see Chapter 2) claim about the nature and format of the mental representations in the person's mind—one that goes beyond common sense and folk psychological platitudes. But it need not. It can remain an open question how we are to understand the nature of the (seemingly) picture-like (or sensory-experience-like) mental states that we pick out in this intuitive, firstpersonal way, and from which flow various platitudes about mental pictures and the mind's eye. While there is a long debate in philosophy and psychology—viz., the imagery debate (Block, 1981; Tye, 1991; Pearson & Kosslyn, 2015)—concerning the representational format of states underlying mental imagery, there is no similar debate about whether there is a phenomenon of people having mental states that seem to them to be image-like. It is the underlying nature of this phenomenon that's at issue in the imagery debate.

I-imagining, as I have characterized it, is similar but not equivalent to what some others refer to as "sensory imagining" (Kung, 2010), "perceptual imagining" (Currie & Ravenscroft, 2002), and, indeed, "imagistic imagining" (Van Leeuwen, 2013). Each of these terms is used to mark a form of thought that features mental images essentially—images keyed to some sense modality or other. Where my notion of I-imagining perhaps stands out is in explicitly including *all* (apparently) image-involving thought within its extension (though this fits with

Van Leeuwen's (2013) understanding of "imagistic imagining"). It is not always clear if others who invoke a notion of "sensory," "perceptual," or "imagistic" imagining mean to include only some image-involving thought within the class, or all.² I choose the term 'imagistic imagining' over these other terms in order to highlight the idea that, when theorizing about imagining in this sense, we are focused on the apparent imagistic format of the mental states, as opposed to any particular use or functions to which the mental states might be put, and as opposed to any different "attitudes" we might take toward states involving such imagery. It is within one's right to hold that, in addition to this "format sense" of imagistic imagining, there is a distinct "attitude sense" of imagistic imagining, where "imagistic imagining" in the attitude sense marks a distinctive kind of mental-image-involving process (Arcangeli, 2019). In my terms, this would be to say that there are A-imaginings that both involve mental imagery and constitute a sui generis mental process, mode, or attitude—one that is irreducible to collections of judgments, memories, desires, decisions, and so on. My argument occurring over the course of this book—is that we needn't countenance such a process or attitude; all image-involving A-imaginings can be identified with a more basic collection of (image-involving) folk psychological attitudes, such as beliefs, desires, and intentions.

3.2.1 Defining 'Mental Imagery'

Despite its ambition for neutrality, my first-pass characterization of mental imagery has controversial implications we should explore. First, if it is a requirement on mental imagery that it *seems* a certain way to the person having it (namely, to be image-like, or to involve sensory character), then there can no mental imagery that a person is not conscious of—no imagery that seems no way at all to the person having it. While that may be a happy conclusion for those who view imagining as an essentially conscious phenomenon, others will—rightly, I think—object that there can be unconscious episodes of mental imagery, just as there can be unconscious perception (Nanay, 2010, 2018b). It would, in any case, be question-begging to rule out the possibility of mental imagery we are not conscious of in our very definition of the phenomenon. Second, if a thought-episode's *seeming* to be image-like, or *seeming* to have sensory character, were sufficient for

² Currie & Ravenscroft (2002, p. 27) are clear that all image-involving thought qualifies as perceptual imagining, in their sense, while Van Leeuwen (2013) is similarly clear that the use of mental imagery in thought is both necessary and sufficient for an I-imagining, in his sense. Amy Kind (2001), however, finds imagery to be necessary but not sufficient for imagining—and holds, further, that all relevant forms of imagining involve imagery. Others who invoke the notion perceptual or sensory imagining—including Noordhof (2002), Martin (2002), Peacocke (1985), and Byrne (2007)—leave it ambiguous whether it is to include all (apparently) image-involving thought or only some.

its really being a case of mental imagery, then any type of thought episode at all (image-like, or not) could be a case of mental imagery, provided the person having it was convinced that it was image-like, or had sensory character. We should avoid in our definition of 'mental imagery' any suggestion that we might transform a phenomenon into mental imagery simply by judging it to be image-like.

Bence Nanay (2018b) offers a definition of mental imagery that avoids these problems; he also claims that it meshes better with the way mental imagery is understood by psychologists and neuroscientists. (He has in mind researchers such as Pearson & Westbrook (2015) and Kosslyn, Behrmann, & Jeannerod (1995).) Mental imagery, on Nanay's view, is "perceptual processing that is not triggered by corresponding sensory stimulation in a given sense modality" (2018b, p. 127). This definition avoids the kind of reliance on subjective impressions that proves problematic on my account. There is no requirement that perceptual processing of a relevant sort must seem a certain way to the person having it; and there is no suggestion that people will be infallible judges of when such perceptual processing occurs. Neuroimaging, and even single-cell recordings, can provide independent evidence of when mental imagery has been triggered, provided that the relevant areas for perceptual processing have been identified. Nanay respects the intuition that, unlike perception, mental imagery is causally independent of an outside stimulus by holding that it is "not triggered by corresponding sensory stimulation." Finally, and importantly, his definition is also neutral on the question of the representational format of imagery—be it pictorial, language-like, or something else.³ His definition simply suggests that we should understand the format of mental imagery in whatever way we understand the format of perceptual processing generally.

Why not go with Nanay's characterization, defining I-imagining as the use of mental imagery in his sense? My main concern is that it is too broad. We shouldn't assume that all perceptual processing that is not triggered by corresponding sensory stimulation in a given sense modality forms a natural kind. There may be important differences among instances of such processing that speak against lumping them together as "mental imagery." The fact that some mental imagery is under agential control, and thus suitable to serve in cases of stimulus-independent thought, while others, on Nanay's (2018a) view, occur as an ordinary aspect of perception, would be one *prima facie* reason. Further, there may be instances of mental imagery, in Nanay's sense, that have little or nothing to do with mental imagery (and I-imagining) as it is conceived by common sense—viz., as episodes

³ Nanay highlights the importance of *retinopy*—the fact that human visual cortex is organized in ways that mirror the structure of the retina (Grill-Spector & Malach, 2004)—to understanding perceptual processing and mental imagery (Nanay, 2018b, p. 127). Whether or not retinopy warrants thinking of the format of perceptual processing as *pictorial*, *iconic*, or *analog* in nature is an interesting question that I must leave for another occasion.

of visualizing and "seeing with the mind's eye." Evidence linking *some* cases of perceptual processing not triggered by corresponding sensory stimulation to subjective reports of visualization and "seeing with the mind's eye"—as we find, e.g., in Kosslyn et al. (1999) and Slotnick, Thompson, & Kosslyn (2005)—is not strong evidence that all cases of one are cases of the other. There is, indeed, considerable empirical evidence that the neural regions supporting visual perception overlap only partially with those activated when people describe themselves as having visual imagery (see Brogaard & Gatzia (2017) for a review).

Here Nanay could respond that he and the cognitive scientists he cites are not concerned with preserving the commonsense understanding of mental imagery; they are doing science, not lexicography. So they can pursue their investigation with whichever conception seems theoretically most fruitful. That is fair enough, but there are limits. The scientific investigation of mental imagery, still in its early stages, cannot turn its back completely on the commonsense notion of "images in the mind's eye" that gave rise to it. The parent phenomenon—recorded in the *OED*—of mental states that seem image-like to the people having them, and that occur without an outside stimulus, still has partial custody. To discover mental imagery's place in the brain, one hand must be kept on this initial characterization, the other on where the science leads—else we risk changing the topic.

We these points in mind, I propose a Kripkean (Kripke, 1980) compromise between my and Nanay's account. The features highlighted in my definition of mental imagery—its seeming image-like to the people having it, and so on—can be seen as properties of mental imagery by which we *fix the reference* of the term 'mental image'; but we needn't assume they are essential properties. Compare the familiar Krikean story about water and H₂O: we start with an idea of water as the predominant clear, drinkable liquid in lakes, rivers, oceans, and so on; this understanding allows us to fix the reference of the term 'water.' Subsequent scientific investigation reveals water to have a certain chemical composition, H₂O. Chemistry then gives us good reason to think of H₂O as a natural kind. With water reconceived as a natural kind, we can see how there can be instances of water—of H₂O—that don't have the properties by which we initially fixed the reference of the term; and we can see how there can be instances of things other than water that do have those properties (Putnam, 1975).

Here is a revised definition of mental imagery that brings these thoughts together:

Mental imagery: the kind (or kinds) of mental state or process that, when people are aware of having it and reflect on its nature, is typically described as image-like, or as having sensory character, while not being caused by an outside stimulus.

This characterization still links mental imagery to the way it seems to us, introspectively, while not requiring *all* episodes of mental imagery to be

introspectively apprehended. It simply holds that, when it is introspectively discerned and described, mental imagery is *typically* characterized as being imagelike, or as having sensory character. These are the characteristics by which the reference of 'mental imagery' is fixed. Yet they ensure that, if there happens to be a kind of perceptual processing that is never or rarely described by people as being image-like, or as having sensory character, then it is not mental imagery. For that's not the kind of thing we were ever referring to with the term 'mental imagery.' The definition is also compatible with other kinds of endogenously-caused mental states that are not mental imagery being described as image-like, or as having sensory character, so long as they are not *typically* described that way.

The question of whether there is a kind of perceptual processing that is not triggered by corresponding sensory stimulation *and* that is never or rarely described as image-like by the people having it cannot be answered without an established scientific means for typing different kinds of perceptual processing (nor without relevant empirical investigations). Nanay may think that neuroscience already offers that means and that there simply is no kind of endogenously-produced perceptual processing that is distinct from the kind whose instances are typically described as image like, or as having sensory character, when their possessors are aware of them. I am skeptical that current science warrants that confidence (see, again, Brogaard & Gatzia (2017)), but I don't pretend to have established the point. Instead I propose to move forward with my amended "reference-fixing" definition of mental imagery, noting that it is compatible with Nanay's deeper account being correct in the end.

A last important point: thinking is not the same thing as perceiving. Thought is stimulus-independent in a way that perception is not (Beck, 2018). When I define imagistic imagining as any kind of *thought* that involves mental imagery, I am excluding from the class of imagistic imaginings any case of perception that involves mental imagery. On some views, mental imagery forms an essential ingredient to ordinary perception (Grush, 2004; Nanay, 2010, 2018a). Even if those views are correct, such perceptual experiences will not be cases of imagistic imagining, because they are not cases of stimulus-independent thought (or of "cognition"). The reasons for distinguishing imagistic imagining from these other mental-imagery-involving episodes are the same reasons we have for distinguishing thought from perception.

3.3 Attitude Imaginings—Keeping the Definition Neutral

Attitude imaginings (or "A-imaginings") are, again, cases of rich, elaborated, epistemically safe thought about the possible, pretended, unreal, and so on. A-imaginings enable us to consider what could have been or may yet be—to contemplate the fictive and fantastical. As we saw in Chapter 1, the Oxford English

Dictionary gives several definitions for 'imagine' that mesh well with this conception. Recall senses 2, 3, and 4, in particular:

imagine:...

- 2. To create as a mental conception, to conceive; to assume, suppose...
- 3. To conceive in the mind as a thing to be performed; to devise, plot, plan, compass...
- 4. To consider, ponder, meditate...(Oxford English Dictionary, 2009)

Both my characterization and these of the OED leave A-imagining's relationship to mental imagery unresolved. My notion of A-imagining is, I think, similar in spirit to what other philosophers have discussed under the heading of propositional imagination (Nichols, 2006c; Nichols & Stich, 2000), belief-like imagining (Currie & Ravenscroft, 2002), or, indeed, "attitude imagining" (Van Leeuwen, 2013, pp. 223-4) and "attitudinal imagining" (Kind, 2016b, p. 5). The important difference is that A-imagining, as the OED and I characterize it, is relatively theory-neutral. Many who speak of "propositional" or "belief-like" imaginings tie them—either implicitly or explicitly—to "heavy-duty" (see Chapter 2) ontological or theoretical commitments of one kind or another. Such imaginings are, for instance, held to occur "in the same code" as beliefs (Nichols, 2004a), to have the "same logical form" as beliefs (e.g., Nichols & Stich, 2003; Currie & Ravenscroft, 2002; Schroeder & Matheson, 2006; Carruthers, 2006), or to be nonimagistic in nature (Currie & Ravenscroft, 2002).4 Others invoke the theoretical notion of a cognitive attitude in their most basic characterizations of the phenomenon (Van Leeuwen, 2013; Kind, 2016b). For instance, Van Leeuwen, whose "attitude imagining" term I share, holds that attitude imaginings occur when someone "takes a cognitive attitude toward [the proposition] c that nevertheless treats c as somehow fictional" (2013, p. 221). The level of ontological commitment is ambiguous in this kind of characterization. If taking a cognitive attitude toward p requires one to token a mental representation with the content *p*, then—as we saw in Chapter 2—such a definition of attitude imagining is not open to theorists with a light-duty folk psychological ontology.⁵ On light-duty views, there are no

⁴ That Nichols & Stich view propositional imaginings as not involving mental imagery can be inferred from the fact that they analyze belief and propositional imagining as involving the processing of propositionally structured representations, and "are skeptical that perceptual states can be entirely captured by representational accounts" (2003, p. 164). Mental images are likely "perceptual states" in the relevant sense and thus, for Nichols & Stich, unlikely to be "in the same code" as beliefs and propositional imaginings. However, this involves some extrapolation from their explicit remarks, as they are generally silent on the role of mental imagery in imagination.

⁵ It appears that Van Leeuwen favors a heavy-duty interpretation of this characterization. He later summarizes attitude imaginings as cases where one's "cognitive system represents *c*, through taking it to be non-real"; this implies the existence of mental representations with a specific content (2013, p. 224).

mental representations whose contents mirror the contents of the that-clauses that occur in ordinary folk psychological ascriptions. And, yet, a light-duty theorist—including dispositionalists about folk psychological kinds (Dennett, 1991; Schwitzgebel, 2002, 2013)—will not deny that people imagine that p any more than they will deny that people believe that p. So we need a way of picking out the phenomenon we want to study—the phenomenon of imagining that p—that does not force anyone into eliminativism from the outset.

If, on the other hand, taking a cognitive attitude toward p—one that treats p as "somehow fictional"—does not, by definition, require one to token a mental representation with the content p, then the characterization is simply not as clear as it could be. What is it, exactly, to treat a proposition as somehow fictional? We do not need a *deep* answer at the outset. But we need to hear more. We need something along the lines of my characterization of A-imagining—something that will give us a better idea of just what processes we aim to explore, while leaving it uncontroversial that they occur at all. Kind (2016b) goes some distance toward meeting this demand, by characterizing attitudinal imaginings as having a "mindto-world direction of fit," where the relevant world is "best understood to be a make-believe or fictional world rather than the actual world" (p. 5). The trouble here is that the characterization employs a combination of theoretical notions— "direction of fit" and "fictional world"—that are no clearer than what they are called on to explain. It requires us to understand what it is to fit, or fail to fit, a non-existent fictional world, before we can understand what it is to imagine. In cases where we imagine in response to an independently existing fiction—Moby Dick, say—it may seem we have a reasonably clear picture of what it would be for the imagining to "fit" what is true in that fictional world (though this question itself generates heated debate, as we will see in Chapters 9 and 10).6 However, many paradigmatic imaginings—including daydreams, fantasies, cases of conditional reasoning, and creative cognition—lack any corresponding fictional world that the imagining can be said to faithfully, or unfaithfully, represent. For instance: I am now imagining that my office is covered in tinfoil and that unicorns live on the dark side of the moon. It is hard to grasp what it might be for these imaginings to fit, or fail to fit, a fictional world. In relation to which fictional world are we to assess their accuracy? Can such imaginings be inaccurate? How? And if there are no conceivable conditions under which they would be inaccurate, how can

⁶ Relatedly, it is common to analyze truth-in-a-fiction by appeal to what the fiction (or its author) prescribes one to imagine in response to the fiction (Currie, 1990; Stock, 2017; Walton, 1990). If those accounts are correct, we cannot know what is true in a fiction until we know what we are prescribed to imagine; and, plausibly, we cannot know what we are prescribed to imagine if we don't yet know what it is to imagine. So, for those who define truth-in-a-fiction by appeal to prescriptions to imagine, there can be no elucidation of imagination by appeal to its fitting, or not fitting, what is the case in a fictional world. Our grasp of what is true in any fictional world—and hence of whether an imagining fits those truths—will have depended on a prior grasp of what it is to imagine.

they be defined in terms of accuracy conditions? Perhaps there are answers here.⁷ But we shouldn't need those answers before we can know what we're talking about when we talk about imagining (in the attitude sense).

What we need is a characterization that our next-door neighbor can understand—one that, like the *OED*, captures what competent speakers take imagining to be when they use 'imagining' in the attitude sense. The key is to avoid technical terms like "proposition," "attitude," "possible world," and "direction of fit." For one thing, most people don't grasp those notions, despite being competent users of the term 'imagine.' For another, they are all theoretical notions within philosophy; once they are invoked, the explanation of A-imagining has already begun. As philosophers, we feel that we are moving toward an explanation of imagination precisely because imagination is being brought into the fold of other mental states whose theoretical definitions partake in the same notions. The problem is that attempted explanations-cum-characterizations of this sort foreclose *other* explanations that are worth considering. So, if possible, we should avoid such terms in the most basic characterization of what it is to imagine.

A-imagining, I have held, is rich or elaborated thought about the possible, fictive, unreal, and so on, that is, in general, epistemically safe. With the exception of "epistemically safe," this is something our neighbors can understand. (We can remove "epistemically safe" for them by saying that A-imagining is engaging in rich, elaborated thought about the possible, fictional, unreal, and so on, that does not call one's sanity, knowledge, or reasonableness into question.) I recommend this characterization as a neutral starting point for theorizing about imagining in the attitude sense. Importantly, it leaves open the role of mental imagery in such imaginings. And it makes no comment on the relation of concepts, propositions, modules, modes, possible worlds, attitudes, directions of fit, and other theoretical notions to A-imagining. Yet it remains substantive enough to give us a sense of when imagining occurs in everyday life and when it does not. Further, it leaves the existence of A-imagining uncontroversial among theorists with divergent folk psychological ontologies. No one is driven to eliminativism from the outset.

While this understanding of A-imagining may seem overly broad in what it counts as imagining, its breadth is a virtue. It allows us to see why so many different cognitive acts in so many different contexts come to be called 'imagining' in the first place; and it offers a plausible picture of why generalizations about imagining are so messy and subject to exception (see Chapter 2). There is no

⁷ Alon Chasid (2017) has proposed to understand facts about fictional worlds in terms of a distinct mental state—what he calls "design-assumptions." On his view, one's design assumptions guarantee that thus and such is true in a fictional world, and then one's imaginings can be said to be fit, or fail to fit, the fictional world to the extent that they cohere with one's own design assumptions. Yet this appears to leave us with the same question we were trying to answer; for we now need an account of design assumptions and *their* "direction of fit." So it is not clear that the proposal moves us forward. Alternatively, if design assumptions can be characterized without appeal to a direction of fit, then perhaps imaginings can as well.

prima facie reason to think that all instances of epistemically safe, elaborated thought about the possible, fictional, and unreal would share enough similarities to enable law-like generalizations about imaginings as a kind. We should expect them to be a heterogeneous group. Finally, there is no need to worry that imagination—the real imagination—will slip through our fingers when we begin with a broad definition of this sort. As earlier noted, by focusing on explaining the cognition at work in paradigmatic contexts where A-imagining occurs—including pretense, conditional reasoning, and consuming and creating fictions—we can ensure that any (putative) narrower class of imaginings proper is not overlooked.

3.4 The Relationship between A- and I-imagining

We can now turn in earnest to consider the relation of I-imaginings to A-imaginings. Two central questions we can ask are:

- Do all A-imaginings involve mental imagery, and so qualify as I-imaginings? And,
- 2. Do all cases of I-imagining amount to rich, or elaborated, epistemically safe thought about the merely possible, fantastical, and so on—and so qualify as A-imagining?

My answer to both questions will be no: there are A-imaginings that involve no mental imagery; and there is I-imagining that is not A-imagining. There is, however, overlap between the two. Fig. 3.1 maps this relation, with the left oval representing I-imagining, and the right oval representing A-imagining. To some, this map of the terrain will seem immediately right; to others, it will appear question-begging or false. It is important to carefully consider the reasons for and against mapping the terrain in this way and to ask whether there are important phenomena it obscures or fails to address.



Fig. 3.1 The relationship of imagistic imagining to attitude imagining

3.5 A-imagining without I-imagining

It is common in philosophy to allow for imaginings that lack mental imagery, even if the practice has its dissenters (Kind, 2001). Timothy Williamson warns that, even if many cases of imagination involve mental imagery, "We should not over-generalize to the conclusion that all imagining involves imagery" (2016, p. 117). And many of the philosophers who theorize about a capacity for "propositional" or "attitudinal" imagination hold that it does not (or at least need not) involve mental imagery (Doggett & Egan, 2007; Nichols & Stick, 2003; Van Leeuwen, 2014; Nichols, 2004; Goldman, 2006a). An open question for such conceptions of imagination is how (and whether) to distinguish these non-imagistic imaginings from related acts like supposing, conceiving, and hypothesizing (see, e.g., Weinberg & Meskin (2006b), Stock (2017, Ch. 6), and Arcangeli (2018) for discussion).

The idea that there is a non-imagistic form of imagining is sometimes tied to the occurrence of that-clauses in sentences used to ascribe imaginings. Witness Alvin Goldman's characterization of "S-imagination" (where "S" is for "supposition"):

S-imagination is typically formulated with a 'that'-clause, 'X imagines that p', where p can refer, ure strictedly, to any sort of state-of-affairs. To S-imagine that p is to entertain the hypothesis that p, to posit that p, to assume that p. Unlike some forms of imagination, S-imagination has no sensory aspect; it is purely conceptual. (Goldman, 2006a, pp. 41–2)

Taken as an argument for the existence of non-imagistic imaginings, Goldman's claim is question-begging. Certainly, we at times use the verb 'imagining,' followed by a that-clause, when describing people as imagining. But it is not obvious that, when we do so, such people are in psychological states that have "no sensory aspect." If, in ordinary conversation, I say that Jim is imagining that he is skiing in the Alps, it would be strange to add: "And, of course, his doing so involves no state with a sensory aspect." It is only in the context of a specific heavy-duty folk psychological ontology, wherein ascriptions of folk psychological states involving that-clauses are made true by corresponding amodal, language-like ("conceptual") representations, that we can (arguably) move from the truth of such an ascription to the conclusion the corresponding mental state lacks any sensory aspect. Such assumptions have no place at this stage in the dialectic. If we want to establish the existence of some imaginings-some A-imaginings-that don't involve mental imagery, we need to do so in a more theoretically-neutral manner. As it turns out, this is not so easily done. Nevertheless, I think the balance of considerations tips in favor of there being non-imagistic A-imaginings. I'll sketch two arguments to that end.

The first takes it as a premise that A-imaginings are the mental events we rely upon to guide our pretenses. Consider two children pretending to have a tea party. Jamie pretends to set out plates while Sophia pretends to fold napkins. We are apt to describe them as imagining that they are setting up for a tea party, before we give any consideration to whether they are making use of mental imagery. They certainly *might* form mental images while pretending; they might even attempt to imitate what they "see" in their mind's eye (as suggested by Van Leeuwen (2011)). But they might also simply draw upon their declarative knowledge of what typically goes on at tea parties to act in at-tea-party-like ways. After all, if we just *asked* the children what sort of things go on at tea parties, they would be able to answer. On the face of it, they could do so without forming any mental images. If a pretense *could* at times unfold with only that sort of information being exploited, we have reason to think that not all A-imaginings make use of mental imagery.

A critic might respond that, despite appearances, mental imagery is in fact essential to all such pretenses. But it is hard to see why this would be the case. The use of mental imagery in the guidance of action does not suffice to render the action pretense—as evidenced by the role of imagery in decisions about how to climb a wall, decorate a room, or craft a tool (Arp, 2008). It is unclear, then, why using mental imagery would be *necessary* to pretense, short of a robust neoempiricism, where mental imagery is essential to action and inference more generally. At that point, the debate no longer concerns the special relevance of mental imagery to A-imagining, but rather to action and cognition in general.

Another critic might object that the case of A-imagining without imagery I described (and others like it) are really just cases of supposition—and not any form of imagination. However, my definition of A-imagining is intended to include supposition within it. Like the *OED* (definition 2), I don't assume any deep differences between supposing and (at least some instances of) A-imagining. Some A-imaginings that lack mental imagery may be richer, or more developed, or more cognitively engaging than others. These differences, occurring along a spectrum, may track an intuitive difference between non-imagistic A-imagining and (mere) supposition. But this is compatible with them all being cases of A-imagining. On my view, supposition, like imagination, will reduce to a more basic collection of other folk psychological states. So, when we reduce A-imagining to beliefs, judgments, desires, decisions, and so on, we will have done the same for supposition.⁸

A second argument for allowing A-imaginings without mental imagery is that we engage in A-imaginings about unobservable entities—such as the theoretical posits of physics, or legal and moral principles—that, presumably, cannot be

⁸ Supposition is particularly important to conditional reasoning. Chapters 5 and 6 focus on conditional reasoning and confront the challenge of reducing supposition to other folk psychological states.

represented through the use of mental imagery. For instance, a lawyer might ask a judge to imagine the absurd lawsuits that would follow from setting a precedent that may seem acceptable in a single instance. It is not clear that the judge would need to generate mental imagery in order to comply. Or perhaps a mathematician may imagine different ways of solving an equation without using imagery; similarly, a philosopher may imagine an objection to her argument without forming any mental images. Van Leeuwen makes the same point by appeal to temporal properties: "When I imagine, on reading *Lord of the Rings*, that elves can live forever, I'm fictionally imagining a proposition that I couldn't imagine using mental imagery" (Van Leeuwen 2013, p. 222).

It might be responded that, even in these cases, we imagine the putatively unobservable entities by generating imagery of observable models of those entities—written numerals, people acting out contractual obligations, a printed list of premises and conclusions, ancient-looking elves, and so on. For it is one thing to show that imagery cannot contribute all the contents to an A-imagining; it is another to establish that it provides none of them. Yet here, again, the question seems headed toward a more general dispute about the role of mental imagery in all of cognition. Why expect imagery to be featured in each of these contexts where we describe people as imagining, if it is not in general necessary for the generation of complex thoughts?

Kind (2001), perhaps the most prominent advocate of the view that any cognition worthy of the name "imagining" must involve mental imagery, defends the thesis on the grounds that "no matter what I imagine, my imagining will involve an experiential aspect," and that "without such an experiential aspect, a mental exercise is not an act of imagining" (p. 94). Mental images, she argues, are what account for this experiential aspect. Yet she offers no reason to doubt the claims of others who are happy to allow for imaginings that lack such an experiential aspect; nor, to my knowledge, does she seriously question the kinds of examples raised in their favor. We have, at best, a stalemate.

Fortunately, should it turn out that there are no non-imagistic A-imaginings, we will only have explained *more* than we needed to when we explain A-imagining as I conceive of it. On the other hand, we risk omitting relevant phenomena from our explanation of imagination if we assume that there are no non-imagistic A-imaginings. So I propose to move forward with the working assumption that there are indeed non-imagistic A-imaginings.

The same form of response can be given to those who grant the existence non-imagistic A-imaginings but worry that the notion of A-imagining (as I define it) still pulls in other states—such as supposings, or conceivings—that should be distinguished from (non-imagistic) imagining proper (see, e.g., Arcangeli, 2018). My characterization of A-imagining goes some distance toward accommodating the intuitions that lead some to distinguish imagining from supposing and conceiving, insofar as A-imagining is an especially "rich" and "elaborated" way of

dwelling on the possible, fantastical, unreal, and so on (whereas supposing and conceiving may be less involved). But some may think there is a difference in kind between supposition and A-imagining that is missed by trying to see one as a more elaborated version of the other. In favor of maintaining a hard distinction between the two, it is sometimes held that, while we can easily suppose flat contradictions, we cannot imagine them (Kind, 2013; Weinberg & Meskin, 2006b). This seems to point to something more than a difference in degree. Similarly, it might be proposed that, while imaginings tend to trigger emotions, suppositions as a class do not (Kind, 2013, p. 153).

In response, it is not clear to me that we really can suppose obvious contradictions. If someone asks me to suppose that all squares have fifty-two sides, I won't know what to do. Sure, we are told, in logic class, that *everything* follows from a contradiction. We know how to write out proofs where a contradiction appears on one line. But, psychologically speaking, what is it to suppose a contradiction? How can we know when we've done so? I'm really not sure. (NB I address the phenomenon of supposing/imagining for the sake of *reductio ad absurdum* separately in Chapter 7, on hypothetical reasoning.)

But, fine, let's suppose, for the sake of argument, that we really can suppose contradictions. How do these authors know that, when they suppose a contradiction, they aren't also imagining it? Likewise, when they suppose a proposition and register no emotional response, how do they know that they didn't also imagine it? Is it that they can *just tell*, introspectively, which state is which? If that is the answer, then whatever feature it is that allows them to confirm, introspectively, that their supposings are one thing, and their imaginings another, is what *really* underwrites the distinction between the two. If that feature is mental imagery (or the lack thereof) that makes the difference—with imagining always featuring imagery—then we are back to the question of whether there can be A-imagining without mental imagery. If it is not mental imagery that allows one to introspectively descrimiate imaginings from supposings... well then what is it?

3.6 I-imagining without A-imagining

Let's return now to the second question above: are all mental episodes that involve mental imagery, and which are therefore I-imaginings, also cases of A-imagining? One reason to think not is that mental imagery is a prominent feature of ordinary episodic memory (Addis, Pan, Vu, Laiser, & Schacter, 2009; Schacter & Addis, 2007). Episodic memories are memories of specific events from one's personal past. Episodically remember this morning's breakfast and you will likely generate a mental image. Did you *imagine* your breakfast? In one sense—the I-imagining sense—yes, you formed a mental image of something. In another sense—the A-imagining sense—it seems not. In recalling your breakfast, you did

not engage in especially rich, elaborated, thought about the possible, fantastical, or unreal. You just remembered your Cheerios. Berys Gaut makes a similar observation in distinguishing (mere) imagery-involving states from imagining in something like the A-imagining sense:

Imagery is a matter of the having of sensory presentations; but these images need not be instances of imagination. A memory image of the blue front door of my previous house involves a belief about that front door, not an imagining of it (2003, p. 272)

Van Leeuwen concurs:

Imagery is involved in many beliefs, possibly as a constituent of a larger structure, which the agent takes to represent reality...This often happens with vivid memories. (2013, p. 222)

So, many find it natural to conceive of episodic memories both as image-involving *and* as constituting (many of) our beliefs about our personal pasts. This meshes with the fact that, when we lose the ability to generate imagery, we lose most of our beliefs about our past experiences; that is, we acquire amnesia (Greenberg, Eacott, Brechin, & Rubin, 2005; Rubin & Greenberg, 1998). These I-imaginings—the loss of which causes us to lose many of our most important beliefs—are not good candidates for A-imaginings. Instead of considering elaborate possibilities, fictions, and unrealities in an epistemically safe way, we trigger basic commitments about our own personal pasts.

Nevertheless there remain strong currents of resistance to the idea that mental imagery can have a role within beliefs or "commitments" themselves, even among philosophers who emphasize the importance of imagistic states to human reasoning in general. An attractive view to some will be that we form beliefs about our personal pasts on the basis of imagistic episodic rememberings, without those imagistic episodes themselves being beliefs. They may propose, by analogy, that we form beliefs about our current environment on the basis of our perceptual experiences, without our perceptual experiences themselves being beliefs. This view leaves the door open to thinking of all I-imagining—episodic memory included—as, in some sense, flying free of what we believe, and, instead, as misrepresenting no-longer-existent scenarios as present before us (even if we are not taken in by the misrepresentations).

⁹ As I am finalizing this book, I've become more aware of a debate among memory researchers over whether episodic remembering is the same kind of process as imagining (Michalian, 2016; Robins, 2020; Debus, 2014; Perrin, 2016). What they mean by 'imagining' in this debate is not always clear. It does not appear to be either A- or I-imagining that they have in mind. I plan to address this debate—and what it is they might mean by 'imagining'—in future work.

Why would one be attracted to this way of thinking about episodic memories, as opposed to viewing them as commitments or judgments of a kind? There are several reasons worth exploring. The first is grounded in a heavy-duty ontological view, popular in some quarters, according to which all reasoning takes places in a language-like symbolic format (see Chapter 2). For if reasoning is symbolcrunching of a sort that mirrors the manipulations of symbols in a system of formal logic, then mental imagery—supposing it occurs in a picture-like format—is left to impinge, somehow or other, from the sidelines. It won't then seem absurd to view all imagistic cognition as divorced from one's beliefs and proper commitments. I will consider the motivations and costs of such a view in more depth later (Chapter 4). For now it bears noting that, even on such views, something will need to be said about how I-imaginings interact with non-imagistic beliefs and desires in inference-aiding and (apparently) truth-preserving ways. Once imagery is properly woven into the general fabric of human inference, much of the resistance to viewing imagery as partly constitutive of our beliefs falls away. Moreover, whatever problems there might be in holding that images form proper parts of states that are not wholly imagistic simply reappear when we ask how imagistic states can be featured in sequences of reasoning with non-imagistic states.

Others may find it wrong to posit imagery-involving beliefs for much the same reason it seems wrong to assimilate perceptual states to beliefs. The fact that we can perceive things to be ways we don't believe them to be—as when knowingly viewing an illusion—is commonly seen as reason to distinguish perception from belief. We can also generate I-imaginings of things we don't believe to exist. This may seem to show, by parity of reasoning, that I-imaginings are not beliefs. Yet an easy response is to ask why I-imaginings should be treated *as a single class* when considering their relation to states like beliefs and desires. The fact that some I-imaginings are not judgments does not suggest that *none* are. (Recall that our question here is only whether *some* I-imaginings are simple judgments about past events and, thus, not A-imaginings.)

The similarities of perceptual experiences to I-imaginings may, however, tempt us to treat I-imaginings as a single class. The thought here is that, if perceptual experiences form a single class, and I-imaginings are very similar to perceptual experiences, then I-imaginings likely also form a single class. Here it helps to remember that when we ask whether an I-imagining should be considered a belief or desire, we are just asking whether it tends to guide or motivate behavior in the same way that a relevant belief or desire would. An I-imagining may play such a role even if it has important similarities to perceptual experience—including in the kinds of (fine-grained) properties it represents (Tye, 1991), its phenomenal character, or the neural regions underlying its use (Kosslyn, Thompson, & Ganis, 2006). None of the features that I-imaginings share with perception suggest that all I-imaginings must have a single kind of (non-belief-like) functional role.

After all, many philosophers take belief and desires to be realized in the same representational format—and so to be profoundly similar in *that* sense—and yet to be fundamentally different *kinds* of mental states, with quite distinct functional roles. Once we are clear that the notion of an I-imagining simply picks out processes that make use of mental states that, introspectively, appear to occur in a certain imagistic *format*, there is no reason to expect all such states to be functionally on a par. And if they are not all functionally on a par, we can easily see them as playing a role in a variety of different kinds of states—including beliefs, desires, intentions, and decisions—that we ascribe with ordinary folk psychological terms.

A last reason one might resist the idea that some I-imaginings are simply commitments of a kind—and beliefs, in particular—traces to the intuition that what we imagistically imagine is "up to us." It is, arguably, a platitude about both A- and I-imaginings that what we imagine is (at least in the normal case) determined by what we *intend* to imagine, and not by what is before our eyes. Colin McGinn comments: "I know that my image is of my mother because I *intended* it to be; I don't have to consult the appearance of the person in the image and then infer that I must have formed an image of my mother" (2004, p. 31). Unlike ordinary perceptual experience, where our causal contact with the perceived entity determines the object of our perception, in the case of I-imagining, "the imaginer starts with the object and then constructs an image of it" (p. 31).

If who or what I am imagining is typically determined by my intentions, it seems a short step to the conclusion that an I-imagining can't have the functional role of a belief. Beliefs aren't under intentional control in that way; this, it seems, is why they are suitable guides for navigating the world. If what we are imagistically imagining is entirely determined by our intentions, it is hard to see how imaginings could be guides to anything other than our intentions themselves.

One response here would be to insist that the object of an I-imagining is not, in fact, determined by the imaginer's intentions. It could instead be held that, even if our intentions are what start us rummaging about for a proper image, their doing so does not *guarantee* that the image retrieved is in fact an image of the intended object. For reasons explored later, this is not the path I recommend. For one thing, it leaves us with the question of what it is that makes the image an image of one object, and not another. If we point to its causal history—to the perceptual experience from which it derives (if any)—we seem boxed in to saying that any subsequent use of that image will constitute an imagining of its causal source, regardless of our intentions. Moreover, in many cases—e.g., imagining a standard yellow pencil—it seems unlikely that there will be just one particular object from which the image causally derives.

Fortunately there is a better and more obvious response to make here on behalf of some I-imaginings being beliefs. We can accept, with McGinn, that our intentions typically determine the *object* of our I-imagining. Even so, there is still the

question of whether that object is correctly represented by the image we form. So, for example, suppose that I try to recall the hairdo of my twelfth grade English teacher, Mrs. Wells. I end up imagistically imagining Mrs. Wells because it is she whom I intend to imagine. In that sense, it is "up to me" that my image is of Mrs. Wells. My intention determines the object. However, if Mrs. Wells' hair didn't look the way my image represents it as having looked, the I-imagining is non-veridical—the judgment false. (I will come back to the question of the degree and respects in which an image must faithfully represent its object for the imagining to be considered accurate.) My episodic remembering—itself an I-imagining—will be under voluntary control in the sense that I have chosen the *object* of the imagining; but having this kind of control does not entail that the memory is accurate, or that it only carries information about my intentions.

This point connects to an observation made in Chapter 1 in the explanation of the "freedom" of imagination. There is a perfectly good sense in which we are free to make judgments, or bring to mind beliefs, on whatever topic we like. I can choose to remember my twelfth grade teacher, my first baseball game, the capital of Arkansas, or whatever. The fact that we get to pick these topics does not, however, entail that the recollections or judgments we make concerning them will be correct. In the case of episodic memory, more is needed: the way that my third grade teacher, or my first grade soccer team, or college dorm room, is represented must be faithful to how I really saw them to be. Or consider a standard block rotation task of the sort used in imagery studies; a participant is shown a set of blocks and asked to judge which of several pictures depicts the same block configuration as it would look when rotated 180 degrees (Shepard & Metzler, 1971). Suppose that I answer by visualizing the block figure rotating. My intention will ensure that my I-imagining is of those very blocks; yet it will not ensure that I accurately represent the way they would look if rotated 180 degrees. The imagining ends up being a reliable guide to action and inference only if the blocks really would look the way I imagine them looking when rotated 180 degrees. In this way, the imagining has a functional role and associated correctness conditions of an ordinary judgment. This isn't to say that all I-imaginings have the functional role of beliefs, of course—only that having their objects determined by our intentions does not prevent them from ever having such a role. And when they do play the role of a judgment-regarding, say, what one had for breakfast-they will not always be good candidates for A-imaginings. This allows for I-imaginings that are not A-imaginings.

There still remains a last source of skepticism about the idea that some I-imaginings have the functional role and psychological force of beliefs. This is the idea that I-imaginings are inherently *simulative*, *recreative*, or *emulative* of perceptual states. As we will see, this view goes hand-in-hand with the idea that I-imaginings are to be analyzed *as a class* when considering their functional role.

And it is also suggestive of a broader view, on which *recreative imagining* is the most general type of imagining—a type of imagining obscured by the A-imagining/I-imagining distinction I have recommended. Is important to see why this influential view should be resisted.

3.7 Against Recreative Imagining

In presenting a view where there are just two overlapping conceptions of imagination—A-imagining and I-imagining—I have suggested that there is no additional notion of imagining that ought to guide philosophical inquiry. Currie & Ravenscroft (2002) (hereafter "C&R") appear to challenge this view in arguing for an umbrella notion of imagining—what they term recreative imagining—that encompasses both belief-like imaginings and perception-like imaginings. Goldman (2006a) espouses a similar umbrella notion of enactment imagination (or "E-imagining"), which he describes as "a matter of creating or trying to create in one's own mind a selected mental state, or at least a rough facsimile of such a state, through the faculty of imagination" (p. 42). Belief-like imaginings, for C&R, are belief-like mental representations put to use in the kinds of activities I have associated with A-imagining. These include pretense, conditional reasoning, and fiction consumption as central cases. C&R's perception-like imaginings are any and all mental episodes that make use of sensory imagery (2002, pp. 24-7). So characterized, these appear to align with I-imaginings, as I have understood them. (C&R consider whether some uses of mental imagery might not be imagining in any proper sense and conclude in the negative: "we have been given no reason for thinking that imagery is not imagining...the idea that visualizing is imagining is at least unrefuted" (2002, p. 26).)

While belief-like imaginings and perception-like imaginings are, for C&R, entirely distinct sets of cognitive episodes, they propose that the two kinds of imagining fall together within a single class of recreative imagining. It might be thought that there is no real conflict between the notion of a recreative imagining and my dual notions of A- and I-imagining; the former might even appear to be a useful umbrella notion for capturing what the latter two have in common. However, to lump A- and I-imaginings in this way is to suggest that all instances of each have something important in common—something that would be missed by a view that, like my own, distinguishes A- from I-imaginings, without placing all instances of both within a broader class of imaginings. C&R also don't allow for overlap between belief-like imaginings and perceptual imaginings, in the way I allow for overlap between A- and I-imaginings. This is another reason to suspect that there's a substantive dispute in the offing.

To see what's at issue, we can ask, first, what it is that every perceptual imagining has importantly in common with every belief-like imagining, in virtue of which they are all recreative imaginings. And, second, why is there, for C&R, no overlap in belief-like and perception-like imagining? In answering, we can begin with C&R's most general description of recreative imagination, which they characterize as:

the capacity to have, and in good measure control the having of, states that are not perceptions or beliefs or decisions or experiences of movements of one's body, but which are in various ways like those states—like them in ways that enable the states possessed through imagination to mimic and...to substitute for perceptions, beliefs, decisions and experiences of movements. (2002, p. 11)

Because forming visual imagery amounts to entering a state that is like visual perception in various ways—"standing in" for it as a "counterpart"—C&R include all uses of imagery within the realm of recreative imagination (2002, pp. 24–7). Like C&R, Goldman agrees that all image-involving states fall within the broad category of E-imagination: "Acts of visual and auditory imagination…are familiar types of E-imagination…The term 'imagery' is commonly applied to these cases" (Goldman, 2006a, p. 42). The notion of a recreative or "E" imagining can be extended broadly to apply to a wide variety of putative counterpart states. Indeed, it has been proposed that practically *every* sort of mental state has an imaginative counterpart, insofar as there is some state or other that serves to "recreate" or "simulate" it (Arcangeli, 2018). This suggests a fundamentally different way of conceiving of imagination—one that doubles our mental ontology with *sui generis* imaginative counterparts. ¹⁰ Needless to say, this is not an approach I recommend. I aim to undermine its appeal in the balance of this section.

Earlier I proposed that the use of imagery in episodic memory and visuospatial reasoning (e.g. block rotation tasks) warrants separating at least some I-imaginings from the class of A-imaginings. Arguably, in those cases, imagery does not "stand in for," "mimic," or "substitute for" some perceptual state; such imaginings simply constitute one's judgment on an issue. If there is nothing substantively *recreative* about mental imagery in itself, then, *pace* C&R and Goldman, not all uses of imagery should in fact be included among the recreative (or enactive) imaginings. Even if mental imagery and perceptual experiences were to share the same representational format, this would hardly be a reason to label one a recreation or simulation of the other. Beliefs and desires occur in the same representational format, on most views, without one sort of state recreating the other.

¹⁰ One such putative counterpart state is a counterpart to desires—namely, "i-desires" (Currie, 2010; Doggett & Egan, 2012). These are typically posited to explain phenomena surrounding our appreciation of fictions. I question the need for such in Chapters 9, 10, and 11.

C&R and Goldman might respond that episodic memories are indeed recreative (or E-) imaginings precisely because they serve to stand in for, or mimic, previous perceptual experiences one has had. (Unfortunately, C&R and Goldman never explicitly discuss the role of imagery in episodic memory when arguing that mental imagery is inherently recreative—a curious omission.) Similarly, in cases of visuospatial reasoning, such as block rotation tasks, they might hold that I-imaginings serve to recreate, or mimic, *possible* perceptual experiences one would have when watching the block figure rotate.

Granting these as coherent proposals, we still have the question of whether such recreative imaginings should also be considered beliefs or judgments of a kind. This is where the real tension lies in the relation of their proposal to my own. Suppose it is granted that episodic memories are both (occurrent) beliefs about one's past and recreative imaginings. Recall that belief-like imaginings are, on C&R's account, states that mimic or stand in for beliefs. If some beliefs (namely, episodic memories) are also recreative imaginings (because they recreate previous perceptual experiences), it should be possible for us to "recreate" those episodic-memory-beliefs themselves through the use of belieflike imaginings. That is, if episodic memories just are beliefs of a kind, we should be able to generate "belief-like" counterparts to those mental states. We could call these counterpart states episodic-memory-like imaginings. These would be a sub-class of belief-like imaginings and would occur when we merely simulate remembering an experience from our personal past. Of course, episodic memories are themselves already recreative imaginings, on C&R's view, due to their involving mental imagery. So this would entail our having recreative imaginings of states that are already themselves recreative imaginings. Episodic memory-like imaginings would be recreative in two ways simultaneously: they would mimic, and so serve to recreate, episodic memories; and they would also mimic, and so recreate, genuine perceptual experiences (insofar as they involve imagery).

This is not an incoherent result. But it shows something important: we in fact have two notions of recreation at work. First, there is a *functional* notion, according to which certain states are considered "recreative" because they recreate aspects of the functional role of another state. This is the sense in which C&R's belief-like imaginings are recreative. And, second, there is a *format* notion of recreation, where all mental imagery-involving states are recreative because they recreate the (presumably pictorial, or iconic) format of different perceptual states. A particular mental state—such as the episodic-memory-like imagining just described—can be recreative *in both ways simultaneously* just because these are distinct notions. But once we have separated the two ways of being recreative, we can see that there is no interesting psychological similarity that mental episodes recreative in one way bear to episodes that are recreative in the other.

One way for C&R and Goldman to maintain that recreative or enactive imagining is an important category in its own right would be to reject the proposal that episodic memories are beliefs. Then they could maintain that there are no recreative imaginings that are recreative only because they reproduce the format of some other kind of state. (This would, in turn, allow them to reject the idea that there are two distinct, unrelated notions of recreation in play.) To simply stipulate that beliefs cannot have mental images as proper parts would be question-begging in the present context, however. Yet they could argue, instead, that mental imageinvolving processes—qua simulations of perceptual experiences—are invariably recreative in a functional sense, just because they invariably recreate aspects of the functional roles of perceptual experiences. Arguing that all image-involving processes are functionally recreative (or enactive) of perceptual experience requires that one specify the sense in which imagistic imaginings invariably duplicate the functional role of perceptual experiences. Here it is difficult to see what the relevant resemblances could be. The causes of perceptual experiences and sequences of mental images, respectively, are for the most part entirely different—the former being caused by outward stimuli impinging on our sensory transducers, while the latter are endogenously triggered. Their normal effects are distinct as well: perceptual experiences of an x typically lead us to believe in the presence of a nearby x in our environment. Generating a mental image of an x rarely if ever has that effect. Further, the particular sequence of perceptual states we experience across time depends on the nature of the environment we are perceiving. With I-imaginings, the environment plays no such role; their causes are again endogenous in nature. Moreover, it appears that I-imaginings can play many different functional roles, depending on the uses to which mental images are put. If all ordinary perceptual experiences are functionally on a par-tending to cause belief in the presence of the objects represented, for instance—not all I-imaginings can serve to recreate that same role. So, if all imagistic imaginings are recreative in some sense or other, it is not because they recreate the functional role of perceptual experience.

An alternative route of response for C&R would be to reverse course and allow that some uses of mental imagery—including episodic rememberings, in particular—are not perception-like imaginings. This would also evade the charge that a perception-like imagining can be recreated simply by triggering mental imagery. Yet this leaves them owing a different account of what unifies the class of perception-like imaginings. Since format could no longer be the answer, we would need to look for functional similarities between perceptual imaginings and perceptual experiences. Once again, it is hard to see what these similarities might be, and how they could be robust enough to define the class.

Again, none of this is to deny that visual imagery and visual perception draw on partially overlapping neural networks (Kosslyn, Thompson, & Alpert, 1997; Slotnick et al., 2005); and it *may* even be that they both represent objects by

means of a common, non-discursive "pictorial" cognitive format. The point is simply that these are not in themselves reasons to conceive of one as a simulation, or recreation of the other. Mental images are not *wanna-be* perceptual experiences. They are tools for ordinary, stimulus-independent reasoning about the past, present, and future. The notion of "recreative" or "enactive" imaginings favored by those who view I-imagining as inherently simulative does not cut the mind at a natural joint. Nor does it mark any salient commonsense conception of imagination. Instead, it reinforces the misconception that I-imaginings cannot share the functional role of states like judgments, desires, or decisions; and it wrongly suggests that all imagery-involving cognition must occur, in some sense, "offline," detached from our proper commitments.

This concludes my argument for the framework sketched in Fig. 3.1: some A-imaginings are I-imaginings; and some I-imaginings are A-imaginings. But neither is a sub-set of the other. Further, there is no theoretically significant third class of imaginings—recreative imagining—that includes both. We turn, in the next chapter, to look more closely at the role mental images play within different kinds of folk psychological states.