

# 4

## Imagistic Imagining Part II

### Hybrid Structure, Multiple Attitudes, and Daydreams

#### 4.1 Introduction

This chapter delves further into the nature of I-imaginings and the mental images they employ. I develop a framework where I-imaginings have both imagistic and non-imagistic components. Within this “hybrid” framework—elements of which I’ve defended elsewhere (Langland-Hassan, 2015, 2018a)—some I-imaginings are shown to be familiar folk psychological states like judgments, desires, and decisions. Establishing that instances of I-imagining can be identified with such states is crucial to this book’s larger project of showing how A-imagining (or “attitude imagining”) can be reduced to a collectively more basic assortment of folk psychological states. The reason is this: last chapter I argued that some mental events are both A-imaginings *and* I-imaginings: they are A-imaginings insofar as they are cases of rich, elaborated, epistemically safe about the possible, unreal, and so on; and they are I-imaginings insofar as they make use of mental imagery. If one cannot see how I-imaginings can be identified with judgments, decisions, desires, beliefs, and so on, one won’t be able to see how A-imaginings that incorporate mental imagery can, either. My aim in this chapter is to make the possibility of such identifications more visible.

One source of resistance to the idea I-imaginings can have instances that are judgments or desires is the idea that mental images occur in a representational format distinct from “propositional” thoughts like judgments and desires (where “propositional thoughts” are folk psychological states whose contents we ascribe with that-clauses). This apparent difference in format can make it difficult to see how the two kinds of mental state could combine to form complex truth- (or accuracy-)evaluable mental states. Now, on my way of speaking, a mental image is simply a kind of mental state that appears, to the person having it, to be image-like, or to have sensory character, and that occurs without a proximal external cause. It remains an open empirical question how we are to understand the format of the mental representations or processes underlying this introspectively familiar phenomenon. This is so even if we are convinced that mental imagery has the same representational format as the processes involved in ordinary perception; for the

format of perceptual states is itself an open question.<sup>1</sup> Likewise, as I argued in Chapter 2, agnosticism about the representational format of propositional states like belief and desires is also reasonable at this moment in cognitive science. Because I view questions concerning the representational format underlying mental imagery and other folk psychological states as unsettled, I don't think that theories of A- and I-imagining need to be tightly constrained by any (putative) facts about the cognitive formats in which they occur.

And yet: I know that not everyone will share in my agnosticism about cognitive formats. Nor do I want my general arguments concerning I- and A-imagining to rely upon that agnosticism. So, in addition to articulating a hybrid framework for understanding the nature of I-imaginings—where I-imaginings have both imagistic and non-imagistic components—I will also try to motivate it from within the terms of views on which there *is* an important difference in cognitive format between non-imagistic folk psychological states and sequences of mental imagery. I circle back to the “clash of formats” worry, in particular, at the end of this chapter (section 4.10). Before that, I will show how token I-imaginings can be instances of states like judgments, desires, and decisions—and propose that this is compatible with some of the same token instances *also* being daydreams. These points are all important for the larger project of establishing that A- and I-imaginings are themselves heterogeneous classes of mental states and processes—classes that can be fruitfully reduced to a more basic collection of folk psychological states.

## 4.2 The Relation of Mental Images to I-imaginings

As I stare at the coffee cup on my desk, we have an easy answer for why my visual experience is of *this* cup and no other: the experience is being caused by just this cup. Wiggle the cup and you wiggle the experience. A similar story applies to photographs. The contrasting stimulus-*independence* of I-imaginings forecloses

<sup>1</sup> I don't have space to defend agnosticism about perceptual and imagistic formats here. My main worry is that the space of options is too small in contemporary philosophical debates. It is often assumed that mental imagery and/or perceptual states have to be *either* pictorial/analog/nonconceptual or discursive/language-like. Yet contemporary artificial neural networks give us reason to allow for other possibilities. Consider those used in face recognition (Lawrence, Giles, Tsoi, & Back, 1997; Parkhi et al., 2015). These connectionist networks take images as input and output judgments about whether the image records a face—or even whether it records a particular previously encountered face. Variations on such networks have been used not only to discriminate images, but to *generate* novel photorealistic images as well (Denton, Chintala, & Fergus, 2015; Ledig et al., 2017). As discussed in Chapter 2, such networks do not make use of discrete language-like representations; but neither do they make use of discrete *analog* or *pictorial* representations. The judgment, by a face-detection neural network, that a certain input contains a face arises out of parallel processing, distributed across multiple “hidden layers” of nodes, where the nature of the processing is determined by the strength of connections among the many nodes in the hidden layers. Any claims about the format of perceptual state and mental imagery will need to consider carefully the relevance of these, our most successful, models of perceptual states.

this way of answering the question about their reference. Part of what makes an I-imagining a (mere) imagining is that it is endogenously, as opposed to exogenously, caused. I-imaginings are, in that sense, stimulus independent. We cannot lean on the external world to settle the question of their objects in the same way. Nor can we trace the reference of a mental image to the particular from which it causally derives—my image of my mother being *of* my mother just because it in some sense derives from past sightings of my mother. For it is doubtful that there is a *single* individual from which each token image could be said to causally derive. For instance, it's unlikely that my image of a yellow pencil derives from just one yellow pencil I perceived in the past. Moreover, an important feature of I-imaginings is that they are capable of taking, as objects, things never before perceived.

What, then, determines the objects of our I-imaginings? What, in Wittgenstein's (1953) phrase, makes my image of him an image of *him*? My answer will be that it is an internal, non-imagistic state of the person doing the imagining—one that pairs in the proper way with the mental image. I will motivate this answer by appeal to the theoretical work it can do. Mine is not the only conceivable answer to how mental images come to be images *of* something, of course. And it comes with questions of its own. How, for starters, do *non*-imagistic states come to have objects? While the question is legitimate, I won't try to answer it. In defense of that omission: most in these debates are already committed to the existence of non-imagistic mental states that have objects; relying upon them is not introducing a new tool.

Supposing that we are happy enough with non-imagistic mental states having determinate objects, the question is how we are to understand the relation of such states to the mental images that occur within I-imaginings. I will argue that I-imaginings are *hybrid* states, consisting of a mental image—or sequence of images—paired with a non-imagistic state. The non-imagistic component is what enables the I-imagining, as a whole, to have an object. While mental images may be “purely imagistic,” in some sense relevant to their format, I-imaginings *are not*. The precise sense in which mental images are “paired with” non-imagistic states will be explained below, with the general picture being motivated by the explanatory work it can do.

### 4.3 The Multiple Use Thesis

While the “hybrid” view of I-imagining I will defend may seem counterintuitive to some, general sympathy for such a view is implicit in the widely accepted Multiple Use Thesis concerning mental imagery (Martin, 2002; Noordhof, 2002; Peacocke, 1985). According to the Multiple Use Thesis, the very same mental image—in the sense of a *type* of image—can be used in the fulfillment of multiple

different imaginative projects. In Peacocke's terms, "the same conscious, subjective image" will serve to support numerous imaginative projects, including:

Imagining being at the helm of a yacht; imagining from the inside an experience as of being at the helm of a yacht; and imagining from the inside what it would be like if a brain surgeon were causing you to have an experience as of being at the helm of a yacht. (1985, p. 19)

The difference-maker in such imaginings, Peacocke tells us, are "S-imaginings" where "S" is for 'suppose.' S-imaginings account for "the difference between imaginings which, though having a common image, still differ" (1985, p. 25). Although S-imagining is not literally supposing, he remarks, "it shares with supposing the property that what is S-imagined is not determined by the subject's images" (p. 25). The differences in the three yacht-related imaginings are "differences in which conditions are *S-imagined* to hold." While Peacocke never commits to the claim that images can only gain reference by being paired with a non-imagistic component, he has arrived at the same conclusion that a characterization of the full content of an I-imagining will incorporate the contribution of non-imagistic ("S-imagining") states. In specifying that S-imagining is "not literally supposing," he seems to suggest that S-imaginings are, instead, literally parts of sensory imaginings (though parts that are distinct from sensory images themselves). M. G. F. Martin voices a similar idea when considering the multiple uses to which a certain type of image can be put. "Typically," he remarks, "acts of imagining things to be a certain way have both imagistic and non-imagistic aspects" (2002, p. 403). (See also Kung (2010).)<sup>2</sup> Whether or not these theorists literally mean to propose that an imagining, considered as a particular kind of mental state, can have both imagistic and non-imagistic elements, this is indeed the sort of "hybrid" view I will go on to develop.

It is one thing to explain how images acquire objects; it is another to show how image-involving states can, like judgments, be considered *true* or *false* (or, like desires, be considered *satisfied* or *unsatisfied*). (Sometimes images themselves are thought only to be *accurate* or *inaccurate* with respect to their objects, where,

<sup>2</sup> Wiltsher (2016) argues against what he calls the "additive view" of sensory imagination, which he characterizes as the view that "mental imagery often involves two elements," including "an image-like element" and "a non-image element, consisting of something like suppositions about the image's object" (2016, p. 266). He targets, in particular, the views of Peacocke (1985) and Kung (2010). While it might seem that Wiltsher's argument targets my view as well, it does not. Wiltsher himself defends a view where the objects of mental images are determined by relevant non-imagistic "concepts" involved in the generation of an image: "You actively generate an image by deploying a concept, which calls up sensations sufficient for a scenario, and simultaneously dictates what ... content is applied to that scenario" (2016, p. 273). In the end, Wiltsher's target is quite narrow; it is the view that mental images are accompanied by "something like *suppositions* about the image's object" that are not, strictly speaking, suppositions (my emphasis). Whatever its merits, the view targeted is not one I defend.

unlike truth and falsity, accuracy comes in degrees.) If at least some I-imaginings are going to be assimilated to judgements, desires, and decisions, we need to see how they can both represent particulars *and* have different kinds of truth or satisfaction conditions. That is the main project of the next section.

#### 4.4 Judgment I-imaginings

This section lays out an approach for seeing some I-imaginings as judgments (where judgments are occurrent beliefs). The more general framework, in which I-imaginings have hybrid structures, will then be applied to other folk psychological states, including desires and decisions.<sup>3</sup>

Let BEL represent the attitude of belief, with whatever follows it inside parentheses representing its content. So, the belief that it is raining can be symbolized as: BEL (it is raining). We understand the BEL part of that symbolization to the extent that we understand the functional (and inferential) role of beliefs in general. Judgments, as I am understanding them, are occurrent beliefs; this is to say that they are mental *processes* in which one arrives at a belief of the same content.<sup>4</sup> Using JUD to stand for the attitude of judgment, we can express the judgment that it is raining as: JUD (it is raining).

Let us use JIG to stand for an image-involving state that is a sub-species of judgment generally—what I will call *judgment I-imaginings* (JIGs). In calling the state a “judgment I-imagining,” I am not suggesting that it is a kind of non-serious, imitative, or pretend form of judgment. (JIGs, as I will understand them, are not akin to “belief-like imaginings” as some use that term (see, e.g., Currie & Ravenscroft, 2002; Doggett & Egan, 2007); and Schellenberg, 2013).) Rather, JIGs simply *are* judgments that involve mental images as proper parts; they are a sub-set of all judgments. And they are a sub-set of I-imaginings, as well. The idea, which I will sharpen in a moment, is that, just as I might judge that tomorrow it will rain, I might also judge that the front of my childhood home looked thus-and-so—where “thus-and-so” is replaced by a mental image of the house. Both are ordinary judgments; but only the latter incorporates a mental image and so is also an I-imagining.

We can symbolize a judgment I-imagining by using JIG with a content following it in parentheses. As JIGs are instances of I-imagining, at least some of their constituents will be mental images. This means that, in expressing the content of a JIG, we need to account for the place of the image. My proposal will be that a JIG constitutively involves two components, one of which pertains to the

<sup>3</sup> This section develops, refines, and expands a proposal I have made elsewhere (Langland-Hassan, 2015, 2018a); here, new terminology is adopted to fit the terms used elsewhere in this book.

<sup>4</sup> Characterizing the difference between occurrent and non-occurrent states is not as easy as one might wish. I recommend Bartlett’s (2018) treatment of the topic, according to which a state’s being occurrent amounts to its consisting in an *activity* or *process* of some kind.

visual (or other sensory) image itself, the other of which lies outside of it and is non-imagistic in nature. Considered together, these components constitute a single judgment-imagining.

I will use **bold** to distinguish the specific portion of an imagining contributed by a mental image. Of course, the fact that psychological contents are here described in natural language should not be taken to suggest that their format is itself language-like. As earlier remarked, I am remaining neutral on questions of cognitive format. Also, it should not be assumed that, for every word included in bold, the relevant image represents that very property. The image whose content is described as a **big brown horse**, for instance, may not itself represent the property of being a horse. The words in bold are simply meant to point the reader toward a general idea of the kinds of (perhaps only superficial) properties represented by the image.

Like visual perceptual states, visual images seem to have a rich and fine-grained content that can be difficult, if not impossible, to capture in the words of a natural language. This is part of the reason I do not pretend to do so with the words in bold. Another reason is that folk psychological platitudes do not put clear limits on the kinds of properties that an image-like thought can represent; and the science of mental imagery is, in my estimation, too young to do so definitively (see fn. 1, above)). Thus I will include an ellipsis as part of the description of such contents to indicate that the words in bold only gesture at the actual full imagistic content. The ellipsis is also meant to convey that the imagistic content may include within it what we would intuitively count as a sequence of images, and not simply a single static image.

Finally, and importantly, I will suggest that the contents of images should be thought of as akin to indefinite descriptions (i.e., descriptions beginning with “a” or “an,” or “some”). Among other things, this allows for a natural account of how one and the same image (in the sense of an image type) can be used to imagine many different objects and scenarios. It also entails that, like indefinite descriptions generally—such as “a big brown horse”—mental images are not *by themselves* assessable for truth or falsity (or as being satisfied or unsatisfied).<sup>5</sup>

<sup>5</sup> In saying that mental images, by themselves, fail to represent truth-evaluable propositions, I may seem in agreement with others who say that sensory images are only “as if” they have a direction of fit (Lormand, 2007, fn. 15; Searle, 1983, pp. 13–14), or are “neutral about reality” in that they “do not purport to tell us how the world is” (McGinn, 2004, p. 21). Yet, in other work (Langland-Hassan, 2015), I have taken aim at such proposals. Here is why: these other accounts do not distinguish between the content of an image itself and the *sensory imagining* in which it is featured. On my view, it is crucial to grant that an imagistic (or sensory) imagining can have robust correctness or satisfaction conditions, even if images, taken by themselves, do not. If, on the other hand, the point others are making is simply that mental images—like predicates without subjects—lack correctness conditions *by themselves*, then we may be in agreement. My strong hunch is that there is in fact a deep disagreement, however, insofar as others view sensory imaginings as entirely composed of mental images and do not make suggestions for how a sequence of images can have correctness conditions when a single image does not. Indeed, Lormand characterizes sensory imaginings as being able to “mismatch the world without being in epistemic need of revision” (2006, fn. 15). The notion of a *mismatch* suggests a view where sensory imaginings do in fact represent the world as being a certain way—a way it is not. This is *unlike* the notion of a bare indefinite description which cannot by itself be said to predicate anything of the world one way or the other.

To put this framework into practice, suppose that Joe is engaged in some I-imagining in order to determine whether the couch he ordered will fit through his doorway. He might have an imagining we can express as:

(1) JIG (When the couch I ordered arrives, it will be: **a tan couch-shaped-object fitting through a rectangular doorway...**)

While the image itself only represents (in a fine-grained way) a tan, couch-shaped object fitting through a doorway, the imagining as a whole represents the specific couch he bought as fitting through his doorway. This is thanks to the (non-bold) portion of content that is non-imagistic in nature. Here we see an affinity with Fodor's (1975) idea that images "convey *some* information discursively and *some* information pictorially" (p. 190). The definite description—"the couch I ordered"—occurs as a non-imagistic, descriptive aspect within the imagining—one that helps determine what the image is an image *of*.<sup>6</sup> This non-imagistic component accomplishes two important tasks simultaneously: it generates an object for the image; and it allows the image to be characterized as contributing to a truth- or satisfaction-evaluable state.

In this case, Joe is trying to predict how the couch will look as it comes to his door, in order to determine whether it will fit through. The attitude he takes toward the overall content is that of judging it to be the case. So the mental episode as a whole is veridical if the couch will indeed fit and non-veridical otherwise. Note, however, that for a JIG to be veridical, it is not necessary for the image to represent the object exactly as it looks (or would look), with all the same detail as a comparable perceptual experience. Just as ordinary sentences (e.g., "The brown dog jumped") can be true while leaving out many details (What shade of brown? How high?), so too can an imagining be veridical without going into all the details that a perceptual experience might. To assume otherwise is to mistake the cognitive role of imaginings for that of perceptual experience.

To try another example, suppose that Avery has only seen misleading pictures of the Arc de Triomphe—pictures which made it look silver in color. Setting out on his first trip to Paris, he might engage in the following imagining:

(2) JIG (The Arc de Triomphe is: **a big silver arch...**)

In such a case we can say that Avery has *misimagined* the Arc de Triomphe, just as one might *misperceive* the Arc de Triomphe if somehow, through a trick of light,

<sup>6</sup> David Kaplan advocates a similar approach to placing images within judgments in his "Quantifying In" (1968): "Many of our beliefs have the form: 'The color of her hair is \_\_\_', or 'The song he was singing went \_\_\_', where the blanks are filled with images, sensory impressions, or what have you, but certainly not words. If we cannot even say it with words but have to paint it or sing it, we certainly cannot believe it with words" (p. 208). Kaplan seems to share the view that, within judgments and beliefs, images assign properties to an object that is determined by an element of content *outside* of the image, with images playing a predicative role. Thanks to Neil Van Leeuwen for alerting me to this passage, which he discusses in Van Leeuwen (2013).

one saw it as silver. Taking his first stroll down the Champs Elysées, he comes upon the arch itself and thinks: “It’s not at all as I imagined it.” Intuitively, he did indeed I-imagine *the Arc de Triomphe* before; he just got it wrong. He imagined *as silver* something that is not in fact silver. That is why it is a *misimagining*—and, indeed, a *misjudgment*. He was trying to get it right and failed.

But note that a successful imagining closely related to (2) is also possible—one that involves the same type of mental image. It is possible to successfully imagine the Arc de Triomphe *as silver*, even if one knows it is not silver. For a clear role of many I-imaginings is to represent not how things are or were, but how things could be, or could have been. Such hypothetical and counterfactual imaginings are closely associated with the creative “freedom” of imagination. Knowing full well what the Arc de Triomphe looks like, Jude might imagine the arch *as silver*, just because he is interested in what it would look like painted silver. For Jude, the experience could be symbolized as:

(3) JIG (The Arc de Triomphe painted silver would be: **a big silver arch...**)

Here the imagining still has correctness conditions, but of a different (modal) kind. The content pertains to how the Arc de Triomphe *would look* under certain conditions. And if the arch would not have those characteristics when coated in silver, it is another *misimagining*. It is a *misimagining* with a modal content.

With (3) we get a first look at how we might explain some imagery-involving A-imaginings in terms of their being image-involving judgments. When Jude makes the JIG in (3), it is reasonable to describe him as “engaging in rich thought about a merely possible situation, in an epistemically safe way.” He is, after all, thinking about a merely possible situation, where the Arc de Triomphe is painted silver; his use of imagery renders it phenomenologically and representationally rich; and he does not diminish his epistemic standing in making this (presumably true) judgment about what the Arc de Triomphe would look like painted silver. This particular A-imagining turns out to be an image-involving judgment (a JIG); it is therefore also an I-imagining.

Imaginings with modal character can also be aimed at the past. The person who imagines what it would have been like if Hilary Clinton had won the 2016 U.S. presidential election may have an imagining with the content:

(4) JIG (Hilary Clinton giving a victory speech on election night would have been: **a smiling and waving Hilary-Clinton-looking woman...**)

This is another plausible example of an I-imagining that is also an A-imagining. Of course, (3) and (4) add more structure to certain acts of imagining than one might have expected, pre-theoretically. But then, there must be some cognitive difference between the person (Avery, in example (2)) who imagines the Arc de Triomphe as silver with the idea that it *is* that way, and the person (Jude, in



example (3)) who imagines it counterfactually as being that way. And there must be some difference between the person who, thinking Clinton won, imagines her smiling and waving, and someone who imagines her doing so while knowing it never happened. The above is a proposal for capturing these differences that respects the different roles each imagining plays in guiding the behavior of the imaginer. By adding in the structure here (as opposed to within metacognitive background beliefs about what their respective imaginings aim to depict), we are able to give an account of the contents and correctness conditions of the related I-imaginings that links them to their actual roles in cognition. When these JIGs are false, they decrease our epistemic standing and lead us to say false things; when they are true, they increase our chances of successfully navigating the world. In short, we are able to link the content and resultant correctness conditions of I-imaginings to their successes and failures in allowing us to carry out our goals.

If, instead, we think of the entire act of I-imagining as lacking any correctness conditions—as being only “as if” it has a direction of fit (Lormand, 2007, fn. 15; Searle, 1983, pp. 13–14), or “neutral about reality” in that it “does not purport to tell us how the world is” (McGinn, 2004, p. 21)—we miss the obvious fact that our I-imaginings do in fact guide our actions and inferences to greater or lesser degrees of success. We need a way of seeing how I-imaginings can constitute some of our considered judgments themselves, and holding that they have hybrid structures allows us to do so. At the same time, we can see I-imaginings such as (3) and (4) as episodes of thinking about the merely possible, fantastical, and so on, in an epistemically blameless way. This means they satisfy the criteria for A-imagining. As (3) and (4), being JIGs, are, in addition, judgments, we can see them as image-involving A-imaginings that are reducible to more basic folk psychological states.

Next I want to extend this framework to show how instances of I-imagining can be folk psychological states of other kinds. This meshes with the larger project of showing how both I- and A-imaginings are heterogeneous collections of more basic folk psychological states.

#### 4.5 I-imaginings that are Desires, Decisions, and Intentions

The schematic form used to symbolize JIGs can be coopted to symbolize I-imaginings with other attitudinal forces and other associated functional roles. Very often, these processes are also instances of A-imagining. Recall Walton’s “paradigm instance of an exercise of the imagination” recounted in Chapter 1:

Fred finds himself, in an idle moment, alone with his thoughts. Feeling unsuccessful and unappreciated, he embarks on a daydream in which he is rich and famous. He calls up images of applauding constituents, visiting dignitaries, a

huge mansion, doting women, fancy cars. But alas, reality eventually reasserts itself and Fred gets back to selling shoes. (1990, p. 13)

Walton is clear that this daydream involves Fred's calling up "images." In line with my proposal in Chapter 1, we can characterize the daydream as sequence of occurrent imagistic desires, using "DIG" to designate a desire-I-imagining:

(5) DIG (I see cheering constituents that are a **crowd of people waving and holding signs bearing my name**; I own a lavish home that is a **gleaming mansion on a hill**; I am greeting visiting dignitaries who are a **well-coifed and fancily tailored group**; I am trailed by doting women who are: **some beautiful model-types**; my garage is: **a large, car-filled museum**.)

Just as JIGs are full-blown judgements, so too are DIGs actual, occurrent desires. They are not imaginative "analogues" to desires, or desire-like states—they are not "i-desires" (Doggett & Egan, 2012) or desire-like imaginings (Currie, 2002, 2010). DIGs are simply desires that have mental images as proper parts. The DIG symbolized in (5) will be satisfied when Fred's fantasy comes true. Until that time, it will play the kind of cognitive role we associate with occurrent, unsatisfied desires generally.

DIGs are important to the explanation of how A-imaginings can be explained in terms of more basic folk psychological states. Much of A-imagining is "mere fantasy"—we think about (and visualize) things we would like to happen, even if we doubt they will occur. One of the more puzzling gaps in recent theoretical treatments of imagination is that few are inclined to call our imagistic fantasies and daydreams what they plainly are: desires! (These include, at times, desires for thus and such *not* to occur—also known as *fears*.) Unlike beliefs and judgments, desires needn't reflect what we think is true or even likely. As Amy Kind observes, there is nothing untoward about desires whose chances of satisfaction are slim to none, or that we cannot presently act upon:

I might desire that I could introduce my children to their grandfather, who is no longer living; I might desire that my (not yet existing) grandchildren have healthy and happy lives; I might desire that a certain ballot proposition had been defeated in a recent election. In none of these cases is the reasonableness of the desire undercut by the fact that the object of the desire is nonactual.

(2011, p. 425)

Of course, Kind does not propose that such desires are cases of imagining. But why shouldn't we allow that at least some desires are indeed A-imaginings? A-imagining is nothing other than epistemically blameless, rich, elaborated thought about the merely possible, fantastical, fictional, and so on. Many desires fit that bill precisely.

#### 4.6 On the Relation of Desire to A-imagining More Generally

Well, there *are* reasons others haven't included image-involving desires within the class of A-imaginings. But they are not, on reflection, *good* reasons. One reason has been the assumption that all I-imaginings should, like the perceptual experiences they resemble, be analyzed *as a class*. If all perceptual experiences are thought of as representing the world as being some way or other, it will then be natural to think of all I-imaginings as doing so as well. It might, for instance, seem that all imagistic imaginings represent their objects *as present before one*, in the manner of corresponding perceptual experiences, even if they are usually non-veridical in doing so. But, as we have seen, this is simply to mistake a possible sharing of format between I-imaginings perceptual experiences for the view that they must have the same force or "direction of fit" as well. Notions of "force" and "direction of fit" (Searle, 1983) are tied to a state's functional role, not its format. As I-imaginings rarely lead us to believe in the nearby presence of what they represent—and certainly do not do so as a default—there is no good reason to view them as always having essentially the same correctness conditions and direction of fit as perceptual experiences. Moreover, supposing that they do leads to the absurd result that all uses of mental imagery are in some sense misrepresentational.

Another reason people have not thought of DIGs, and desires generally, as possible instances of imagining traces to the specific explanatory contexts in which imagination has been put to work. When we focus on explaining a specific behavior or ability—such as pretend play or understanding other minds—it is natural to conceive of the related imaginings as *guides* to behavior and inference. Desires are thought to *motivate*, but not to guide behavior in the manner of beliefs. Now add the tacit assumption that the class of imaginings constitutes a single cognitive kind, and, *voilà*, we quickly arrive at the conclusion that all imaginings must, in some sense, be "guiding" states with a "mind to world" direction of fit.

Yet problems and puzzles quickly arise when we try to shoe-horn everything we would like to say about imagination into a single kind of guiding state with a well-defined functional role and "mind to world" direction of fit. For there are platitudes about imagining that we would like to uphold—such as that we can imagine whatever we wish—that seem to conflict with what we have to say about the guiding process we have posited to explain pretense behavior. One reaction is to nevertheless seek a way of saying those same things about the process we have posited—showing, for example, how it can be *both* constrained by what we believe *and*, at times, free to represent whatever we choose (Kind, 2016a; Langland-Hassan, 2016). Another, more advisable, reaction is to back up and grant that, while the process we have posited to explain pretend behavior is *an instance* of imagining, there is no reason to think it is the only kind of process that can be an instance of imagining—and, therefore, no reason to say that *it* must have all the features we associate with imagining in other contexts. All we really mean by "imagining," in the relevant folk

psychological sense, is engaging in rich, or elaborated, epistemically safe thought about merely possible, fantastical, and fictional scenarios. And this characterization remains silent on whether a variety of functionally-distinct processes fit that bill. Should it turn out, on reflection, that all the token processes we end up counting as A-imaginings are instances of folk psychological states we already believed in and understood independently... well then we should be delighted.

### 4.7 Decision I-imaginings

With JIGs and DIGs as examples, it is easy to see how a range of other imagery-involving folk psychological states can be symbolized. A person who decides that, later today, he will finally put away the screwdriver that has been sitting on the counter for weeks now, may token the following *decision*:

(6) DEC (Later today that screwdriver will be: **a screwdriver going-back-into-a-toolbox...**)

Imagery-involving decisions of this sort will form part of the larger explanation of creativity I develop in Chapter 12. To preview, writing a story will involve making decisions such as:

(7) DEC (In the story I am writing, the officer who pulls me over to compliment my driving looks like: **a friendly policeman...**)

This is again not to say that *all* image-involving decisions should be counted as A-imaginings. Due to their focus on the here and now, their relatively sparse content, or other contextual factors, some image-involving decisions—like some JIGs and DIGs—will not satisfy the general characterization of A-imagining as rich, epistemically safe thought about the merely possible, fantastical, and so on. Thus, by my reckoning, (6) is *not* an A-imagining, while (7) is, due to its connection to story-telling and fantasy. The difference, however, is not deep one.

### 4.8 Imaginative I-imagining?

In addition to JIGs, DIGs, and DEC, we could also consider whether to posit an imaginative version of I-imaginings, corresponding to cases where we would say a person has imagined (but not judged, desired, or decided) that *X*, and where their doing so involved mental imagery. Such a posit does no harm to the project of reducing and explaining imagination, so long as we understand these as “light-duty” ascriptions and don’t take ourselves to be describing a *sui generis* folk

psychological state or cognitive attitude, irreducible to any others. For instance, instead of characterizing Fred's daydream, in (5), as a sequence of desires, we could call it case of imagining that he is rich and famous. We could even symbolize it as:

(8) IMAG (I see cheering constituents that are a **crowd of people waving and holding signs bearing my name**; I own a lavish home that is a **gleaming mansion on a hill**; I am greeting visiting dignitaries who are **some well-coifed and fancily tailored individuals**; I am trailed by doting women who are: **some beautiful model-types**; my garage is: a **large, car-filled museum**.)

What matters for the project of explaining A-imagining is that we can give some characterization of this state in other familiar folk psychological terms, and without appeal to a distinct attitude of imagination. And we have precisely that with (5). Just as we can allow that there is such a thing as suspecting that  $p$ , without its being something over and above one's believing that it is somewhat likely that  $p$  (see Chapter 1), we can allow that there are I-imaginings where the attitude is one of imagining, without its being the case that taking that attitude is something over and above one's making a certain judgment, having an occurrent desire, making a decision, or a combination of such.

But are there reasons to think that there are I-imaginings for which no such recharacterization is available? Imagistic daydreams, with their tenuous relation to both outward behavior and folk psychological explanation, are perhaps the most likely candidates. I offered a reductive account of one such daydream from Walton, above. But it will help to consider the issue of daydreams in a bit more detail.

## 4.9 Daydreams

We should want a theory of imagination to say something about the nature of daydreams. But what are daydreams? How can they be characterized in a theory-neutral way? Because daydreams are not associated with any particular kind of outward behavior or resulting beliefs, it is difficult to know what the constraints might be on theory of daydreams. Here is a quick stab at an initial characterization:

*Daydreams:* daydreams are A-imaginings that, at least typically, involve mental imagery, and which serve no immediate practical goal.

The kinds of "practical goals" screened off by this characterization are things like taking part in a pretense, arriving at a belief in a conditional, consuming a fiction, or making a creative product—i.e., the main contexts I focus on in the chapters to follow. As with A-imaginings more generally—which are simply rich or elaborated, epistemically safe episodes of thought about the possible, unreal, and so

on—there is no reason to think that the folk psychological notion of a daydream picks out a single type of mental state or process. We should expect the mental events that get called “daydreams” to be a heterogeneous group, including DIGs (such as (5), above), JIGs, and DECs at a minimum.

For instance, one way to engage in rich thought about the merely possible, unreal, and fantastical, in an epistemically safe way—to A-imagine—is to make a series of elaborate judgments about what is *not* the case. Let’s consider an example of that sort. Suppose that Sebastian arrives at an empty and serene park, expecting it to be full of people enjoying the sunny day. Looking out over the park, he thinks:

(9) JIG (How strange it is that there are no **kids running after each other**; . . . no **families having a picnic**. . . no **dog leaping after a Frisbee**. . . no **couples rowing boats**.)

Here Sebastian makes a series of judgments about what is *not* going on in the park, using a variety of mental images in the process. He doesn’t make a single snap judgment—*empty park!*—and move on. He *contemplates* the park’s being empty through the use of imagery, thinking about what the park would be like if it were a normally busy weekend. Because he is engaged in some rich, extended thought about a merely possible situation (the park being full of revelers) in a way that is epistemically compatible with his not believing the situation to obtain, it is a good candidate for an A-imagining. And, due to the presence of the mental images within this rumination, it is also an instance of I-imagining. Further, because it serves no immediate practical goal, it is, in addition, a daydream. And, finally, because it is a JIG—one of Sebastian’s occurrent judgments—the episode can also be explained in more basic folk psychological terms.

Pre-theoretically, we simply don’t consider whether all the mental states entertained during an instance of A-imagining could possibly be judgments. We just remark that Sebastian was imagining the park full of revelers, for instance, without contemplating whether the states in virtue of which he does so could possibly have been judgments. But, in this case, on reflection, we can account for the sense in which his cognition is “about the merely possible, fantastical or unreal” by noting that he is thinking about a rich variety of ways he believes the park *not* to be; this is to consider possibilities for how the park could have been.

This is certainly not to suggest that *all* daydreams could receive this sort of analysis. I will consider some different cases below. It is also not to suggest that all JIGs where negations are judged will be A-imaginings. Not all will be adequately rich and extended, or occur in the sort of contemplative setting where we are inclined to ascribe an A-imagining. So it is no objection to point out that there are cases of judging a series of negations that we would not happily describe as imagining. As earlier noted, on my view, imagining does not form a natural (mental) kind. Whether our folk psychological intuitions pull us toward granting

that someone is imagining is a highly contextual matter. Issues of subject matter, duration of the episode, the person's assumed mood, the sort of action she is undergoing, and so on, will all influence our judgments.

With these points in hand, other examples are easily found. Assuming that the following occur in a context where they are not put toward achieving some immediate practical goal, here are some other DIGs and JIGs that are plausible instances of daydreams:

- (10) JIG (It would be fun to be a **person flying over the Alps in a jetpack...**)
- (11) DIG (The animal I see as I peek through the Jurassic reeds, is a **brachiosaurus eating from the treetops...**)
- (12) JIG (The car that might resolve my midlife crisis is a **powder blue, '67 Mustang...**)
- (13) DIG (The landscape visible from the cliff I'm standing on is a **vast expanse of turquoise water.**)

An extended bout of daydreaming could involve a sequence of such JIGs and DIGs.

Some may nevertheless remain unconvinced by such examples. They may reply that *their* daydreams are not plausibly seen as JIGs or DIGs. Presumably, such claims will be grounded in their introspective assessments of their own daydreams. It is, in any case, unclear to me what else such an objection might be based upon. The fact that disputes about the nature of daydreams are likely to devolve into disputes about the deliverances of introspection is, I suggest, reason to let one's theory of daydreams follow one's broader theory of imagination, and not the other way around.<sup>7</sup>

#### 4.10 Hybrid Structures Are Not Problematic

A key claim of this chapter is that non-imagistic elements of thought combine with mental images to form I-imaginings with complex contents and different kinds of truth and satisfaction conditions. The idea that I-imagining involves both imagistic and non-imagistic elements working in tandem is not new. Precedents can be found in Fodor's (1975, p. 190) notion of entertaining images "under a description," Tye's (1991, Ch. 5) interpreted symbol-filled arrays, Kung's (2010) images with "assigned" contents, Reisberg's (1996) images set in "reference frames," Johnson-Laird's (1996) "mental models," Peacocke's (1985) S-imaginings,

<sup>7</sup> See section 1.11 for more on the limits inherent in letting introspection arbitrate disputes about imagination.

and in the passages from Kaplan (1968) and Martin (2002) quoted earlier. Nevertheless, it is also commonly held (e.g., among pictorialists) that mental images have an iconic or pictorial representational format, whereas non-imagistic thought (which is sometimes equated with *conceptual* thought) has a language-like format, such that the meaning of a complex representation is a function of the meaning of its discrete, semantically significant parts, together with the syntactical rules for combining them (as we find, e.g., in Fodor (1975, 1987)). The latter view, as applied to folk psychological ontology, was discussed at length in Chapter 2. As noted at the outset of this chapter, it might be thought that these two formats of representation are like oil and water—they don't mix. If that worry is well founded, then we are left with a significant puzzle about how the two formats manage to interact in sequences of thought.

It should be emphasized, first, that the problem of mixing cognitive formats only arises from within the terms of heavy-duty views of folk psychological ontology that are committed to specific theses about the nature (and format) of the states causally responsible for the dispositions we attribute with folk psychological talk. When a light-duty theorist countenances the existence of JIGs, they merely grant that there are occurrent processes that involve apparently image-like states that lead one to have certain dispositions. For instance, to say that Joe has made the JIG in (1) is just to say that he fulfills a certain dispositional stereotype associated with believing that the couch he ordered will fit through his doorway, and that he does so in virtue of a thought process that seemed to him image-like. As there is no commitment here to the existence of representations in particular formats, there is no question to address as to how distinct formats might combine. However, I nowhere assume the truth of a light-duty perspective and, again, don't want to depend on such an account's being correct. I want instead to explain why, even on a heavy-duty view of folk psychological ontology, there is no special reason to be troubled by the idea that I-imaginings have hybrid structures.

The primary reason for holding that language-like and picture-like formats cannot combine within a single truth- or satisfaction-evaluable mental state traces to the issue of logical form. One of the dreams of cognitive science—especially in its early stages—was that transitions in rational thought could be modeled on the rules for manipulating the variables and connectives of various systems of formal logic. We know that the truth-preserving inferences of formal logic can be captured by a set of (syntactic) rules for manipulating symbols based purely on their intrinsic physical properties—their “shape,” as it is sometimes put. In that way, relations of semantic entailment among symbols can be mirrored by relations of causal entailment among those same symbols, based on their intrinsic physical features—as discussed, briefly, in Chapter 2. This is, in essence, how computers work. A tempting thought is that human thought



processes might also, in effect, be viewable from two perspectives simultaneously: as unfolding according to physical laws governing the neural realizers of symbols in the brain, yet where this “unfolding” at the same time mirrors the rational relations of semantic entailment we take our thoughts to follow at the personal level (Fodor, 1987). A crucial part of this picture is that thoughts have discrete meaningful *parts*, akin to the parts of a logical expression, such that the meaning of a thought is a function of the meaning of its parts. The meaning of a complex representation can then change if the parts are rearranged in accord with relevant syntactic rules. Without these assumptions—or, if you like, *hypotheses*—there is no clear analogy to be drawn between the operations of a computer and human cognition.

Introducing mental imagery into this picture may be thought to create problems. For if pictorialists are right that mental images represent by depicting their referents, then mental images must lack the language-like compositional structure necessary for the desired analogy of thought to formal logic to hold. In Fodor’s (2003, pp. 34–7) term, depictions, and “iconic” representations generally, “lack canonical decompositions,” insofar as there is no regimented way of breaking the representation into minimally meaningful parts of the sort that can be recombined, in accord with a set of syntactic rules, to form new truth-evaluable representations. It then becomes unclear how a cognitive system could use this type of representation in processes that mirror those of formal logic, unfolding according a fixed set of syntactic rules for manipulating and recombining a set of discrete symbols.

However, the potential problem here is not special to the present “hybrid” account. *Any* heavy-duty theory that grants a role for depictive (or “iconic”) representations in practical reasoning must confront the issue of how such representations inferentially interact with non-imagistic, language-like representations. Little is gained on that front by holding that the two kinds of representation never combine into a *single* truth-evaluable representation. We simply trade the question of how a single complex representation can combine formats for the question of how a truth-preserving inference can occur between two complex representations with distinct formats. To the extent that depictive, iconic representations appear at all in sequences of thought, we have already moved beyond what any simple comparison of human inference to the manipulations of formal logic could explain. The proposal that some human thought involves language-like representations combined with iconic representations faces no challenges not also faced by any attempt to find a place in practical reasoning for mental imagery. Thus, those who take a heavy-duty approach to the ontology to JIGs, DIGs, and the rest, are no worse off than anyone else who countenances both language-like and image-like representations in human cognition.

## 4.11 Recap

Whether we think of folk psychological ontology in heavy-duty or light-duty terms, there is no barrier to mental images forming proper parts of various folk psychological states, including judgments, decisions, desires, and more. We can symbolize these folk psychological states through the use of an “attitude” operator (such as JIG, DIG, or DEC) next to a sentence, where the sentence’s predicative content is accounted for by the contribution of one or more mental images. Let’s take brief stock of what this framework allows us to explain:

- We are able to see how some I-imaginings have truth or satisfaction conditions, with related functional and inferential roles. This allows, in turn, for an appropriate connection between the state’s content and correctness (or satisfaction) conditions, on the one hand, and the conditions under which the state leads to successful (or unsuccessful) action and inference (or motivates behavior), on the other.
- We have an elucidation of the Multiple Use Thesis (Martin, 2002; Noordhof, 2002; Peacocke, 1985), insofar as we have an account of the precise sense in which an image of a certain type can be used in imaginings of different particulars and scenarios.
- We have an explanation of how an I-imagining can be of or about things other than the causal source of the images involved—a capacity assumed by any theory which grants that we can imagine things never perceived.
- We can see how mental image-involving fantasies and daydreams are in fact cases of judgments and desires.
- More generally, we gain a picture of how I-imaginings—such as elaborated JIGs and DIGs that concern the possible, fantastical, and so on—can also be cases of A-imagining. This enables, in turn, an explanation of those A-imaginings in more basic folk psychological terms. Further, it makes vivid the sense in which both I- and A-imaginings are made up of a heterogeneous assortment of more basic folk psychological states.

These positive proposals are intended to be compatible with either a light-duty or heavy-duty understanding of the mental states involved. In ascribing to someone a JIG (or DIG, or DEC) with a certain content, I am ascribing an occurrent mental process that (as a matter of folk psychological platitudes) is responsible for a person’s having dispositions to engage in particular behaviors and inferences, and that is the sort of endogenously-triggered process that tends to be introspectively identified as “image-like,” or as having sensory character. Some theorists working with a heavy-duty ontology may add to those claims that the process itself makes

use of mental representations that occur in distinct language-like and image-like (or analog) formats. The point of simultaneously maintaining a coherent light-duty analysis is not to avoid refutation by empirical science or to imply that any particular view about the nature of cognitive representation is incorrect. It is instead to offer a framework for explaining imagination that may be useful to a variety of incompatible approaches to understanding the underlying mechanics of cognition.

In the chapters that follow, this hybrid framework for understanding I-imaginings will appear in explanations of the A- and I-imaginings that take place in contexts paradigmatically associated with imagination, including conditional reasoning, pretense, fiction consumption, and artistic creation.