1

On the Irreducibility of Attitudinal Imagining

Forthcoming in Ergo

ALON CHASID https://orcid.org/0000-0002-4793-1190

Bar-Ilan University

Contact: alon.chasid@biu.ac.il

Abstract: This paper argues against the view, proposed in Langland-Hassan (2020), that attitudinal imaginings are reducible to basic folk-psychological attitudes such as judgments, beliefs, desires, decisions, or combinations thereof. The proposed reduction fails because attitudinal imaginings, though similar to basic attitudes in certain respects, function differently than basic attitudes. I demonstrate this by exploring two types of cases: spontaneous imaginings, and imaginings that arise in response to fiction, showing that in these cases, imaginings cannot

be identified with basic attitudes. I conclude that imagining is a distinct attitude: it enables us to

freely conjure up scenarios without being bound by the restrictions that govern basic folk-

psychological attitudes.

Keywords: Imagination; reductionism; folk psychology; fiction; daydreaming; emotions

1. Langland-Hassan's reductionist project

Langland-Hassan (2020) argues that attitudinal (sometimes called 'propositional' or 'belief-like') imagining is not a distinct kind of mental state. Rather, imaginings are reducible to more basic kinds of folk-psychological states such as beliefs, judgments (which Langland-Hassan deems *occurrent beliefs*), desires, intentions, decisions, or combinations thereof. Indeed, the folk-psychological states to which imaginings are reduced are heterogeneous: in one context, an imagining is a doxastic state, in another, a desire, in a third, an intention, etc. For instance, consider Mary, who is reading a novel in which Bernie Sanders is depicted as the US President. In response to reading the novel, Mary imagines that Sanders is the US President. On Langland-Hassan's view, in this context, Mary's imagining is simply a *judgment* about what is true in the novel: the judgment that, according to the novel, Sanders is the US President (ch. 9). In another context, Mary's imagining can be reduced, not to a judgment, but to a *desire* (85, 90): the desire that Sanders be elected President. In yet another context, that of conditional reasoning, Mary's imagining is reducible to a judgment about what is possible, but not actual: her imagining is nothing more than the judgment that Sanders *could* be elected President (ch. 1; ch. 4, §§4.4-4.6).

Overall, the idea underlying the proposed reduction is that we need not take imagining to be a distinct attitude, since every case where imaginings arise can be fully explained in terms of more basic attitudes. Langland-Hassan compares imagining to other reducible attitudes, e.g.,

¹ To my knowledge, the thesis that the state of attitudinal imagining is reducible to basic folk-psychological attitudes has been defended in the literature only by Langland-Hassan (2020); see Kind (2016b), 2-3.

suspecting or regretting (13). Much as suspecting or regretting that *p* is nothing more than having a combination of certain basic attitudes, so too imagining that *p* is nothing more than having certain basic attitudes. Note also that in arguing for the reducibility of imagining to basic attitudes, Langland-Hassan is not proposing to *eliminate* imagining, much as the reducibility of suspecting or regretting does not eliminate suspecting or regretting. Rather, his point is that imaginings are identical to or composed of more basic 'components,' i.e., folk-psychological attitudes (2020, xi-xiii).

Langland-Hassan mentions an immediate problem with his account: folk-psychological attitudes such as beliefs, desires, etc., have features that imaginings do not seem to have (§1.10). He adduces a list of such features mentioned in Spaulding (2015, 459-460): imaginings do not motivate us to act, as beliefs do (e.g., imagining that a mud glob is a pie does not motivate us to taste it); imaginings are subject to voluntary control, whereas beliefs are not; imaginings are less constrained than beliefs (we can readily imagine propositions we know to be false and absurd, but, usually, we cannot believe them).²

Langland-Hassan explains away these differences by arguing that the reduction he proposes does not assume "content-mirroring" (14). That is, the basic attitudes to which an imagining is reducible do not necessarily have the same content we 'superficially' ascribe to the imagining itself. Imagining that a glob of mud is a pie is not identical to believing that it is a pie; rather, it is identical to believing that according to the game of make-believe we're playing, it's a pie. Since our imagining is identical to *this* belief, we need only act in a manner *like* that in which we

² Some of these differences are also discussed by others. See, e.g., Kind (2016b) and Van Leeuwen (2021) with respect to imagining in response to fiction.

would act were the glob really a pie, which allows us to "stop short of doing anything that would put [us] at digestive risk" (18-19).

Likewise, Langland-Hassan argues, though we are not free to believe anything we want, we are free to engage in reasoning about any subject whatsoever. The freedom to imagine, he contends, is the freedom to make judgments about different possibilities. This assumption also explains how we can imagine a disbelieved proposition: imagining a proposition is not reducible to believing it, but to believing that *in some possible world* (though not in the real world), the proposition is true, or that it is true *according to the pretense* the imaginer is engaged in.

To enhance his reductive strategy, Langland-Hassan emphasizes the heterogeneity of the mental states to which imaginings are reduced (14). Unlike the purported reduction of attitudes like regretting or suspecting, the basic attitudes to which imagining is reducible vary from one instance of imagining to another, in accordance with their contexts and purposes. Obviously, the reductionist is not free to invoke *any* kind of basic attitude and *any* kind of content: it would be ridiculous to claim, e.g., that the imagining that trees are walking is reducible to the desire for hot mashed potatoes, or that the imagining that the sun is rising is reducible to the judgment that stripeless tigers are extraterrestrial. The alleged reduction, and the 'conversion' of content that is ascribed to an imagining to content of the basic attitudes to which the imagining is reduced, must be plausible. Langland-Hassan does not suggest a criterion for plausibility, but seems to assume that if the context or purpose of an imagining is adequately described, the basic attitude to which the imagining is reducible, and the content of this attitude, will come into view.

On this general assumption, the "heterogeneity" principle and the "don't assume content-mirroring" principle appear to provide Langland-Hassan with an effective strategy for overcoming the disparity (in his view, the *seeming* disparity) between imaginings and basic folk-

psychological attitudes. Langland-Hassan's attempt to demonstrate that, appearances notwithstanding, imaginings are reducible to basic attitudes, is admirable. Nevertheless, the proposed reduction risks being rebutted if even one type of case cannot be explained by invoking basic attitudes. If, in even one type of case, imagining must be deemed a distinct kind of cognitive attitude, the reductionist project fails.

In what follows, I will show that there are indeed cases where imaginings cannot be reduced to basic attitudes. My first argument (§2) will focus on imaginings that come unbidden, showing that with respect to such imaginings, Langland-Hassan's attempts to explain away the differences between imaginings and basic attitudes are inadequate. My second argument (§3) will focus on guided imaginings, and specifically, imaginings that arise in response to engaging with works of fiction. I will argue that these imaginings cannot be reduced to judgments about propositions that are considered true in a work of fiction, hence imagining must be deemed a distinct kind of cognitive attitude. Overall, my claim is that imaginings are unique in enabling us to conjure up scenarios with minimal or no restriction, and specifically, to do so without being bound by the constraints that apply to basic folk-psychological attitudes.

A preliminary comment is in order. Langland-Hassan's proposed reduction applies to attitudinal imaginings, not 'imagistic' imaginings, i.e., states that comprise mental images. Langland-Hassan does not dispute the widely-held view that attitudinal imaginings can be accompanied by mental images (53), and contends that mental images can accompany the basic attitudes to which attitudinal imagining is reducible. Hence the fact that attitudinal imagining can involve images is consistent with the reductionist project: if an imagining involving images is reduced to a *judgment*, it is reduced to a judgment involving images; if it is reduced to a *desire*, it is reduced to a desire involving images; etc. (24). On Langland-Hassan's view, unlike the

content of an attitudinal imagining, which is propositional, the content of an image is an indefinite description, and hence is not, in itself, assessable for truth / correctness (81). When an attitudinal imagining (e.g., that the counter in my kitchen is expensive) is accompanied by a mental visual image (e.g., an image of a counter), the image represents a counter, and the non-imagistic, attitudinal imagining specifies that the imagined counter is in my kitchen, and that it is expensive. According to Langland-Hassan, this imagining is reducible to, e.g., an image-involving desire to have an expensive counter in my kitchen.

For the argument's sake, I will accept Langland-Hassan's account of the relation between attitudinal imagining and mental images, as well as his account of imagistic content. My critique of the proposed reduction of attitudinal imaginings to basic attitudes will focus on attitudinal imaginings and their propositional content, whatever images accompany them.

2. Spontaneous imaginings and basic attitudes

Beliefs, desires and other basic attitudes have, I assert, certain features that imaginings do not have. Langland-Hassan disagrees. In this section, I discuss various cases of quotidian imagining, showing that Langland-Hassan's attempts to explain away the differences between imaginings and basic attitudes (2020, §1.10) are flawed.

The imaginings considered in this section arise spontaneously, i.e., they do not arise upon deliberation, and specifically, they do not ensue from any intent to act on an invitation to imagine, follow rules, comply with an (external) mandate to imagine, etc. Since imaginings that come unbidden are unguided, they cannot be identical to intentions, decisions, judgments, or desires to comply with any guidance or directive to imagine.

Although spontaneous imaginings are common, Langland-Hassan does not discuss them systematically. He does refer to daydreams, which obviously can, if not must, arise spontaneously, and argues that they are attitudinal imaginings that "serve no immediate practical goal" (2020, 88; Langland-Hassan's claim is not that daydreams have no practical goal, but that their practical goal is not "immediate"). Daydreams can, he claims, be reduced to judgments about possible but non-actual scenarios. For instance, daydreaming that one is driving a Mustang can be reduced to the judgment that driving a Mustang would ease a midlife crisis (90).

Langland-Hassan's remarks on daydreams raise two problems. First, it is doubtful that the (spontaneous) daydream about driving a Mustang can be reduced to the said judgment, since such a judgment would arise within the context of deliberating about a specific issue. Even if a process of deliberation—e.g., deliberation over what would ease one's midlife crisis—can start off unprompted, a specific judgment made in the course of such a process—e.g., the judgment that driving a Mustang would ease a midlife crisis—obviously arises deliberately: making a judgment about a means of alleviating a midlife crisis seems to be a patently *deliberate* act. Hence, if a daydream is *spontaneous*, it cannot be reduced to such a (deliberate) judgment. Second, even if some spontaneous imaginings may seem to correspond to judgments, many do not, since they tend to have somewhat outlandish, if not totally bizarre, content, content that can generally be explained in terms of associations. You might, for instance, find yourself imagining that dice on a table are chatting with each other, that dark-eyed redheads live forever, that a week in Fiji is only five days long, that gazing at three consecutive new moons prevents cancer, or that you are surrounded by seven imperceptible creatures. Such impromptu imaginings may have been generated by sub-personal factors, e.g., associating a pair of dice you just came across in a drawer with familiar voices; associating the striking appearance of a dark-eyed, redheaded friend

with immortality; associating Fiji's name and small area with the duration of a week there, etc. (see Van Leeuwen 2013, 224ff).

The reductionist might argue that the fact that your imagining was prompted by subliminal associations does not, in itself, suffice to refute the claim that your imagining was a judgment. But the reductionist must contend with a more serious problem raised by impromptu imaginings. If an imagining is identical to a judgment, it must have the features characteristic of doxastic states. Yet as I will show, pre-theoretically, i.e., if we remain neutral on the issue of reductionism, ascribing doxastic features to impromptu imaginings is far-fetched.³ I will adduce four such features, some of which were mentioned in §1 above.

First, doxastic states are correct or incorrect by virtue of having true or false content. Hence, on the reductionist position, imaginings must be correct or incorrect by virtue of the truth or falsity of the content of the judgment to which they are allegedly reduced. For instance, the extemporaneous imagining that dice are chatting, that a week in Fiji is five days long, or that

It might be argued, against my claim that Langland-Hassan's theory clashes with our pretheoretical intuitive stance, that being counterintuitive does not rebut a theory: after all, many
philosophical theories are counterintuitive. My response is that philosophical theories that go
against our pre-theoretical intuitions must be adequately motivated. In the case of LanglandHassan's reductionism, parsimony—reductionism's main motivation—is far from sufficient to
justify a counterintuitive approach. Were parsimony sufficient to warrant the relinquishing of
pre-theoretical intuitions, we would be impelled to consider putative reductions of, say, beliefs,
desires, and intentions to perceptual experiences. Obviously, such counterintuitive reductive
claims are non-starters because they have no further motivation.

gazing at three consecutive new moons prevents cancer, is, in the *literal* sense of these terms, either *correct* or *mistaken*. However, absent a prior commitment to the reductionist agenda, arguing that such spontaneous imaginings are putatively assessable for accuracy is absurd: there is no pre-theoretical motivation for deeming them correct or mistaken. The content in question is not something whose truth-value we care about: it seems to be nothing but randomly combined ideas, as per the Humean claim that imagination mixes and combines ideas.

Second, doxastic states arise for (good or bad) reasons or in response to (good or bad) evidence, and are sustained by reasons and evidence. Vis-à-vis our examples, the reductionist position entails that you necessarily had *some* reason or evidence for (spontaneously) imagining that dice were chatting, that a Fijian week was five days long, that you were surrounded by seven imperceptible creatures, etc. *Whatever* the content of the doxastic state to which such spontaneous imaginings are allegedly reduced, they must, in the final analysis, be guided by reasons and evidence. Yet, again, pre-theoretically, there is no motivation for maintaining that the mixtures of ideas you spontaneously conjure up—that dice are chatting, that a Fijian week is five days long, etc.—are supported or sustained by reasons and evidence, *however* these ideas feature in the content of the doxastic states to which your imaginings are allegedly reduced. The claim that such imaginings *are* responsive to reasons and evidence seems to be an artificial constraint imposed by the reductionist.

Third, even if we do not immediately revise our doxastic states in light of evidence or reasons to the effect that they are mistaken, defeaters generate, at minimum, some epistemic tension, inducing us to reassess the accuracy of our doxastic states (see Bergamaschi Ganapini, 2020). On the reductionist view, this feature must also characterize imaginings: spontaneous imaginings that seem incompatible with our occurrent beliefs will generate epistemic tension,

prompting us to revise our beliefs. It follows that finding yourself imagining that dice are chatting, that dark-eyed redheads live forever, or that gazing at three consecutive new moons prevents cancer, should induce you to compare the content of the judgment to which your imagining is reduced with the content of your other beliefs, and assess whether your imagining / judgment is mistaken, or your other beliefs are mistaken. However, this type of tension does not seem to be characteristic of spontaneous imaginings, at least not of those with outlandish content: usually, we remain epistemically unperturbed upon finding ourselves imagining such content.

Fourth, paired with desires, doxastic states motivate actions. Langland-Hassan accepts this folk-psychological thesis. But, other things being equal, this thesis applies, in particular, to *verbal* behavior. That is, if nothing impedes our ability to express ourselves verbally, and we have no reason to disavow the content of our beliefs (as we might, e.g., in cases of implicit bias),⁴ holding beliefs renders us able to recount their content. It should be noted that the ability to recount the content of our beliefs does not require introspection. This point is crucial since, addressing the critique that the proposed reduction can be falsified by *introspection* (i.e., an imaginer, adducing introspection, might well claim that her imaginings are *not* identical to any basic attitude), Langland-Hassan asserts that introspection cannot be relied on to reveal the nature of our mental states, and in particular, cannot be relied on to reveal whether imagining is reducible to more basic kinds of mental attitudes (Langland-Hassan 2020, §1.11; 90; cf.

⁴ In cases of implicit bias, which require a separate discussion, an individual's verbal behavior seems incompatible with her (implicit) mental attitudes (see Brownstein 2019).

access to her doxastic attitudes. Rather, my claim is that ordinarily, if a subject judges that a proposition is true, she is in a position to recount the content of her judgment, and doing so does not require introspection. Hence, if your spontaneous imagining about chatting dice, dark-eyed redheads' immortality, etc., is identical to a *judgment*, and nothing impedes your ability to express that judgment or somehow alienates you from it, you're in a position to recount the content of this judgment. But while it is easy for you to recount what you *imagined*, you do not seem to be able to recount, if asked, the content of a *judgment* you just made, namely, the judgment that is, so the reductionist claims, identical to your imagining.

For the purposes of the argument being made here, it is sufficient to maintain that these four features are *characteristic* of doxastic states, i.e., their absence calls for explanation. What has to be determined is whether they are found in cases of spontaneous imagining, and if not, whether their absence calls for explanation. But such cases do not have these four characteristic features. You can find yourself imagining that dice are chatting, that dark-eyed redheads live forever, that a week in Fiji is five days long, etc.—without any risk of being mistaken, without any need for supporting reasons or evidence, without experiencing any epistemic tension between these imaginings and your beliefs that prompts you to reconsider those beliefs, and without being in a position to recount the content of any judgment you made that is identical to your imagining.

To defend the reductionist agenda, the reductionist must argue that, despite appearances to the contrary, these four features *do* characterize the aforementioned imaginings. In so arguing, Langland-Hassan can invoke the "don't assume content-mirroring" principle, arguing that imagining that *p* is not identical to judging that *p*, but to a judgment with different content. Langland-Hassan's strategy for 'converting' the content of an imagining to content of a judgment is to apply an operator to the imagined content. This sort of conversion seems to work

in cases of guided imagining: to reduce a guided imagining with content p to a judgment, Langland-Hassan suggests prefacing p with an operator such as 'according to the game I'm playing / the work of fiction I'm reading / the instruction I intend to comply with / the rule I intend to follow/ etc., p.' Since spontaneous imaginings are not guided, the most plausible way to reduce them to judgments would be to convert their content by applying a modal operator. Spontaneously imagining that p, on this line of thinking, is reducible to making the judgment that it is possible (but not actual) that p. For instance, the spontaneous imagining that a pair of dice are chatting, 5 that gazing at three consecutive new moons prevents cancer, or that you are surrounded by seven imperceptible creatures, is reducible to the judgment that it is possible, but not actual, that a pair of dice are chatting, that gazing at three consecutive new moons prevents cancer, or that you are surrounded by seven imperceptible creatures.

The proposed reduction of imaginings to judgments about non-actual possibilia seems to be inspired by the Humean idea, currently much debated, that imagination is a guide to possibility (for an overview, see, e.g., Kung 2010; Kind, 2016a; Kind 2020). Note, however, that the crucial question is not whether imagining is a *guide* to possibility—i.e., whether imagining that *p*

⁵ An anonymous referee suggested that, if a spontaneous imagining (e.g., the imagining that dice are chatting) is accompanied by mental images (e.g., images of chatting dice), then the judgment to which that imagining is reduced is the judgment that this is what the imagined content (in this example, that dice are chatting) *would look like*. But this suggestion raises a problem, since not every imagining can be accompanied by an image that captures its content (e.g., the propositions that dark-eyed redheads live forever, that a Fijian week is five days long, and that gazing at three consecutive new moons prevents cancer, cannot be captured in images).

provides *evidence* for the belief that it is possible that *p*—but whether imagining is *identical* to making the judgment that it is possible that *p*. If so, it seems that all the positions voiced in this debate would concur that imagining is *not* identical to making a judgment about possibility. For even if, under certain conditions, imagining a scenario *entails* that the scenario is possible (e.g., Kung 2010), it follows that the imagining is *not*, in itself, the judgment that the scenario is possible, but only provides epistemic support for such a judgment.

Vis-à-vis the reductionist claim, what must be examined is not whether, in imagining, we are making a *correct* judgment about possibilia, whether we are *justified* in making such a judgment, or whether we are *prompted* to make such a judgment. Rather, the question is whether, in imagining, our psychological state is that of someone making a (true *or* false; justified *or* unjustified) judgment about possibilia. The answer is no: even if imagining is a good guide to possibility, and even if imagining sometimes *induces* us to judge that the imagined content is (in *some* sense) possible, nevertheless, *when engaged in imagining*, our psychological state is not that of making a judgment.

Specifically, we are usually not concerned about the question of whether the scenario we're imagining is nomologically, metaphysically, or only logically possible. In spontaneously imagining that a pair of dice are chatting, that dark-eyed redheads are immortal, or that a Fijian week is five days long, you are not speculating about whether this imagined content is possible, or the specific sense in which it is possible. Your imagining can perhaps *prompt* you to think about possibilia: you can find yourself pondering whether it is metaphysically or only logically possible for dice to talk, or whether it is physically possible for anyone (i.e., not just dark-eyed redheads) to live forever. Likewise, you can judge that what you imagined is *logically* possible, since it involved no contradiction. But to claim that spontaneous imaginings are *nothing but*

judgments that the imagined propositions are logically possible, or perhaps also nomologically possible, is problematic. We are not constantly occupied with the notion of logical, metaphysical, or nomological possibility, to the effect that spontaneous imaginings—specifically, those with outlandish content—must be identified with an affirmative judgment about purely logical possibility, or some kind of possibility that is less restrictive than nomological possibility.

Recall also the fourth characteristic feature of doxastic states: paired with desires, they motivate us to act, and specifically, they may prompt us to recount their content. If spontaneous imaginings are judgments about possibilities, imaginings (paired with suitable desires) should therefore put us in a position to recount these possibilities. But it is not necessarily the case that, in spontaneously imagining that p, we would readily affirm, if asked, that p is possible (in some sense of 'possible'). Again, even if, in certain cases, we are induced to judge that p is possible, we may hesitate before stating that what we just imagined is possible. Moreover, in some cases, especially where our imaginings have outlandish content, we would likely state that what we imagined is *impossible*: after these imaginings, we would be inclined to say that their content was the product of our imagination, which has the power to divide, mix, and combine ideas, as Hume famously asserted. And even when we admit that some, if not all, such content is *logically* possible, the fact that we sometimes assert that what we spontaneously imagined (e.g., that dice were chatting) is *impossible* entails that in imagining, our mental activity has nothing to do with confirmation of some kind of possibility. For why would we claim that what we imagined was not possible, if our imagining—i.e., the judgment we just made, according to the reductionist—is identical to an affirmative judgment about a possibility? If our imagining is indeed a judgment about what is possible, we would say so directly.

Furthermore, psychological experiments show that not only adults, but also children, can judge that imaginary events (e.g., sprouting tomatoes by patting the ground) and imaginary entities (e.g., flying pigs) are not only improbable, but *impossible*. It follows that, although a child can easily find herself imagining, say, a flying pig, she is in a position to state that what she imagined is impossible. The reductionist might argue that in such cases, the child's imagining is identical to a judgment that flying pigs are *logically* possible. Here too, however, to argue that in spontaneously imagining that which she believes to be impossible, the child does nothing more than affirm a logical possibility, is absurd. Imagining propositions that are merely logically possible, i.e., logically possible but otherwise impossible, can be amusing and edifying: it is highly unlikely that in imagining such propositions, children are doing nothing more than making affirmative judgments about logical possibilities.

Lastly, it is widely accepted that sometimes, if not always, imaginings generate emotions akin to those generated by beliefs with similar content (for an overview, see Arcangeli 2018, ch. 2; indeed, this is one reason philosophers deem attitudinal imaginings 'belief-like'). In §3 below, I will discuss this point with respect to imaginings that arise in response to fiction. However, this capacity to generate emotion also characterizes spontaneous imaginings. Finding yourself imagining that gazing at three consecutive new moons prevents cancer, you may feel cheerful; finding yourself imagining that you're surrounded by seven imperceptible creatures, you may have a fear-like emotion; etc. The idea is that, paired with conative states—e.g., the desire (or desire-like state) that there be a way to prevent cancer, or the desire (or desire-like state) that no

⁶ See Woolley & Nissel (2020). See also Harris et al. (2006); Schultz et al. (2007); Weisberg & Sobel (2012).

mysterious, imperceptible creatures approach too closely—imaginings can function like beliefs vis-a-vis generating emotion.⁷ But if an imagining is nothing but a judgment about a *non-actual*, sometimes merely-logical, possibility, why would an imaginer—child or adult—respond emotionally to her imaginings as she would to beliefs with similar content? A judgment that it is merely *possible* (i.e., *not* actual) that gazing at three consecutive new moons prevents cancer would not generate cheerfulness. Compare imagining such content to making an *ordinary* judgment—i.e., a judgment made in a context other than that of imagining—about this non-actual, probably only logical, possibility: in making such an ordinary judgment, no cheerfulness would be generated. By contrast, in finding yourself *imagining* that new-moon-gazing prevents cancer, especially if you're deeply immersed in this daydream, you may feel cheerful and upbeat (until your daydream ends). In short, if imaginings are judgments about non-actual (sometimes merely-logical) possibilities, the fact that spontaneous imaginings can generate emotion is inexplicable. On the non-reductionist view, such emotional responses are accounted for by taking the (distinct, irreducible) state of imagining to be belief-like in generating emotion: paired with

⁷ According to some views (e.g., Doggett and Egan 2012), emotions that arise in response to fiction are not ordinary emotions, but imaginative analogs of ordinary emotions—i-emotions, as it were. My argument is neutral with respect to this claim. For convenience, I will refer to the emotions in question as ordinary emotions. (A similar claim is made with respect to the conative states that, paired with imaginings, generate emotional responses; I will say more about this claim in §3 below).

the desire (or desire-like state; see §3 below) that there be a way to prevent cancer, your imagining that new-moon-gazing prevents cancer renders you cheerful.⁸

The reductionist might invoke the heterogeneity principle (Langland-Hassan 2020, 14) and claim that spontaneous imaginings with outlandish content are reducible not to doxastic states, but to *desires*. On this proposed reduction, spontaneously imagining that a pair of dice are chatting away, that dark-eyed redheads live forever, or that a week in Fiji is just five days long, is reducible to *desiring* that dice chat with each other, that dark-eyed redheads live forever, that a Fijian week be just five days long.

Attempting to reduce such imaginings to desires is no less problematic than attempting to reduce them to judgments (specifically, judgments about possibilia). For one thing, there is no link between the absence of epistemic grounds for judging the imagined content to be possible, and the presence of desires associated with the imagined content. Furthermore, the

⁸ This argument also rebuts the claim that, in cases where we *deny* that what we imagined is possible, our imagining is reduced, not to a judgment about the *possibility* of what we imagined, but to a judgment that what we imagined is *impossible* (I thank an anonymous referee for suggesting this sort of reduction). For why would we respond emotionally, as we do when we believe the content in question, if we judged that the imagined content is not only *false*, but *impossible*?

⁹ E.g., referring to Walton's example of Fred, a shoe salesperson, who finds himself imagining that he is rich and famous, owns fancy cars, etc. (Walton 1990, 13), Langland-Hassan takes Fred's imaginings to be reducible to his *desires* to be rich and famous, own fancy cars, etc. (Langland-Hassan 2020, 25; 84-86).

aforementioned considerations against the reduction of imaginings to doxastic states similarly apply to the proposed reduction of imaginings to desires. Much as, in spontaneously imagining that dice are chatting, that dark-eyed redheads live forever, or that a Fijian week is only five days long, we need not have any beliefs about the possibility of talking dice, the lifespan of dark-eyed redheads, or the duration of a week in Fiji, so too we need not have any desires or goals with such outlandish content. Imagined content of this sort is constructed associatively, and not, or not necessarily, connected to our conative attitudes. Indeed, at least in cases where we have no reason to disavow the content of our desires, we may well assert unequivocally that we have no desires or goals associated with such odd content (chatting dice, the duration of a week in Fiji, etc.).

Can spontaneous imaginings be reduced, not to a single basic attitude, but to a *combination* of basic attitudes? Without straightforward examples of *how* imaginings are reduced to such a combination, stating that they can be so reduced is purely speculative. Indeed, it is no less speculative than the hypothetical (and absurd) claims that, say, beliefs can be reduced to desires and mental images, or perceptual experiences can be reduced to emotions and pains. Without a clear-cut motivation for making such claims, they are non-starters, if not straightforwardly false. Moreover, if spontaneous imaginings cannot be reduced to a *single* basic attitude because they do not satisfy constraints on that attitude, as I have shown, the claim that they can be reduced to a *combination* of basic attitudes is false *a fortiori*, since this would require them to satisfy even more constraints than reduction to a single basic attitude.

To recapitulate, my argument in this section invoked everyday spontaneous imaginings, which reductionists tend to ignore. The capricious nature of such imaginings thwarts the possibility of their reduction to basic attitudes. Put simply, imaginings are not bound by the

parameters that constrain our beliefs and judgments. Specifically, reducing imaginings to judgments about non-actual possibilia is implausible, since such judgments cannot engender emotional responses that are typically engendered by imaginings. In general, the role of imagining in our mental life differs from, and is independent of, the role of judgment.

I now turn to my second argument against the reductionist account, which applies to imaginings that arise in engaging with fiction. Here too, the idea is that were imaginings reducible to basic attitudes, they would be limited accordingly, hence our imaginative experiences would be very different from what they actually are.

3. Fiction, imagining, and emotional responses to fiction

It is widely agreed that we respond to reading (watching, etc.) works of fiction by imagining their content. ¹⁰ Langland-Hassan accepts this claim, and in line with his proposed reduction, argues that imaginings that arise in response to a work of fiction are typically judgments about what is true according to the work (Langland-Hassan 2020, chs. 9-10). For instance, in reading a novel that depicts the protagonist as benevolent, or describes a certain building as about to explode, we imagine that the protagonist is benevolent, or that the building is about to explode. This state of imagining is, Langland-Hassan contends, identical to the state of judging that

¹⁰ This is the "standard" (Friend 2012, 182) view of fiction; see, e.g., Walton (1990); Kind (2016b); Stock (2017); Currie (2020); Chasid (2019). Friend (2012) adduces several counterexamples, but acknowledges that a *standard* feature of fiction is that it mandates imagining the recounted events (188).

according to the work, it is *true* that the protagonist is benevolent, or that the building is about to explode.

Langland-Hassan accepts that not every 'fictional truth'—i.e., proposition that is true according to a work of fiction—is *explicitly* presented by the work; indeed, sometimes we need to extract *implicit* fictional truths. On Langland-Hassan's view, we do this by a type of conditional reasoning (196). Since conditional reasoning does not require that imagining be a distinct kind of attitude (chs. 5 and 6), determining a work's implicit fictional truths similarly does not require that imagining be a distinct attitude.¹¹ Note also that imaginings that arise in response to fiction sometimes incorporate details that the work leaves *indeterminate*, details that we cannot deduce even by conditional reasoning. These imaginings are not reducible to judgments, since we have no grounds for judging that what we imagine is true in the work. Langland-Hassan maintains that we fill in the missing details by *deciding* how to develop the work. Accordingly, imaginings that fill in 'gaps' in the fictional content are reducible, not to judgments, but to *decisions* (§9.3.3).¹² Overall, though, if we discover that a proposition is true in

Langland-Hassan acknowledges that to infer what is true in the work, we also need to invoke the author's interests in creating the work. These considerations, too, he claims, do not presuppose a distinct, irreducible attitude of imagining; see Langland-Hassan (2020, §9.5).

12 Van Leeuwen (2021) suggests certain differences between imagining in response to a work of fiction and believing that something is true in the work, though his arguments do not target either the reductionist view or Langland-Hassan's arguments. Although I accept the differences discussed by Van Leeuwen, I think the reductionist can explain them away by invoking the strategy I introduce in §1 above and in this section. For instance, as just mentioned, imagining

the work, imagining this proposition is, Langland-Hassan argues, *nothing more* than judging that according to the work, this proposition is true.

Langland-Hassan's account must meet the challenges posed by two features of works of fiction. First, what a work of fiction *presents* as true, either explicitly or implicitly, at a certain stage of its unfolding, is not always what *is* true in that work. For instance, in M. Night Shyamalan's film, *The Sixth Sense*, the protagonist, Malcolm Crowe, is initially presented as a (living) psychologist who helps Cole, a child with the ability to see ghosts; eventually, it is revealed that Crowe himself is a dead person: he is one of the ghosts with whom Cole communicates. In J.R.R. Tolkien's novel, *The Lord of the Rings*, Saruman is initially presented as a good wizard, whereas the novel later reveals that he is, in fact, evil. In David Fincher's film, *The Game*, the main character, Nicholas Van Orton, is presented at a certain stage in the narrative as mistakenly shooting his brother to death, and consequently as about to die by suicide, whereas the film subsequently reveals that he did not kill his brother and was not about to die. Such shifts are quite commonplace in fiction: the protagonist is initially depicted as harmless, an event is initially presented as disastrous, etc., and only at a later stage does the work reveal the 'truth'—the protagonist is an infiltrator, the event was successful. Being an integral

Hassan's view, identical to a *decision*; imagining something that is *not* true in the work can be reduced to a *decision* about how to the develop the work in a different way (e.g., a way that would generate more interest or aesthetic pleasure); see also my argument below regarding differences between imagining and making judgments about what is true in the work vis-à-vis emotional responses (cf. Van Leeuwen 2021, 656ff).

part of our experience of fiction, such shifts are intended to arouse emotional, conative, and cognitive reactions by directing us to first *imagine* a fictionally-false proposition, and later *imagine* the fictional truth.

Second, many works of fiction invite rereading (rewatching), and each rereading may generate the same overall imaginative experience that the initial engagement did. ¹³ In reengaging with a work of fiction, we can readily imagine what it initially invites us to imagine even if we know that what we are invited to imagine is false in the work. We may know that according to *The Sixth Sense*, Crowe is a ghost; that according to *The Lord of the Rings*, Saruman is evil; that according to *The Game*, Van Orton did not kill his brother and is not about to die. But in re-engaging with these works' early chapters / scenes, we can easily imagine that Crowe is alive; that Saruman is good; that Van Orton killed his brother and is about to die.

Since a work of fiction may invite us to imagine fictional falsehoods, and knowledge of the fictional truth does not thwart imaginings with fictionally-false content, it follows that imaginings cannot be identical to judgments about that which is true according to the work. Holding beliefs about what is true in a work is one thing, imagining the work's content is quite another.

¹³ In certain cases, if we know (e.g., from a spoiler) how a work will unfold, our emotional responses to shifts such as those just discussed may differ to some extent from the responses we would have had absent this foreknowledge of the plot's twists and turns (see, e.g., Van Leeuwen 2021; Chasid 2021, §5). Nevertheless, in many cases we can re-engage with the work, readily imagine its content, and respond just as we did when we read it the first time. Indeed, this is why works of fiction often invite rereading.

At this point, the reductionist could perhaps refine his account, and claim that imagining in response to fiction is making a judgment, not about what is true according to the work, but about what the work only *presents* as true at each stage of its unfolding. To imagine that Van Orton killed his brother and is about to die by suicide is to make the judgment that, according to the (fictionally false) description presented at a certain stage in the work, Van Orton killed his brother and is about to die. This judgment is consistent with our knowledge that at a later stage, the work informs us that Van Orton did not kill his brother, and is not about to die.

The problem with this hypothetical reductionist move is that if imaginings are identical to judgments about what a work only *presents* as true at each stage, the emotions that usually arise in response to fiction cannot be explained. This point requires clarification. It is widely accepted that to explain the thrust of engaging with fiction is, at least in part, to explain why fiction moves us: why we feel happy, sorrowful, worried, relieved, etc., in response to reading, and imagining, a fictional work's content. The prevailing account of emotional responses in general invokes basic folk-psychological attitudes, namely, *beliefs* and *desires*. We feel, e.g., fear and stress, because we *believe* that a dangerous event is about to occur and *desire* that it not occur. Generally, the core strategy for explaining emotional responses is to pair a cognitive attitude with an appropriate conative attitude.

However, since we do not usually believe fictional content, philosophers have proposed alternative explanations for our emotional responses to fiction. These explanations invoke the functional similarity between attitudinal imagining and belief, specifically, the similarity with regard to generating emotion. The idea is that imagining can generate emotion much as believing can generate emotion (see §2 and note 7 above). On one view, imaginings take the place of beliefs, and desires are construed as pertaining to the fictional scenarios (see, e.g., Kind 2011;

Schellenberg 2013; Spaulding 2015). That is, we feel sorrowful and dismayed in watching *The Game* since we *imagine*, as per the film's guidance at a certain stage, that Van Orton mistakenly shot his brother to death and is going to kill himself, and *desire* that Van Orton's brother hadn't died, and that Van Orton's suicide not succeed. On a different view, the cognitive state in question is likewise imagining, but the conative state is a unique conative attitude analogous to desire, i.e., 'i-desire,' whose content pertains to the imagined proposition, for instance, the i-desire that Van Orton's brother hadn't died, and that Van Orton's imminent death be averted (see, e.g., Currie and Ravenscroft 2002; Doggett and Egan 2007; 2012; cf. Langland-Hassan 2020, 212-213).

In defending his reductive stance, Langland-Hassan proposes a third view: the cognitive and conative attitudes that explain our emotional responses to fiction are ordinary beliefs and desires *about the fiction* (2020, 213ff). That is, we are dismayed since we *believe* that in *The Game*, Van Orton killed his brother and is about to kill himself, and we desire that, in *The Game*, Van Orton's brother hadn't died, and that, in *The Game*, Van Orton's imminent suicide not succeed. Langland-Hassan posits what he calls the "in the fiction' operator" (211ff, §10.2), arguing that the basic attitudes in question are simply beliefs and desires whose content takes the form 'in the work of fiction, p'.

Langland-Hassan's account of emotional responses to fiction is problematic, first of all, since in *re*-engaging with *The Game*, we do *not* believe that in this film, Van Orton killed his brother and is about to die: we *know* that, according to the film, these events do not occur. Nevertheless, in rewatching the pertinent scenes, we feel dismay. Moreover, we are also aware that the desire that (together with our beliefs about the work) allegedly explains our dismay—

namely, the desire that, in *The Game*, Van Orton and his brother stay alive—is ultimately satisfied.

Let us now examine whether emotional responses to fiction can be accounted for by the suggested refinement of Langland-Hassan's proposed reduction, which asserts that imagining that p is identical to judging that the fictional work presents p as true at the current stage of its unfolding, even if p is false according to the work. This refined claim is no less problematic than the original. The claim entails that in rewatching *The Game*, we feel dismay since we judge that, at the current stage of its unfolding, the film is presenting as true the fictional falsehood 'Van Orton killed his brother and is about to die,' and we desire that the film not present, at this stage, this fictional falsehood as true. But for one thing, why would our belief and desire about that which the film is presenting as true at a particular stage of its unfolding engender dismay? Furthermore, note that what would satisfy such a desire is that the film *not present* as true, at this stage, the fictional falsehood that Van Orton killed his brother and is about to die. But it is absurd to say that our dismay-inducing desire would be satisfied by a 'revision' of what the film presents as true at this stage; after all, this desire is satisfied by the film's revelation, at a later stage, of the fictional truth that the events in question did not take place (i.e., Van Orton did not kill his brother, etc.). Indeed, it is only by engaging with that later revelation that our dismay is relieved. Note further that were it the case that the dismay-inducing desire was a desire that the film present as true at *some* stage of its unfolding (though not necessarily the *current* stage) the proposition that Van Orton did not kill his brother, then in rewatching the film, we would know that this desire is ultimately satisfied, and we would not be dismayed at any stage. In short, beliefs and desires about what a work of fiction is *presenting* as true cannot explain our emotional responses to fiction.

By contrast, on the non-reductionist view, the emotional responses in question are not generated by our beliefs about the work or by how the work's content is presented, but by the distinct, irreducible cognitive state of *imagining*. For one thing, even if we know that what the work asks us to imagine is fictionally false, we can readily *imagine* a fictional falsehood. For instance, in rewatching *The Game*, we readily imagine that Van Orton killed his brother and is about to kill himself, despite our knowledge that this proposition is fictionally false. Secondly, our beliefs and knowledge that our pertinent desires / i-desires (i.e., that Van Orton and his brother stay alive) are ultimately satisfied do not thwart our dismay when the film presents Van Orton as having killed his brother and as about to kill himself, since what engenders our emotional responses is—along with our desires / i-desires—*not* the cognitive state of belief, but the cognitive state of *imagining*. We feel dismay despite *knowing* that our desires / i-desires are ultimately satisfied because we *imagine* that they are *not* satisfied, as per the film's early depiction of the events in question. In general, emotional responses to fiction ensue from the combination of the distinct state of *imagining* and desires / i-desires.

In response to my critique of his account of fiction / emotional responses to fiction,

Langland-Hassan might invoke his proposed resolution of the well-known 'paradox of fiction,'

i.e., the question of how our emotional responses to fiction can be explained, or whether they are
rational, given that we believe that the fictional events are *not real*. Non-reductive accounts of
imagining usually resolve this paradox by accepting that, as I just explained, the irreducible state
of imagining, paired with desires / i-desires, can indeed move us. Langland-Hassan rejects nonreductive accounts, hence he must take a different approach. He discusses the paradox of fiction
in light of his claim about the 'in-the-fiction' operator. On his view, although invoking this
operator seems to create "distance" between one's beliefs and the work's content (by

emphasizing that the depicted events are *merely fictional*; see 2020, §10.9), the paradox is explained away if we accept that emotional responses to fiction are *governed by norms*. That is, the dismay and sorrow that arise upon judging that, according to *The Game*, Van Orton killed his brother and is about to die by suicide, ensue from the norms of imaginative engagement with fiction, which call for emotional responses that parallel our responses to similar real-world events (see §§11.7-11.8).

Langland-Hassan's suggested resolution of the paradox raises various difficulties. Consider, for instance, the fact that emotional responses to what we know to be false simpliciter arise not only in response to fiction, but also, as mentioned in §2 above, in the course of imagining spontaneously. It seems awkward to claim that the norms applicable to engaging with works of fiction—i.e., the norms that govern emotional responses to works of fiction—also govern spontaneous, non-deliberate imaginings.

Furthermore, how can a judgment of the form 'according to X, p is true' (X being, in the cases discussed here, a work of fiction) be governed by norms to the effect that the judgment must generate emotional responses? There seems to be no other type of case where judgments of this form generate emotion. For what does the fact that, according to some X, p is true, have to do with emotional responses to p? Of course, if we are inclined to *believe*, by accepting X's affirmation of p, that p is true, our emotional responses are explained. But obviously, this is not what happens in engaging with fiction: the paradox of fiction ensues from the assumption that we do *not* believe that which is true according to a work of fiction.

These problems also apply to the hypothetical refinement of Langland-Hassan's claim, namely, the claim that what generates emotion is not judgments about that which is *true* in a work of fiction, but rather, judgments about that which the work *presents* as true at each stage of

the narrative. Again, maintaining that some sort of norms govern such judgments, to the effect that we must respond emotionally to these judgments, is problematic for the reasons adduced above, as is Langland-Hassan's original claim. Moreover, *however* such norms operate, it is difficult to identify the putative desire that can be paired with the judgment that a (fictionally-false) proposition is being presented as fictionally true, so as to engender the appropriate emotional response, e.g., dismay. As mentioned above, if the pertinent desire is the desire that the film not present it as true, at the current stage in its unfolding, that Van Orton is about to die, our dismay should be relieved only if the film is revised to the effect that it does not present this proposition as true at the current stage. But obviously, our dismay is not relieved by this hypothetical revision, but by engaging with the film's later revelation of the fictional truth. And if the desire is that the film not present Van Orton as about to die at *some* stage of the film, then in rewatching the film, since we know that this desire is ultimately satisfied, no dismay would arise at all. In short, either way, invoking norms cannot explain our emotional response, since there is no desire to pair with our judgment.

To solve the paradox of fiction, we must accept that, contra the reductionist, engaging with fiction involves a distinct state of imagining, a state that is belief-like in having the power to generate emotion (when paired with desires / i-desires about the fictional content). In rewatching *The Game* and imagining that which it invites us to imagine at each stage of its unfolding, we respond emotionally by virtue of our desires / i-desires and *imaginings*: our prior knowledge that these desires / i-desires are ultimately satisfied does not affect our emotional responses, since the cognitive state that engenders them is not that of belief, but rather, imagining. In other words, even if our desire / i-desire will be fully satisfied, and we *believe* or *know* that it will be fully satisfied, we nonetheless feel dismay if we *imagine* a scenario in which it is *not* satisfied. Indeed,

in the case of engaging with fiction, as in many other cases, since the distinct (cognitive) state of imagining is belief-like in certain functional respects, it can straightforwardly account for phenomena that cannot be accounted for by adducing the subject's beliefs.

To recapitulate, Langland-Hassan's account of imagining in response to fiction, and specifically, his thesis that imaginings which arise in response to a work of fiction are reducible to judgments about what is true in the work, is confronted by a vexing problem. When we reread or rewatch a work of fiction, we may know that what we are imagining is false according to the work, hence our imaginings cannot be reduced to judgments about what is true in the work. I therefore suggested a refinement of Langland-Hassan's account, namely, that in the context of fiction, imagining that *p* is judging that *p* is *presented* by a work of fiction, at each stage of its unfolding, as true. But this suggested refinement was also unsuccessful, since it could not explain our emotional responses to the work.

The nature of engaging with fiction, and our emotional responses to it, can, however, be readily explained by taking imagining to be a distinct kind of cognitive attitude that, though differing from belief in several key ways, does share a crucial feature of beliefs, namely, the ability to generate—when an appropriate conative attitude is present—emotion. Whether the *conative* attitude in question is a desire vis-à-vis the fiction or an i-desire warrants investigation. What we can safely conclude is that the *cognitive* attitude in question is an irreducible state of imagining.

4. Conclusion

I have argued against the reduction of imagining to basic folk-psychological attitudes, a reduction proposed in Langland-Hassan (2020). First, I showed that, Langland-Hassan's insightful argumentation notwithstanding, reducing imagination to doxastic states or desires is inconsistent with the fact that imagination does not have the characteristic features of doxastic states or desires. Second, I showed that imagining in response to re-engaging with a work of fiction cannot be reduced to judgments about what is true in the work or what it presents as true. Specifically, I showed that the reductionist explanation of emotional responses to fiction is unable to account for emotions that arise in the course of re-engaging with fiction.

My conclusion is that the attitude of imagining cannot be reduced to basic folk-psychological attitudes. Imagining enables us to devise scenarios freely, or in a (relatively) unconstrained manner. Were imaginings identical to basic folk-psychological attitudes (either attitudes with the same content as the imaginings, or attitudes with that content prefaced by an operator, etc.), they would be bound by the restrictions that govern those basic attitudes. My arguments show that imagining is not bound by such restrictions. Indeed, the uniqueness of imagining lies in its 'unregimented' nature, which enables us to consciously represent all sorts of scenarios, and react to them emotionally, without any need for consistency with our doxastic states, goals, and desires; responsiveness to evidence; etc. The freedom to conjure up an almost unlimited range of scenarios seems to be one of the quintessential features of imagining.

Nevertheless, Langland-Hassan's theory is a major philosophical achievement. For even if the overall reduction to basic attitudes fails, there is value in showing that specific types of cases, such as those of conditional reasoning and pretending, do not, or do not always, require a distinct state of imagining, and *can* be explained by basic attitudes. This project of 'local' reduction is appealing, and merits further study.

* This research was supported by the Israel Science Foundation (grants No. 1544/20 and 2349/23)

References

- Arcangeli, Margherita (2018). Supposition and the Imaginative Realm: A Philosophical Inquiry.

 New York: Routledge.
- Bergamaschi Ganapini, Marianna (2020). Belief's minimal rationality. *Philosophical Studies* 177:3263-3282.
- Brownstein, Michael (2019). Implicit bias. *The Stanford Encyclopedia of Philosophy* (Fall 2019 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/fall2019/entries/implicit-bias/>.
- Chasid, Alon (2019). Imagining in response to fiction: unpacking the infrastructure. *Philosophical Explorations* 23 (1):31-48.
- Chasid, Alon (2021). Imaginative immersion, regulation, and doxastic mediation. *Synthese* 199: 7083-7106.
- Currie, Gregory and Ravenscroft, Ian (2002). *Recreative Minds: Imagination in Philosophy and Psychology*. Oxford: Oxford University Press.
- Currie, Gregory (2020). *Imagining and Knowing: The Shape of Fiction*. Oxford: Oxford University Press.
- Doggett, Tyler and Egan, Andy (2007). Wanting things you don't want. *Philosophers' Imprint* 7 (9): 1-17.

- Doggett, Tyler and Egan, Andy (2012). How we feel about terrible, non-existent mafiosi. *Philosophy and Phenomenological Research* 84 (2): 277-306.
- Friend, Stacie (2012). Fiction as a genre. *Proceedings of the Aristotelian Society* 112:179-209.
- Harris, Paul L., Pasquini, Elizabeth S., Duke, Suzanne, Asscher, Jessica J. & Pons, Francisco (2006). Germs and angels: The role of testimony in young children's ontology.

 Developmental Science, 9 (1):76-96.
- Kind, Amy (2011). The puzzle of imaginative desire. *Australasian Journal of Philosophy* 89 (3):421-439.
- Kind, Amy (2016a). The snowman's imagination. *American Philosophical Quarterly* 53 (4): 341-48.
- Kind, Amy (2016b). Introduction: exploring imagination. In *The Routledge Handbook of Philosophy of Imagination*, ed. Kind A., 1-11. New York: Routledge.
- Kind, Amy (2020). Philosophical perspectives on imagination in the Western tradition. In A. Abraham (ed.), *Cambridge Handbook of Imagination*, Cambridge University Press, pp. 64-79.
- Kung, Peter (2010). Imagining as a guide to possibility. *Philosophy and Phenomenological Research* 81 (3):620-663.
- Langland-Hassan, Peter (2020). Explaining Imagination. Oxford: Oxford University Press.
- Schellenberg, Susanna (2013). Belief and desire in imagination and immersion. *Journal of Philosophy* 110 (9): 497-517.
- Schulz, Laura E., Bonawitz, Elizabeth B. & Griffiths, Thomas L. (2007). Can being scared cause tummy aches? Naive theories, ambiguous evidence, and preschoolers' causal inferences.

 *Developmental Psychology, 43(5):1124-1139.

- Schwitzgebel, Eric (2019). Introspection. *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/win2019/entries/introspection/>.
- Spaulding, Shannon (2015). Imagination, desire, and rationality. *Journal of Philosophy* 112 (9):457-476.
- Stock, Kathleen (2017). Only Imagine: Fiction, Interpretation and Imagination. Oxford: Oxford University Press.
- Van Leeuwen, Neil (2013). The meanings of 'imagine' part I: constructive imagination. *Philosophy Compass* 8 (3): 220-30.
- Van Leeuwen, Neil (2021). Imagining stories: attitudes and operators. *Philosophical Studies* 178 (2):639-664.
- Walton, Kendall L. (1990). *Mimesis as Make-Believe*. Cambridge MA: Harvard University Press.
- Weisberg Skolnick, Deena & Sobel, David. M. (2012). Young children discriminate improbable from impossible events in fiction. *Cognitive Development*, 27(1):90-98.
- Woolley, Jacqueline D. & Nissel, Jenny (2020). Development of the fantasy-reality distinction.

 In A. Abraham (Ed.), *The Cambridge handbook of imagination*, Cambridge University

 Press, pp. 479-499.