University of Arkansas, Fayetteville

ScholarWorks@UARK

8-2016

An Inquiry into the Distinction between Belief and Imagination

Maxwell M. Gatyas
University of Arkansas, Fayetteville

Citation

An Inquiry into the Distinction between Belief and Imagination

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts in Philosophy

by

Maxwell Gatyas
Knox College
Bachelor of Arts in Philosophy, 2014

August 2016
University of Arkansas

This thesis is approved for recommendation to the Graduate Council.

_____
Professor Eric Funkhouser
Thesis Director

_____   _____
Professor Jack Lyons   Professor Edward Minar
Committee Member   Committee Member

Abstract

Theories of mind typically see belief and imagination as distinct cognitive attitudes. While most admit that imagination is belief-like in many ways—e.g. in its capacity to guide action, cause emotional responses, and aid in decision-making processes—the popular view is to separate the two attitudes when constructing a theory of mental architecture. The similarities are not enough for theorists to admit that the two attitudes are indistinct. Imagination, then, is construed as an "analogue" of belief, similar in many ways, but nevertheless fundamentally different. In what follows I examine these methods of distinguishing between belief and imagination. My method of examination will rely greatly on empirical evidence. This evidence, I argue, places serious doubts on common views concerning the relationship between belief and imagination. My positive view of the imagination will ultimately see imagination as a subset of belief. Belief is seen as an attitude connected to behavior, cognition, and phenomenological experience. I contend that imagination should be seen in the same light. Both, I argue, are regarding as true attitudes connected to action, cognition, and experience. To imagine, then, is to have some, but not all, of the features of a believer.

Acknowledgments

Thanks to Eric Funkhouser for his help in putting this thesis together. My growth as a philosophy student owes much to his dedication as a teacher and mentor. Also, thanks to Jack Lyons and Edward Minar for serving on my defense committee.

Dedication

This edition of *An Inquiry into the Distinction between Belief and Imagination* is dedicated to my father, Kent Gatyas, without whom I would not have had the privilege of completing this work.

Table of Contents

Introduction

Theories of mind typically see belief and imagination as distinct cognitive attitudes. While most admit that imagination is belief-like in many ways—e.g. in its capacity to guide action, cause emotional responses, and aid in decision-making processes—the popular view is to separate the two attitudes when constructing a theory of mental architecture. The similarities are not enough for theorists to admit that the two attitudes are indistinct. Imagination, then, is construed as an "analogue" of belief, similar in many ways, but nevertheless fundamentally different.

The reasons for this separation have been well-documented within the philosophical and psychological literature on the imagination. Some, such as David Velleman and Tamar Gendler, hold that imagination and belief are distinct on the basis that each attitude has an aim, or telos. To believe is to accept a proposition as true with the purpose, aim, or intention of getting the truth value of the proposition right. Imagination, on the other hand, has no such aim. To imagine is to accept a proposition as true for the purpose of supposition or pretense.

Other theorists hold that the two can be distinguished on the basis of their connection to action. Neil Sinhababu argues that only belief has the ability to conjoin with desires in order to motivate action. Imagination, by contrast, has no such property. Sinhababu also claims that belief and imagination can be distinguished based on their connection to sincere assertion—i.e. under favorable conditions, one only sincerely asserts what one *believes*. One asserts what one imagines in cases of supposition or storytelling.

In what follows I examine these, and more, methods of distinguishing between belief and imagination. Is belief necessarily constituted by an aim towards the truth? Is it the case that the imagination plays no role in producing and guiding our decisions and actions? My method of

examination will rely greatly on empirical evidence. This evidence, I argue, places serious

doubts on common views concerning the relationship between belief and imagination.

After spending the initial two chapters concerned with the aim of belief and the

imagination's role in action, I turn to more empirical literature which indicates that the two

attitudes not only have a great deal in common, but also have the ability to affect each other in

serious ways. So, given that the most prominent methods of distinguishing belief and

imagination are unconvincing, the similarities between the two attitudes, and the evidence

demonstrating the ability of the imagination to affect belief, I call for a theory which sees the two

as non-distinct attitudes.

My positive view of the imagination will ultimately see imagination as a subset of belief.

Belief is seen as an attitude connected to behavior, cognition, and phenomenological experience.

I contend that imagination should be seen in the same light. Both, I argue, are regarding as true

attitudes connected to action, cognition, and experience. To imagine, then, is to have some, but

not all, of the features of a believer. In the end I argue that this theory better accounts for

imagination's ability to affect belief than do theories propounding a stark contrast between the

two attitudes.

I. Is belief constituted by an aim for the truth?

Many notable philosophers have argued that a crucial distinguishing factor between

belief and imagination is the aim or telos of each respective attitude. Tamar Gendler (2008a,

2008b), particularly in her writings on alief, has argued that not only is belief governed by the

norm of truth-sensitivity, it is *constituted* by truth-sensitivity. David Velleman (2000) has argued

similarly, proclaiming that beliefs and imaginings are forms of acceptance that motivate action,

so the only thing distinguishing the two mental states is that the belief mechanism accepts propositions with the aim of being correct. Given that the ultimate aim of this thesis is to bring belief and imagination closer together, I want to call into question the idea that evidence-sensitivity, or the aim of truth, is constitutive of belief. My method will involve bringing attention to recent psychological literature which suggests that mentally healthy humans have adapted to produce beliefs that do not aim at the truth. Before presenting this evidence, however, I will give a thorough account of my opposition's position. If I succeed in producing some skepticism regarding the thesis of belief as necessarily truth-aiming, I will have done away with a crucial tool used to separate belief and imagination, and thus will have contributed to my larger goal of bringing the two mental states closer together.

Belief as necessarily truth-sensitive

Gendler addresses the distinction between belief and imagination in the context of her discussion of precipice cases, notably brought up by Hume:

> …consider the case of a man, who, being hung out from a high tower in a cage of iron cannot forbear trembling, when he surveys the precipice below him, tho' he knows himself to be perfectly secure from falling, by his experience of the solidity of the iron, which supports him (Hume, 1739/1978, p. 146).

Gendler's goal in bringing up such an example is to reject the idea that the man's trembling behavior is indicative of a belief, say, that he is in danger.[1] She writes, "The tendency to 'infer' intention from action is deep-seated and automatic (2008, p. 563)." However, "…our natural inclination to treat something as indicative of belief regularly misfires, so that the presence of

---

[1] Gendler also rejects the notion that the man's behavior is due to "externally prompted involuntary imagining." Here I focus only on her rejection of belief-attribution, as I will address this other rejection in a later section of this paper.

this natural inclination cannot be taken as decisive evidence for the correctness of the attribution (564)."

Gendler's argument against belief-attribution in this case is central to her distinction between belief and imagination.

> All that is needed is to note that—whatever belief is—it is normatively governed by the following constraint: belief aims to 'track truth' in the sense that belief is subject to immediate revision in the face of changes in our all-things-considered evidence. When we gain new all-things-considered evidence—either as the result of a change in our evidential relation to the world, or as a result of a change in the (wider) world itself—the norms of belief require that our beliefs change accordingly (p. 565).

The claim that the behavior of the man in the cage is the result of a belief that he is in danger is misguided precisely because it disregards the "truth-tracking" constraint governing belief. The man does not believe he is in danger precisely because his trembling is not answerable to reason.

Here we arrive at the core of what thinkers like Gendler take to be the relevant difference between belief and imagination—the evidence-sensitivity of a belief attitude necessarily separates it from an imaginative attitude.

> To believe or imagine or suppose or pretend that P is to regard P as true (in some way). But though they coincide in this dimension, they differ in another: whereas belief is reality-sensitive, supposition and imagination and pretense are explicitly reality-insensitive (2008b, p. 647).

Based on this passage Gendler supports the view that it would be conceptually impossible to have a reality-insensitive belief.

Such a view is not without its predecessors—the most notable of which is probably Bernard Williams (1973). The foundation of Williams' famous claim that we cannot will to believe rests on the notion that beliefs aim at the truth. He writes,

> Belief cannot be like that; it is not a contingent fact that I cannot bring it about, just like that, that I believe something, as it is a contingent fact that I cannot bring it about , just like that, that I'm blushing. Why is this? One reason is connected with the characteristic of beliefs that they aim at truth (p. 148).

This connects with Gendler's further claim about the difference between imagination and belief—i.e. we can imagine [almost] anything at will but we cannot believe anything at will.[2]

Another notable account, one from which Gendler consistently borrows in her writings on this matter, of this distinction comes from David Velleman, who argues that the truth-directedness characteristic of belief is necessary in order to distinguish it from propositional imagination. After conceding that both attitudes are similar in the sense that they each involve the acceptance of a proposition and that each is action generating, he concludes that belief has the added characteristic of intending to get the proposition right.

> …imagining involves regarding a proposition *as* true irrespective of whether it *is* true—regarding it as true, that is, without trying to get its truth-value right. Perhaps, then, believing involves regarding a proposition as true with the aim of so regarding it only if it really is (p. 251).

My acceptance of the proposition "the grass outside is blue" is a belief only if I am accepting the proposition with the aim of getting the truth-value of the proposition right. This, for Velleman, is constitutive of belief. If I accept the proposition without such aim, my acceptance just is another kind of attitude. He writes,

> What I have in mind is an aim that differentiates believing a particular proposition from other ways of regarding that proposition as true, such as imagining or supposing it. I thus have in mind an aim with which a particular proposition can be accepted, such that its being accepted with that aim constitutes its being believed (p. 251-252).

---

[2] This is, of course, an important prima facie difference between imagination and belief. Nevertheless I take the most relevant difference to be that of truth-directedness because it is this claim that motivates the claim that it is impossible to believe at will. Also, I have qualified my statement with "almost" to respect the literature regarding imaginative resistance. See Gendler (2000) and Moran (1994).

It is important to note that this aim needn't be a conscious aim. Velleman claims that a

belief-regulating system can go about ensuring a belief's truth "more or less automatically" and

without the guidance of the agent herself. What we have here, then, is a picture in which beliefs

are conceptually separated from imaginings on the basis of their constitutive aim. Beliefs just

must be distinguished from other cognitive attitudes, and that distinction is drawn by way of

truth-directedness. Velleman gives us an idea of what such a system would look like:

> …beliefs guide the subject's behavior in a manner that benefits him only—or, at
> least, most reliably—when they are true. Their guiding the subject when true is
> what confers advantages on him, and so it appears to be what beliefs were
> selected for, in the course of evolution. Beliefs were thus, metaphorically
> speaking, designed to be true. On the other hand, beliefs are regulated by
> psychological mechanism designed to ensure that they are true…Thus, beliefs
> perform their function best when true, just as various bodily systems perform best
> at 98.6 degrees; and beliefs are regulated so as to be true, just as the body's
> temperature is regulated so as to be 98.6 (p.253).

Velleman insists that he is not attempting to, as he puts it, "naturalize the truth-directedness of

belief." So if we are to interpret him most charitably, he has two claims. One claim, as I have

mentioned above, is entirely conceptual—the a priori difference between belief and other

cognitive attitudes, such as imaginings, lies in the aim of getting the truth value of a proposition

right. Velleman's claim that belief mechanisms were designed to output true beliefs appears to

be an elaboration on this picture—the reason beliefs are this way, i.e. necessarily directed at the

truth, is simply because it is advantageous to the individual forming the belief that the belief be

true.

We see in each of the above authors—Gendler, Williams, and Velleman—an insistence

that the truth-tracking function is constitutive of belief. In other words, if a belief does not aim at

getting the truth value of a proposition correct, then it is defective, and thus lacking the relevant

criteria for being categorized as a belief. E.g. if a chair does not fulfill the function of holding up

a sitting individual, then it is lacking the requisite criteria needed in order to categorize it as a chair.[3]

> What makes my commitment to P a belief that P—as opposed to an imagining that P, or a supposition that P—is that my acceptance of P as true is contingent on how I take the world to be: my attitude is one whose fundamental satisfaction-conditions require that it have been formed (whether intentionally or not) through the workings of a cognitive system which regulates certain of my cognitions in ways designed to ensure that I bear this attitude only towards truths (Gendler, 2007, p. 236).

The following section will be aimed specifically at this claim, but before moving forward a word should be said about the general strategy of the section.

A Naturalist Account of Belief

There is a natural hesitancy towards empirically-based attacks on conceptual arguments. This is, I take it, a legitimate concern, especially considering the methods by which the aforementioned thinkers came to their positions. In much of their writing, Gendler and Velleman are specifically focused on distinguishing belief and imagination on conceptual grounds. In fact, Velleman's project in "On the Aim of Belief" consists in drawing similarities between belief and imagination—i.e. they each involve acceptance of a proposition and each, he thinks, is capable of motivating action—before finally concluding that the only difference between the relevant attitudes is their telos. Gendler, too, is focused on drawing conceptual distinctions between cognitive attitudes, and her commitment to the truth-tracking view of belief leads her to posit the entirely novel cognitive attitude of alief in order to account for certain problem cases where it is difficult to distinguish what an individual believes. If it is plausible to interpret that the man hanging above the precipice may have two contradictory beliefs (i.e. "I am in danger" and "I am

---

[3] This analogy seems especially appropriate given that both Gendler and Velleman repeatedly speak of not only the aim of belief, but also its irreducible *telos*.

not in danger"), insofar as we are committed to holding that he only has one belief, we interpret whichever attitude tracks the truth as his belief, and anything else causing ostensibly contradictory behavior as the result of a different, non-truth-tracking cognitive attitude.

Given the methodologies and positions of my opponents, an empirical attack runs the risk of begging the question. That is, it runs the risk of assuming certain cognitive attitudes are beliefs, when, on the basis of the definition of belief given by my opponents, they are not. This worry will abide throughout my presentation of empirical evidence, but it need not preclude the possibility of the empirical sciences having a nontrivial impact on the discussion regarding the nature of belief.

My argument will take the following form: I will present a number of cases where it appears as though it is advantageous to maintain a false belief. I will then defend the notion that these false beliefs are not defective, i.e. that these beliefs are advantageous specifically because they are mistaken. This will call into question the notion that beliefs are necessarily governed by mechanisms that ensure that belief is at least attempting to track the truth. Again, it will always be an open question as to whether or not the cognitive attitudes to which I am referring are beliefs in the relevant sense, but the goal of the argument is to present cases involving cognitive attitudes that can prima facie be considered beliefs, or attitudes that would most commonly be denominated beliefs. If successful, the argument will leave my opponents with two undesirable alternatives: either they hold firm and assert that the belief-like cognitive attitudes in question are, in fact, not beliefs, or they concede that truth-sensitivity is not a necessary criterion for the cognitive attitude of belief.[4] My inclination will be to abandon truth-sensitivity as a necessary

---

[4] There is the other option of maintaining that these beliefs still aim at the truth in some sense. I hope that the following steers my readers away from this option.

condition of belief, thus weakening the distinction between the cognitive attitude of imagining and the cognitive attitude of believing.

Positive Illusions

Shelly E. Taylor and Jonathon D. Brown, among others, have compiled a notable amount of evidence which tells against the claim that belief-regulating systems are necessarily governed by truth-sensitive mechanisms. They note three different types of "positive illusions" that have proved to benefit the individuals who hold them: self-aggrandizing self-perceptions, illusions of control, and unrealistic optimism. Take the first of the categories:

> It is widely believed that misjudgment produces dysfunction. Certainly, gross miscalculation can create problems. However, optimistic self-appraisals of capability that are not unduly disparate from what is possible can be advantageous, whereas veridical judgments can be self-limiting. When people err in their self-appraisals, they tend to overestimate their capabilities. This is a benefit rather than a cognitive failing to be eradicated. If self-efficacy beliefs always reflected only what people could do routinely, they would rarely fail but they would not mount the extra effort needed to surpass their ordinary performances (1994, p. 24).

Taylor and Brown's findings demonstrate that it is beneficial, in certain instances, to hold beliefs about oneself that are false. If I, for instance, believe that my philosophical abilities are greater than they actually are, I may produce superior work than I would have had my beliefs been an accurate reflection of my abilities. Perhaps even more notably, Taylor and Brown cite research that over-estimations of one's capabilities are particularly beneficial during early childhood.[5] They also note findings that suggest that the belief that one is particularly stronger or better at coping than are other similar individuals can reduce health threats.[6]

---

[5] See Bjorklund & Green (1992) and Phillips & Zimmerman (1990).
[6] See Helgesson & Taylor (1993) and Reed (1989).

Taylor and Brown also cite literature detailing the positive effects of believing that one

has more control over a situation than is reasonable:

> A substantial experimental literature largely generated in the 1970s indicates that
> an illusion of control helps people adjust to forthcoming laboratory stressors, and
> these conclusions remain unchallenged by subsequent experimental work.
> Similarly, experiments conducted in medical settings clearly demonstrate that
> people who believe they have control during stressful procedures cope better than
> those undergoing the same procedures but not exposed to control-enhancing
> interventions, as indicated by a broad array of physiological, health-related, and
> affective measures; these effects occur even when that "control" is largely
> perceived rather than actual (p. 25).[7]

They go on to note that self-generated feelings of control positively affect how one adjusts to

chronic illness. Finally, Taylor and Brown cite a number of examples demonstrating that holding

overly-optimistic views about one's future is associated with positive social relationships and an

ability to cope with health-related stressors more successfully than individuals without these

overly optimistic views.

As I mentioned above, the methodology that writers such as Gendler and Velleman use to

distinguish belief from other attitudes appears to be purely conceptual—the only way to

distinguish belief from other attitudes is by examining the particular *telos* of belief. That being

said, Velleman is aware of possible naturalistic objections to this claim—i.e. it may be, as a

matter of empirical fact, that the purported belief mechanism is not necessarily concerned with

the veracity of beliefs, rather it is simply concerned with holding whatever beliefs will confer the

most advantages on the individual holding them.

In defending his claim, Velleman writes that "beliefs guide the subject's behavior in a

manner that benefits him only—or, at least, most reliably—when they are true." The findings of

---

[7] See also Thompson & Spacapan (1991).

Taylor and Brown appear to be in direct opposition to this claim. Of course, Taylor and Brown admit that beliefs are most often beneficial when they are true. E.g. my belief that the water next to me is uncontaminated and drinkable is advantageous if it is true, disadvantageous if it is false. But Velleman claims that a necessary condition for a cognitive attitude to be a belief is that it is "regulated by psychological mechanisms designed to ensure that it is true," which, by all accounts, discounts the aforementioned positive illusions (assuming they are adaptations) as beliefs at all.

Whether or not Velleman can account for these illusions in his conception of belief comes down to the function of belief-regulating mechanisms. If it is the case, as Velleman mentions, that we ought to view belief-regulating mechanisms as designed to guide an individual's behavior in a way that benefits him, then it appears as though beneficial positive illusions pose a serious problem to Velleman's truth-aiming thesis. The mechanism(s) by which positive illusions are regulated appear to not always have a regard for the veracity of the positions in question.

Velleman may well be in a position to admit that these particular beliefs (if he wants to call these positive illusions beliefs) are beneficial, but this still does not tell against a properly functioning belief mechanism. Again, he writes: "…beliefs are regulated so as to be true, just as the body's temperature is regulated so as to be 98.6." But Taylor and Brown are insistent that these positive illusions are the result of a properly functioning mental system: "…illusion of control often exists in normal samples and that, when it does, it is typically associated with good psychological adjustment," "there is, in our judgment, no clear evidence that such [unrealistically optimistic] beliefs compromise mental health and mounting evidence that they contribute to it." If it is the case that these illusions are indicative of mental health, it suggests a different picture

of properly functioning belief systems. If we are interested in understanding the belief

mechanism as a system which is primarily concerned with benefiting the individual, it may not

necessarily aim at ensuring that beliefs are revised strictly according to evidence and reasons.[8]

Self-Deception

A significant amount of recent literature has surfaced regarding self-deception. What

exactly does self-deception amount to? Why do individuals deceive themselves in the first place?

Gendler herself has weighed in on this topic, claiming, as one might have guessed, that when an

individual appears to simultaneously hold two contradictory propositions—P and not-P—that

whichever proposition arose with the aim of getting the truth value correct is a belief, the other

should be regarded as mere pretense. [9] Evolutionary psychology, however, tells a different story

about the existence of self-deception among humans. In what follows I want to suggest that

evolutionary accounts of animal signaling and self-deception also tell against belief-forming

mechanisms as necessarily aimed at getting the truth value of propositions correct.[10]

Before getting to the evolutionary literature on self-deception, it is important to

understand prior evolutionary work on animal signaling. Work by John R. Krebs and Richard

Dawkins suggests that animals have evolved in order to read the minds—or intentions,

motivations etc.—of other animals by interpreting signals.

> Any animal could benefit if it could behave as if predicting the future behavior of
> other animals in its world. At any moment an animal is faced with choosing
> which of its repertoire of behavior patterns to perform next…The optimal choice

---

[8] I will spend a significant amount of time addressing this issue later in this section.

[9] See Gendler (2007) for a full discussion.

[10] See Funkhouser (2009) for a related discussion on self-deception. See also, Funkhouser (forthcoming) for a full discussion of beliefs and their relation to signaling. Here he provides a substantive account for the conclusion that truth and rational support are often overlooked in favor of belief's signaling function.

will depend on the probable consequences that would follow from each choice. For an animal that has any kind of social life, or that is a predator or is preyed upon, these probable consequences will depend crucially on the internal motivational state and probable future behavior of other animals… (p. 386)

My dog, for instance, would be at a great disadvantage if she were not able to recognize that the dog across the street baring its teeth is defensive or angry, and plans on attacking her if let out of the yard. Thus, natural selection will "favor animals that become sensitive to available tell-tale clues."

So there are obvious benefits to having the skill of mind-reading, of recognizing behavior that signals certain intentions in others. But this leads Krebs and Dawkins to another question: what types of skills might evolution have 'built' in order to counter-act mind-reading? Of course, in certain instances it is advantageous for an animal's intentions to be read accurately. The dog who bares her teeth benefits from my dog understanding her intentions—my dog is likely to back away and not challenge, and thus a potentially harmful conflict is avoided. But one can certainly think of examples in which animals would not benefit from having their intentions read by others. My dog, for example, would have a much better chance at catching birds if she did not so obviously signal her intention to chase them. For animals who have a vested interest in their intentions being read incorrectly, what sorts of techniques might be invoked? Krebs and Dawkins have an interesting answer here:

Like any victim of spying, it can resort to counter-espionage. Counter-espionage in human warfare or industrial rivalry takes two main forms, concealment and active deception…Active deception consists in feeding the enemy deliberately misleading information: the equivalent at the individual level is simulating a mood or intention that one does not really have. It is probable that animals do something corresponding to both these forms of counter-espionage (p. 389).[11]

---

[11] See Krebs and Dawkins (1984) for more details.

Krebs and Dawkins phrased the question in terms of mechanisms—i.e. what sort of mechanisms might natural selection 'choose' to aid animals in the prevention and exploitation of mind-reading? As we have just seen, although they did not provide a great amount of detail regarding how this specific mechanism might work, even in 1978 they were confident that animals may have evolved to have such a system.

I noted that evolutionary literature on self-deception may have a significant role to play in the discussion on the specific aims of belief-generating or belief-regulating systems. With the proper understanding of animal signals and mind-reading, we can now turn to that literature. In 2011 William von Hippel and Robert Trivers provided an account of self-deception.[12] Yet, rather than expend their efforts in pursuit of explaining away an apparent paradox, they present an evolutionary explanation for the existence of the phenomena.[13]

Von Hippel and Trivers pick up on Krebs and Dawkins' argument that deceit plays a significant role in animal relationships. If animals have a vested interest in reading the minds, so to speak, of others, and other animals also have a vested interest in their intentions either being hidden or misinterpreted, then it appears there is an evolutionary arms race. On the one hand you have animals evolving to better read thoughts, and on the other you have animals evolving systems to better conceal, or shape, their intentions. The suggestion is this: self-deception is a tool which acts to aid animals in shaping their thoughts, and thus gain advantages that come from

---

[12] It should be noted that Trivers put forth this view as early as 1976, as he alludes to this theory in the Forward to Richard Dawkins' *The Selfish Gene*.

[13] It should be noted that Von Hippel and Trivers are not working with the customary conception of self-deception. That is, they do not think that self-deception involves the subject simultaneously holding two contradictory beliefs. Rather, they see self-deception as mere manipulation of evidence and information in line with one's goals and motivations (p. 1). Nevertheless, it is clear that their account of self-deception is one which insists that subjects actually *believe* certain falsities. This is all that is needed for my purposes.

successfully deceiving their enemies. For example, Von Hippel and Trivers note literature that suggests being self-deceived about one's attractiveness confers individual benefits. Perceived confidence plays a large role in determining romantic partners. Furthermore, people with more positive self-images are believed more and their advice is more likely to be taken seriously than someone who is less confident.[14]

Given that the larger discussion of this section is concerned with the true aim or nature of belief, one might reasonably object: certainly one can gain the aforementioned advantages without actually believing falsities about reality. One could even concede that individuals are properly self-deceived and that they gain advantages from this without conceding that the false proposition held is a genuine belief. Gendler, for instance, holds that the self-deceived are involved in a type of pretense (2007). She could admit that someone who is self-deceived gains an advantage from being in such a state while still insisting that the attitude toward the false proposition is not a genuine belief. For example, someone may be self-deceived that they are more attractive than they are, and still gain the benefits associated with self-enhancing biases without the bias being an actual belief. My bias need only be a kind of pretense in order to fool others successfully.

The vital part of the Von Hippel and Trivers thesis is that the subject actually have the false belief. Von Hippel and Trivers are particularly interested in the fact that animals have become significantly more skilled at detecting deception in others. Deceivers increase their risk of being detected if they are conscious of the fact that they are lying. Given this fact, the deceiver must have certain abilities to combat this detection.

---

[14] See p. 4-5 of Von Hippel and Trivers for full literature references.

> We propose that self-deception offers an important tool in this co-evolutionary struggle by allowing the deceiver the opportunity to deceive without cognitive load, conscious suppression, increased nervousness, or idiosyncratic indicators that a deception is being perpetrated. To the degree that people can convince themselves that a deception is true or that their motives are beyond reproach, they are no longer in a position in which they must knowingly deceive others (p. 4).

Cognitive load, conscious suppression, increased nervousness, and idiosyncratic indicators are all the resultant effects of attempting deception, and the risks of being detected in a lie are large, so animals have evolved to hold false beliefs so as to further ensure that they are not caught. In short, in order to better deceive others, animals deceive themselves.

So Von Hippel and Trivers' conclusion is that mere pretense is not a reliable enough strategy. Animals have gotten so good at catching deception that the safest way to ensure that others are deceived is to be deceived. If I want to convince others that I am confident, it is not enough for me to believe that I am marginally attractive but act as though I am very attractive; rather, the safest way to convince others of my confidence is to actually be confident, I must believe that I am more attractive than reality suggests.

The initial implication of the Von Hippel and Trivers thesis is similar to what the literature that positive illusions suggested. Evolutionary science tells us that it is advantageous for humans to hold beliefs that are not in accord with the truth. The fact that positive illusions are seen as beneficial to the individual and that these phenomena are not only commonly found in humans, but indicative of a mentally healthy human, suggests that our belief-forming and belief-regulating systems are perhaps aimed at something other than the truth. The mental system involved in forming my belief that I am more attractive than average does not appear to be

reality-sensitive or evidence-sensitive in the way that Gendler and Velleman insist it must.[15] The

mechanism is aimed at a high self-evaluation regardless of what the evidence calls for.[16]

McKay and Dennett on the benefits of ungrounded beliefs

Ryan McKay and Daniel Dennett have addressed the issue of adaptive false beliefs at

length. It is, then, appropriate to address their view. They cite empirical evidence regarding two

different types of positive illusions: those that lead individuals to undertake intentional actions

which are biologically adaptive, and those that have been shown to directly enhance and sustain

life.

Examples of the former category can be found in studies regarding evaluations of one's

partner and children.[17] Such studies suggest that the vast majority (95%) of individuals asked to

evaluate their partner with respect to intelligence, attractiveness, warmth, and sense of humor

judge that their partner is above average. Certainly, such positive appraisals of one's partner will

often lead individuals to undertake "biologically adaptive behavior." McKay and Dennett

postulate that such beliefs help partners stay together which, in turn, better ensures that their

children receive the requisite care. McKay and Dennett also note that unrealistically positive

evaluations of one's children leads to superior parental care. They provide evidence that most

---

[15] Again, to be clear, I am aware that thinkers such as Gendler and Velleman may simply object
to my categorization of these illusions or self-deceptions as beliefs. I use the word 'belief" here
simply because this is ostensibly the most common sense categorization of the mental state. It
does not seem far off to say that individuals who claim view themselves as more attractive than
average have a belief that they are more attractive than average.

[16] There are, of course, critics of the theory of evolutionary advantageous self-deception. Ryan
McKay and Daniel Dennett (2009) argue that this theory has not received enough empirical
attention and that preliminary studies show that self-deceivers are actually less likely to be
trusted by potential detectors. Also, Neil Van Leeuwen (2007) argues that humans were not
specifically adapted to self-deceive, but that the phenomenon is merely a by-product of our
mental architecture.

[17] See McKay and Dennett (2009) for full list of references.

parents studied believe their children possess more positive attributes and fewer negative

attributes than the average child.

Examples of the latter category can be found in studies that show positive illusions as

enhancing the health of terminally ill patients.

> Research has indicated that unrealistically positive views of one's medical
> condition and of one's ability to influence it are associated with increased health
> and longevity (Taylor et al. 2003). For example, in studies with HIV-positive and
> AIDS patients, those with unrealistically positive views of their likely course of
> illness showed a slower illness course and a longer survival time (p. 506).

Not only do positive illusions lead individuals to undertake biologically adaptive actions,

positive illusions have been shown to be directly beneficial to individual health.[18] McKay and

Dennett go on to cite examples which show that cancer patients who employ strategies of denial

are more likely to remain recurrence-free than those who attempt to cope by other means. In all

of the above cases, what we find are individuals who benefit from having beliefs that are untrue.

Or, at the very least, individuals who benefit from having beliefs that are unresponsive to

evidence. All of this suggests, as I have said above, that the mechanism(s) responsible for

forming and regulating beliefs may, in some cases, not aim at the truth—an aim that Gendler and

Velleman claim sets the belief mechanism apart from the mechanism of imagination.

I want to end the chapter by addressing McKay and Dennett's conclusion, as their final

take is especially pertinent to my overall discussion. They write:

---

[18] I should note that McKay and Dennett are also skeptical of examples such as my
overestimating my attractiveness as being specifically adaptive. They argue that it is possible that
overly positive self-appraisals are themselves abnormal. A system could be made specifically to
err on the side of caution, where that erring is adaptive, but this does not mean that the specific
errors due to the design of the system are adaptive. I, however, would still hold that a belief
system erring on the side of caution is not necessarily aimed at getting the truth value of the
belief correct. It is primarily concerned with adaptive benefits of the beliefs it produces and
regulates.

> …although we claim that [adaptive misbeliefs] were adaptive in themselves (not merely by-products of adaptively biased misbelief-producing systems), we do not claim that they were adaptive *by virtue of their falsity*…Their adaptiveness is independent of their truth or falsity. Any given adaptive misbeliever is thus an adaptive *mis*believer because of contingent facts about the world…the upshot is that we do not expect adaptive misbeliefs to be generated by mechanisms specialized for the production of beliefs that are false per se. Instead, there will be evolved tendencies for forming specific *ungrounded* beliefs in certain domains. Where these beliefs are (contingently) false, we will see adaptive misbelief (p. 507-508).

Rather than concluding that the evidence regarding positive illusions suggests that humans have adapted to have false beliefs, they hold that we have adapted to have ungrounded beliefs. My position will be that (a) McKay and Dennett are wrong to think that some of these beliefs are not beneficial in virtue of their falsity and (b) even if McKay and Dennett are correct in thinking that we have adapted to have ungrounded beliefs, this conclusion is clearly not compatible with the Velleman and Gendler theses regarding the aim of truth as constitutive of belief.

Let us take as an example the illusion that an AIDS patient will live longer than could be realistically expected. As mentioned above, evidence shows that just having this belief will confer health benefits on the individual. If one believes this, one is more likely to live longer than an individual in a similar condition who has a realistic belief about their length of life and chances of survival. McKay and Dennett's claim is that this belief is beneficial regardless of whether or not it is true, so it cannot be that the mechanism responsible for this belief is concerned with generating false beliefs. Rather, the mechanism is simply concerned with generating that particular beneficial belief and whether or not it turns out to be true is irrelevant.

Although my position in this section does not hinge on this point, it is important to illustrate McKay and Dennett's mistake with regard to this specific issue. They admit that, they "…have explored special circumstances…where the truth hurts so systematically that we are actually better off with a falsehood (p. 509)." If, in a case such as the AIDS patients, believing in

accord with the truth is actually harmful to one's health, it cannot be that a positive illusion is beneficial regardless of the truth. Had their beliefs actually been in accord with the truth, the belief would have proved harmful. McKay and Dennett are right in saying that these beliefs are advantageous because they are ungrounded—i.e. they are advantageous because they do not track the truth—but an ungrounded belief, in this instance, is advantageous precisely because it leads the subject to accept something other than the truth.

Still, the conclusion that humans must have developed tendencies to produce ungrounded beliefs within the normal course of brain functioning appears to put a large dent in Velleman's and Gendler's claims. Surely the notion that humans have belief-forming mechanisms which ensure that beliefs are ungrounded in certain contexts is inconsistent with the thesis that beliefs are necessarily sensitive to reality or evidence. Insofar as we want to claim that the mental states produced by such a mechanism are beliefs, we must rid ourselves of the idea that beliefs are governed by systems always aiming at the truth.

Concluding Remarks

The ultimate goal of this chapter was to soften the distinction between belief and imagination. One of the key factors used by those intent on separating the two is the idea of telos or aim. Whereas the aim of truth or accuracy is seen as constitutive of the belief mechanism, the constitutive function of the imagination is something entirely different, whether it be for the purpose of argument, pretense, etc. Although it is clear that the mechanism responsible for beliefs is mainly concerned with the acceptance of accurate statements, and the mechanism responsible for imaginings has no such preoccupation, I hope that the above discussion has placed some doubt on the claim that the belief mechanism is *exclusively* concerned with accepting truths. If this modest goal was achieved, we have done away with one criterion of

belief that distinguishes it from the imagination, and have thus brought belief and imagination a step closer to each other.

II. Is imagination involved in the production of action?

The goal of this next section will be to place further doubt onto the distinction between imagination and belief. One way theorists have carved out this distinction is by focusing on belief's connection to action. Belief is viewed as playing a vital role in the production of action, whereas imagination is not. This section will focus on ways to push back on those who use connection to action as a means of distinguishing the two mental attitudes. I will address the ongoing debate regarding acts of pretense before moving on to some important empirical literature. This empirical evidence will give us reason to think that imagination also plays an important role in the production of action.

Belief's role in the production of action

A commonplace view within the philosophy of action can be traced at least as far back as Hume, who held that reason alone cannot motivate action. Rather, human action is the result of the combination of reason and passion, where passion is the driving force behind the action and reason plays a guiding role.[19] More contemporary accounts have shifted the vocabulary from "reasons" and "passions" to beliefs and desires. Eric Funkhouser and Shannon Spaulding (2009) call this the Belief-Desire Thesis: "For every intentional action there is a belief-desire pair that both causes and rationalizes that intentional action." Of course, Hume famously argued for a

---

[19] This view can even be traced back as far as Aristotle. Who held that the intellect alone moves nothing.

hierarchy among these attitudes, claiming that reason is a slave to passion and merely plays the

role of determining what course of action will satisfy a given desire.[20]

My action of getting up from my desk to take my dog out, for instance, can be explained

by the desire to make my dog comfortable and the belief that taking her for a walk constitutes the

proper means towards satisfying that desire. Without making any specific commitments as to the

ordering or the hierarchy of beliefs and desires, it is clear that had I not had that particular belief,

my desire to make my dog comfortable would have either gone unsatisfied, or would have been

satisfied by some other means. So regardless of one's stance on the particularities of the Humean

thesis, it is clear that beliefs play a large explanatory and causal role in theories of action.

The particular role of beliefs in motivating or guiding action has been used as a means of

distinguishing it from the cognitive attitude of imagining.[21] In his paper "Distinguishing Belief

and Imagination" Neil Sinhababu argues that its connection to motivation is one of three

functional properties that sets belief apart from imagination.

> The third property—the relation to motivation—also marks a clear difference
> between imagining and believing. If imagination and belief had the same
> motivational properties, imaginative people would be constantly engaging in
> utterly bizarre behavior, reshaping their entire lives to fit spur-of-the-moment
> daydreams (p. 161).[22]

---

[20] Funkhouser and Spaulding calls this the Motivation-as-Desire Thesis. See their (2009) article
for a more substantive discussion.

[21] Notably, David Velleman (2000) deviates from this line of reasoning. In his attempt to
distinguish belief and imagination, he dismisses the motivational property as capable of making
the distinction and, of course, opts to use the telos or aim of belief to accomplish his goal.

[22] I focus my discussion here only to Sinhababu's claim about belief's relation to motivation. I
hope that my discussion in the last chapter of this thesis addresses the other two properties
(beliefs are shaped by perceptual states, and we sincerely assert what we believe) that Sinhababu
sees as distinct to belief.

Such a view plays a prominent role in aesthetic theory as well. Kendall Walton (1990) famously argues for the existence of quasi-emotions on the basis that those who are immersed in a horror movie do not believe themselves to be in danger. Charles cannot be truly afraid of the green slime on the screen because if he were truly afraid, it would mean that he had a belief that he was in danger. But he cannot believe that he is in danger, because if he did then he would take deliberate action to remove himself from danger (pp. 195-204). The main thought is this: belief plays a prominent role in the production of action, whereas imagination does not. If I believe that my dog is whining to go outside, then, given that I have the appropriate desires, I will get up from my desk and take her outside. If I simply imagine that my dog is whining to go outside, I will not be moved to act in the same way. I can desire to make my dog happy and imagine that she is whining without being moved to get up from my desk.

Pretense as a counter-example to the belief-desire thesis

In recent years a number of theorists have argued that acts of pretense provide a counter-example to exclusively belief-desire explanations of action. Velleman's treatment of the subject has received a lot of attention in the literature. As mentioned above, Velleman does not see belief's connection to action as a means towards distinguishing belief from imagination precisely because imagination also has such a connection.

> …does imagining that *p*, for example, typically dispose the subject to behave as would be desirable if *p* were true? Well, it does in at least one context: the context of child's play, in which imagining disposes the child to pretend. When a child imagines that he is a nurse, for example, he is disposed to behave as would be desirable if he were a nurse; when he imagines that he is an elephant, he is disposed to behave as if he were an elephant; and so on (p. 256).

On this view it is imagination, conceived in terms of mock-belief, that, in conjunction with mock-desire, motivates acts of pretense.[23]

Suppose Henry is taking part in a game of make-believe, pretending that he is a dog. He crawls on his hands and knees around the house, sniffing the floor and the furniture around him. He then pretends to hear the mailperson pull up in the driveway, and quickly crawls to the window and begins barking loudly. Velleman's account goes something like this: Henry does not believe that he is, in fact, a dog, nor does he believe that there is a mailperson in the driveway. Further, Henry does not have a true desire to warn those in the house of a potential threat. Instead, he has an imagining that functions like a belief, and a mock-desire, or i-desire, that functions like a typical desire. Funkhouser and Spaulding summarize the view well:

> They characterize belief-like and desire-like imaginings as states that are not beliefs or desires, but mimic the functioning of real beliefs and desires with respect to inferential reasoning and motivation for (pretense) action…Beliefs in imagination inferentially lead to new beliefs…And just as belief-like imaginings mimic the inferential functioning of real beliefs, desire-like imaginings, they hypothesize, mimic the motivational powers of real desires (pp. 297-298).

The imaginative analogues of belief and desire do all of the necessary work to motivate pretense action.

There are, of course, a number of criticisms of the theory that imagination motivates action, and many thinkers have endorsed a belief-desire explanation of acts of pretense. On this view, Henry has a desire to behave like a dog, along with certain beliefs about how dogs behave in a given situation—e.g. they walk on all fours and bark at strangers who pull into the driveway.

---

[23] Over the years many defenses of this and similar views have come forth. See Curry and Ravenscroft (2002) and Doggett and Egan (2007) for full accounts.

It is the combination of these desires and beliefs that leads Henry to behave the way he does.[24] If

this explanation of pretense is correct, we are back to where we started initially, with connection

to action as a criterion that belief, not imagination, meets.

Proponents of the i-belief and i-desire view certainly have their reasons for rejecting a

Humean account of pretense action. I-theorists claim that a belief-desire explanation requires

children to have an unrealistic grasp of the concept of pretense, denies the child creativity in acts

of pretense, and leaves the child outside the pretense rather than fully immersed. [25] The literature

on this subject is vast, and it is not my intention to defend either theory of pretense. One may not

find the "imagination as intrinsically motivating" theory altogether convincing, in which case we

are still in need of an account that brings the two cognitive attitudes closer together in this

respect.

The modest aim for the remainder of this chapter will be to shift the discussion away

from acts of pretense, and question whether or not imagination plays the common belief-like role

in motivating or guiding action. If the view that our actions can always be explained by an appeal

to merely beliefs and desires can be placed into doubt, then the view that belief's connection to

action sets it apart from imagination can also be called into doubt.

Nanay on imagination and decision-making

---

[24] A number of writers have come out in support of this type of view. See Nichols & Stich (2003)
Sinhababu (2012) and O'Brien (2005). Funkhouser and Spaulding endorse a broader Humean
view, but see acts of pretense as reason to opt for the vocabulary of "guiders" and "motivators"
instead of beliefs and desires.
[25] See Funkhouser and Spaulding (2009) for a full account of the i-theorist's case against a
Humean explanation of pretense.

Bence Nanay has recently come out in opposition to the belief-desire model of decision-making. He cites a number of empirical studies that he takes to be irreconcilable with the belief-desire picture. In order to accommodate these empirical studies, he proposes that imagination is involved to the decision-making process. Only if imagination plays a role in decision-making, he claims, will we be able to properly explain the empirical literature that goes against the belief-desire model. In what follows I want to briefly present Nanay's case, as it has garnered little attention in the literature thus far, and also present some intriguing findings not yet mentioned in the imagination literature. I then want to conclude by addressing the implications of Nanay's view and, more importantly, of the empirical findings in question. Nanay shifts the vocabulary from action to decision-making, and I will follow suit. Nevertheless, I do not think much hinges on this change in vocabulary. If beliefs are fundamental in the way in which we make decisions, then it should be fairly clear that beliefs have a crucial role in the production of our actions. The same, I take it, would hold for the negative case.

Nanay lists five different types of decision-making biases.[26] (i) The order in which questions are raised influences a subject's decision regarding the given questions—*order effect*. (ii) The way in which questions are framed by an experimenter influences how the subject will respond to the questions—*framing effect*. (iii) Unrelated experiences that the subject had previous to the experiment will influence the way the subject responds to questions—*previous unrelated experiences*. (iv) Unrelated experiences that the subject is going through during the experiment influences her decision-making—*ongoing unrelated experiences*. (v) The cleanliness

---

[26] I will only go over these briefly. For a full discussion and literature references, see Nanay (2016).

or dirtiness of the surrounding area affects the decision-making process of the subject—*environmental factors*.

As Nanay points out, these empirical findings do not seem to cohere with the belief-desire model of decision-making. As it stands, beliefs are seen as wholly, or at least primarily, rational cognitive attitudes. My beliefs are only supposed to be influenced by evidence or sense data relevant to the particular decision in question. My belief regarding how to act in a trolley problem, for instance, is not typically seen as sensitive to what film I have watched previous to making my decision (Valdesolo & DeSteno, 2006). Functionally speaking, beliefs are meant to be formed and altered only in accord with relevant truths or reasons. So if beliefs are fundamental to my decision about how to proceed in a trolley problem, why do experiences which are not supposed to influence belief have such an important role?

It is important to emphasize a crucial aspect of Nanay's project. Surely most individuals would hold that, in an ideal situation, only our relevant beliefs and desires factor into our decision-making process. We are beings governed by, at least to some extent, reason. It is not, however, Nanay's goal to give an account of how people should make decisions. Rather, he is simply attempting to describe how humans actually do make decisions. Of course, one still has the option to hold that the above instances are simply deviations from the norm. I.e. we normally make decisions based on the belief-desire model, and only in certain instances do we stray from that paradigm. Even if such a stance is correct, if the above literature is indicative of how humans sometimes make decisions, then such instances must be accounted for in a theory of decision-making. It would not be prudent to hold fast to a theory in light of ostensibly obvious exceptions.

Nanay advocates for a theory of decision-making which incorporates imagination. His

line of reasoning is similar in kind to the reasoning Tamar Gendler (2008a) uses to postulate the

mental state of aliefs. Certain factors influence our behavior, but these factors are also not the

type that are typically considered as rational, or capable of affecting belief states. So, in order to

account for these influences, she posits a novel mental state that connects to action. The

difference lies in Nanay's aversion to the positing of novel mental states, as he sees this type of

move as an ad hoc attempt to salvage the belief-desire thesis. For Nanay, because of the

imagination's ability to be influenced by irrelevant external factors, we can use it in our model of

decision-making and can thus avoid positing new affective mental states.[27] His theory holds that

instead of using background beliefs in order to determine which course of action best satisfies

your desire, you imagine possible courses of action, and decide based on the comparison of the

imaginings.[28] Nanay writes,

> These are the three roles imagination plays in the decision-making process. You
> imagine what you imagine to be your future self, being in a situation that you
> imagine to be the outcome of your decision. As none of these three episodes of
> imagination can be considered reliable, decision-making is extremely unlikely to
> yield the optimal outcome reliably (p. 136).

On this picture, imagination plays a serious role in decision-making.

---

[27] This move is meant to appease those who see belief and imagination as distinct cognitive
attitudes. I.e. for those who see belief as only being influenced by relevant, rational factors
whereas imagination is influenced in other ways. It may be that belief is not necessarily
constrained in this way, in which case there is no distinguishing factor between belief and
imagination in this respect. This coheres with my overall goal. Nevertheless, for those who hold
to the customary view of belief, such a move should show that the imagination, as it is typically
construed, should be involved in our theory of decision-making.
[28] This way of sketching belief-desire decision-making is, of course, not the only way of painting
the picture. I use this merely as a more general option with which many belief-desire theorists
would probably agree.

Still, although Nanay's theory is well-suited to explain why our decision-making process is so often less than optimal, he has not succeeded in showing why this explanation can better deal with the aforementioned empirical evidence regarding irrelevant external factors and their influence on our decisions. The answer, in short, is this: imagination is, in fact, sensitive to irrelevant external influences. Nanay chronicles a number of empirical studies demonstrating the imagination's susceptibility to irrelevant external influence.

> In a variation of the original Perky experiment, the projected images were different from the ones the agents were asked to imagine and the result was that they ended up imagining a mixture of the object that was projected on the wall and the object that they were asked to imagine (Segal, 1972). For example, they were asked to imagine the skyline of New York City while, unbeknownst to them, they were gazing at an image of a red tomato. The result was that they imagined New York City at sunset (p. 138).

Nanay's project is to provide an account of decision-making that allows for our decisions to be influenced by irrelevant external factors. Beliefs are not, as they are typically conceived, the type of cognitive attitude that fits the mold. Imagination, on the other hand, is susceptible in the relevant ways, and thus is a better candidate. The upshot, for our present purposes, is that imagination, on this theory, plays a serious role in decision-making, and therefore to action..

Nanay argues persuasively that we should avoid adding affective states to compensate for these external influences. In speaking of a study that indicates that holding a teddy bear can influence our decisions about other people, he writes:

> I can see two ways in which this proposal could be worked out, but both of them postulate not one but two new mental states that we have no reason to postulate other than salvaging the belief-desire model. If this newly added affective state is an emotion that is directed at the teddy bear, we would need some kind of representation that would connect the way the teddy bear is experienced to the way the people whose social behavior we are supposed to judge are experienced…Alternatively, if the affective state is some kind of mood…then we still need an extra mental state that would tell us how this mood state would influence our decision-making (p. 132).

If we are convinced that these external influences on decision-making cannot be accounted for by positing emotions or affective states, then it appears we are left with two options, one of which Nanay has not considered.

The first option is to simply accept Nanay's account of decision-making, or at least something similar. If the aforementioned empirical literature calls into question the belief-desire model of decision-making, and the imagination is the best candidate for substitution due to its susceptibility to irrelevant external factors, then perhaps we should endorse an account of decision-making that centers around the imagination. Nanay is clear in pointing out that the belief-desire model would not be entirely done away with. On this view, the belief-desire model would explain how we *ideally* make decisions, and the imagination-based model would explain how we *sometimes* make decisions. One model does not preclude the other. This would be, of course, one way to go about lessening the distinction between belief and imagination, given that both imagination and belief are involved in the production of action.

However, as I alluded to above, Nanay does not spend time considering another possibility. We could still salvage the belief-desire model by claiming that another state influences our beliefs without claiming that this attitude is an emotion or an affective state. That is, we could simply paint a picture of our mental architecture where the imagination is in a position to influence our belief states. I want now to briefly point to some empirical literature that would support such a hypothesis, and then chronicle some prominent thinkers who have noted the imagination's ability to influence belief states.

Imagination's influence on beliefs

We hypothesized that our decision-making process may involve both imagination and belief, where belief and desire are still involved in the production of action, but where imagination is in a position to influence belief. This picture would salvage the belief-desire model while still accounting for the empirical literature regarding decision-making biases. This deviates from Nanay's picture slightly. Nanay holds that beliefs are involved, but they play the role of guiding or aiding the imaginative process. If such a model is correct, we would expect to see evidence that imagination can, in fact, influence belief. This is exactly what we find. It has been well-chronicled in recent psychological studies that when a subject imagines that something occurred to her, that she may develop a belief that such an event occurred in actuality. Take the conclusion of a 2003 Mazzoni and Memon study.

> The results of this study show that people can develop both a belief in and a memory of an event that definitely did not happen to them by simply imagining its occurrence. Imagination alone, without any additional suggestive procedure, increased participants' convictions that an event had occurred in their childhood, and also produced false memories of the event. Additionally, the data indicate that the production of false beliefs and memories was not due to an increase in familiarity with the event…but instead depended on processes that occur specifically during imagination (p. 189).

The idea that the imagination can create false beliefs has even been documented in marketing research. Studies show that simply exposing consumers to images of a product can create false beliefs that the subject actually experienced the product, and even be more likely to make the decision to purchase the product as a result.[29] Tversky and Kahneman's (1973) research on the Availability Heuristic also indicates an ability on the part of the imagination to affect beliefs. The research indicates that people tend to make judgments about how frequent or likely an object or

---

[29] See Rajagopal and Montgomery (2011).

event may occur based on the availability of the object or event to one's perception, memory, or imagination.[30]

Psychologists have not been the only ones to recognize the effect that the imagination has on belief states. More recently Susanna Schellenberg (2013) brings up cases of "imaginative immersion" where individuals become so engrossed in an imaginative episode that they come to confuse their imaginings with reality. This experience is commonly attributed to method actors who immerse themselves so deeply into their characters that they begin to believe themselves to be the character they are portraying.[31] Examples of imaginative immersion lead Schellenberg to posit a continuum between belief and imagination, and subsequently endorse what she calls the "belief-related view" where imaginings, beliefs and desires all act together in order to produce action. If such a view is right—i.e. that the imagination is capable of shaping or influencing belief states—then this also places serious doubt on the rationality requirement placed on belief that I addressed in the previous section. Beliefs are supposed to alter only in the face of evidence that can be evaluated by reasons. Imaginings would offer a serious counter-example.

Concluding remarks

The specific views, considered in this paper, that push the imagination as being involved in the production of action, are two-fold. On one view, the imagination is capable of producing action unmediated by belief. This view, as we saw, has been developed both by those who think that acts of pretense provide a counter-example to the belief-desire view of action and by Nanay, who thinks that we ought to abandon the belief-desire model in order to accommodate psychological literature concerning decision-making biases. On another view we have a picture

---

[30] See Tversky and Kahneman (1973).
[31] See Liao and Doggett (2014) for an example of such a case.

where the imagination is involved in the production of action, but does so by influencing belief states.

The theories advocating that the imagination has the power to motivate action either on its own or in conjunction with beliefs and desires will accord with the goal of this chapter. If imagination either motivates action on its own, or works with beliefs and desires to motivate action, the criteria set out by Sinhababu at the beginning of this section will have been done away with. It is not only belief that is connected with action. However, I want to end by noting that even a picture where imaginings influence beliefs, which then influence action, would do away with Sinhababu's criteria.

One way of painting such a picture would be to claim that beliefs still have primacy with regard to producing action—imagination can only influence action when it is mediated by a belief. Remember that the property that Sinhababu thought was distinctive to belief states was its connection to action. But even on this picture, imagination is importantly connected to action. Whether or not the imagination is mediated by beliefs, it is still connected to the mechanism(s) responsible for outputting action. And one need not paint the picture in terms of the primacy of beliefs with regard to the production of action. If imaginings influence action through belief, it could be postulated that, in certain instances, imaginings play the primary role in guiding action, and beliefs merely play the secondary, or intermediary, role. In other words, if an imagining has the power to influence a belief, which then produces action, is it not the imagination that has primary influence over that particular decision?[32]

---

[32]Sinhababu does not carve out the particular motivational properties that he sees as distinctive of belief, so it is not clear whether he would be entirely satisfied with this line of argument. The last vestige for someone on his side would be to claim that imagination influences belief which then causes action, but hold that they are distinct in that belief has the ability to cause action without

The ultimate aim of this thesis is to question the hard distinction between belief and imagination. This chapter was primarily concerned with one of the qualities of belief used to make the distinction in question—connection to action. We found that there are a number of theorists who question whether or not belief alone has this quality. We then found that a good deal of empirical evidence points to the imagination playing at least some, if not the primary, role in decision-making and the production of action. If successful, this chapter will have called into question the notion that belief is involved in the production of action and imagination is not, and thus will have brought the distinction between belief and imagination into further doubt.

III. Imagination as Partial Belief

Thus far we have considered multiple ways of driving a wedge between belief and imagination—truth-directedness and connection to action. My method up to this point as been to present evidence and argument against the distinction between the two attitudes. In this final chapter I want to present positive reasons—e.g. cognitive contagion and imaginative immersion—for thinking that belief and imagination are non-distinct mental attitudes. I then want to address, and reject, some final reasons for thinking that belief and imagination are fundamentally separable. These considerations will lead to my positive view of the imagination. On this view, an imagining is a less-robust version of a belief. I will contend that this view does better to accommodate instances of contagion and immersion, while still able to account for cognitive quarantining.

The Problem

---

the imagination, and not vice versa. Given the empirical evidence we already have, it is hard to see how long such a view will be able to hold up.

The orthodox view throughout much of the literature on the architecture of the mind sees belief and imagination as distinct cognitive attitudes (DCA). [33] One prominent driving motivation behind the DCA theory is that it helps to explain cognitive quarantining. Alan Leslie's (1987) eminent study showing that children as young as two years old can successfully distinguish pretense from reality calls for explanation. Any adequate theory of the mind should explain how a child can simultaneously hold two ostensibly contradictory propositions to be true without falling into a kind of mental collapse. Theories propounding the heterogeneity of the two attitudes, most notably the theory put forth by Nichols and Stich (2003) (henceforth N + S), have served quite well in this respect.

Although accounting for cognitive quarantine has been a pressing theoretical demand, persuasive evidence has been put forth in recent years demonstrating that quarantine is subject to systematic exceptions. Tamar Gendler notes that quarantining gives way to instances of what she calls "contagion," cases where either one's attention or evidential standards are affected by what one imagines—e.g. if one pretends that they are in a warzone for a sufficient amount of time, they may begin to perceive more people or objects as threats to their safety. Furthermore, she notes cases where simply imagining that p causes one to behave in a way that is consistent with the belief that p—e.g. if one imagines that there is an intruder in her house, she may begin to act in ways consistent with the belief that there is an intruder in her house.[34] Gendler considers each of the above instances to be sub-groups of the larger category of "contagion"—the former dubbed "cognitive transmission" and the latter "affective transmission."

---

[33] Peter Langland-Hassan (2012) is a noteworthy exception. I will henceforth use his terminology "distinct cognitive attitude" or "DCA" to refer to the orthodoxy.
[34] Gendler (2003), pp. 131-134.

In a similar vein, Susanna Schellenberg has argued that cases of "imaginative immersion"—i.e. cases where the imaginer seems to lose herself in her fictional world such that she takes the fictional world to be reality—provide reason to be skeptical of the view that imagination is only indirectly linked with belief.[35] She writes, "in cases of imaginative immersion, however, quarantining arguably can break down to some extent. The subject's mental state may start having similarities to belief. The subject may, for instance, start taking to be true whatever she is imagining."[36] Schellenberg takes such cases to point to a need for what she calls a 'continuum' between belief and the imagination. [37]

Such exceptions to quarantine highlight important similarities regarding how imagination and belief function within the mind. Cases of affective transmission demonstrate that the imagination has the capacity to influence our affective responses to external stimuli. Cases of cognitive transmission show that simply imagining something can have a significant impact on one's inferences and perceptions. So, not only must a theory of the imagination account for our ability to keep imaginings and beliefs distinct, it must also account for (1) cases where what we imagine causes affective responses, (2) cases where the imagination seems to play a role in the formation of, or revision of, beliefs and perceptions, and (3) paradigm cases of pretense where the imagination plays a role in either guiding or producing action—specifically cases of imaginative immersion, where it is sometimes unclear as to what the pretender actually believes.

---

[35] Schellenberg (2013), p. 507.
[36] Ibid., p. 508.
[37] The way in which Schellenberg employs the term "imaginative immersion" makes it seem as though it is most analogous to Gendler's cognitive transmission. Nevertheless, I take Schellenberg's notion of imaginative immersion to be more robust, in that it can encompass both affective and cognitive transmission. I will work under this assumption and take affective transmission and cognitive transmission to simply be subsets, or characteristics, of imaginative immersion.

Paradigm Cases and the DCA Account

    It is Halloween and Stacy has gathered with her friends to take part in a traditional

Halloween activity—walking through a haunted house. Stacy is nervous, anxious about the

horrifying creatures she might encounter. Nevertheless, Stacy is fully aware that the only

inhabitants of the house are unthreatening actors dressed in fear-evoking garb. As Stacy enters

the house, her heart-rate increases. She cringes, trying to anticipate the first of many instances

where someone will jump out of a corner or sneak up behind her. Finally, a zombie jumps out

from a dark corner and screams in her face "Arghh!" Stacy lets out an automatic shriek. Her

heart-rate increases even more and she frightfully dashes to the next room of the house, where a

similar course of events is certain to play out.

    The DCA account is well-equipped to explain Stacy's reaction to the zombie.[38] N + S

hold that imaginative content runs through the same "inference mechanism" as belief.[39]

Furthermore, that inference mechanism feeds into the same mechanism responsible for

outputting our affective responses. Thus, Stacy's reaction can be explained as Stacy imagining

that she is in a house full of dangerous creatures. That imagined content is filtered through the

mechanism responsible for updating and controlling the precepts entering the belief mechanism,

which is eventually fed into the affective mechanism, causing an affective response. Nichols

writes,

> Affective systems can receive input from the imagination, and affective systems
> process input from the imagination as they would process isomorphic beliefs. So

---

[38] The finer points about how these distinct mechanisms interact with other mental states (e.g. does the imagination work in conjunction with desires or the imaginative analogue of desires) are, I believe, inconsequential to my overall account. So, for the sake of brevity, I will only address the DCA account put forth by N + S, as I see their account as the most comprehensive. Nevertheless, I take it that the subsequent points made can be applied to any DCA account.

[39] Nichols has termed this view the "Single-Code Hypothesis". See (Nichols, 2004) and (Nichols, 2006) for a more detailed discussion.

> on the single code theory, an affective system can accept inputs in the pretense representation…and the affective system will generate the same affective consequence from the input it would if the input were instead a belief…[40]

This can explain why Stacy's reaction to the zombie in the haunted house is so similar to what her reaction would have been like had an actual zombie, if such things existed, jumped at her in real life.

Madeline is playing in her backyard. She is pretending to be a birdwatcher.[41] She runs around the yard from tree to tree pointing to a plethora of rare bird species. "Look! There's a Cockapoo! And there! I see a White-Faced Owl!" Still, Madeline is quite aware that neither of these birds is actually in her backyard. In fact, let's say for the sake of the example that no birds are currently in her backyard. So, how can we explain Madeline's birdwatching behavior?

The DCA theorist is also equipped to explain this case. Madeline's imaginary content is partly concocted in the script elaborator—i.e. the mechanism responsible for filling in the details of a pretense which are not initially implied by either the pretense premise, the pretender's belief, or knowledge of what happened earlier in the pretense—and funneled into the possible world box (henceforth PWB).[42] The PWB, as stated above, is connected to the inference mechanism which feeds into the belief box. Now, contained in her belief box is something of the form "I am pretending that there is a rare bird in my backyard." This belief, in conjunction with a desire to bring about an action consistent with someone who believes that there is a rare bird in her backyard, causes her pretense behavior.[43] So, as we have seen, the DCA theorist has resources to

---

[40] Nichols (2006), p. 463.
[41] This example is influenced by a passage in Gendler (2003).
[42] Nichols and Stich (2003), p. 35.
[43] I do not wish to take a stance as to whether Madeline's desire is one of a fundamentally different kind, or, as N + S paint the picture, simply different in content. Detailed arguments for the former can be found in Doggett & Egan (2007, 2012). The desire theorist and i-desire theorist can both agree that the imagination and belief are distinct.

accommodate both affective responses to imagined content as well as typical instances of pretense-related behavior.

Imaginative Immersion

What about atypical instances of pretense behavior in which the pretender is so immersed in the pretense that she may no longer be aware that she is pretending? Or, where pretense behavior seems to give rise to belief-like mental states? National Public Radio recently released a story which will serve as a suitable example of such a case.[44] In a small suburb in Illinois, a father of twelve created a quite elaborate game of make-believe. He built a 24-foot long model battleship in the family's driveway, equipped with a wheelhouse, engine room, guns that shoot ping-pong balls, missiles made of spray-painted deodorant sticks, a functioning intercom, and a motor made from recycled blender parts. The father assigned roles to every child in the family, each with their own set of specific responsibilities. The eldest daughter was placed highest in command and given her own office with a functioning land-line phone. Other children were placed in charge of the chow line, responsible for feeding the crew. The children had responsibilities typical of a sailor in the Navy: the deck needed to be swabbed, an activity log was kept, individuals stood guard (in the summer, the children stood guard 24 hours a day, working in 5 hour shifts).

The first-person testimony from the children, now adults, is particularly intriguing. The eldest daughter recalled feeling frustration when one of her siblings did not properly shine the belt buckle which was part of the uniforms they were required to wear on the ship. She also recalled a great deal of tension between herself and her other siblings as a result of her superior rank on the ship. When asked about the motivation to do what seemed like a great deal of work

---

[44] See NPR's *This American Life*, "The Land of Make-Believe" (2015) for the full story.

in order to make the pretense as realistic as possible, the daughter responded, "I don't know that it always was fun. When we were on there, my memory was that it was somewhere between work and play."

How is such a severe case of imaginative immersion to be explained on the DCA account? Perhaps N + S would give answers similar to those above in order to explain the children's behavior and emotions. But this type of theory is still inadequate for explaining why their cognitive lives were so affected by the game of make-believe—so much so that two of the children enlisted in the Navy, and four others enlisted in the Marine Corps. The child responsible for managing the ship's store now runs her own clothing store, and one of the children who worked as a cook on the ship now manages the kitchen at a restaurant. If the content in the PWB ("I am a working sailor") and the content in the belief box ("I am a child playing a game of make-believe battleship") do not directly interact with one another, how can we explain instances in which imagination shapes not only one's emotions and pretense behavior, but also their day-to-day lives?

Such instances of seeming overlap between belief and imagination are not singular. Both Schellenberg and Liao and Doggett (2014) note cases in which actors seem to lose themselves in their roles. Testimonies from both the actors themselves as well as those around them indicate a loss of contact with reality. The DCA theorist is also hard-pressed to deal with more specific cases of cognitive transmission—where "one's attention to and evidential standards concerning the world" are affected by imagined content. In the case of Madeline the birdwatcher, Gendler presents empirical evidence that if one imagines watching birds for long enough, one might be more prone to see birds in actuality, or to mistakenly attribute birdness to a non-bird object.[45]

---

[45] Gendler (2003), p. 135.

Schellenberg puts the point well: any adequate theory of the imagination must account for "(a) relations between imaginings and beliefs that are not pure and (b) the possibility of imaginative immersion."[46]

Schellenberg contends that such evidence calls for a "continuum" between belief and imagination. Such a theory of the mind would allow believers and imaginers to slip back and forth between the mental attitudes while still maintaining that the attitudes are distinct on some level of inquiry. Although I am sympathetic to Schellenberg's aim of connecting the two attitudes, my project is less concerned with demonstrating how one can slip back and forth between believing and imagining, and more concerned with illustrating the ways in which the two attitudes overlap.[47] We argued in the initial chapters of this project that truth-directedness and connection to action are not sufficient criteria to distinguish belief from imagination. In the following section I want to address other characteristics of the respective attitudes that are used as a means of drawing a stark line between belief and imagination. As it was in the previous chapters, the goal of the following section will be to investigate whether or not certain characteristics are distinct to one of the attitudes. It will be my contention that none of the attempts to draw a stark distinction between the two attitudes is successful. This will set the foundation for my positive theory, which accounts for the overlapping of belief and imagination.

Sinhababu and Distinguishing Between Belief and Imagination

---

[46] Schellenberg (2013), p. 512.

[47] The latter, of course, does not preclude the former. I simply want to emphasize the way in which my and Schellenberg's projects diverge. She sees imaginative immersion as a reason to argue that belief and imagination are distinct but connected. I see imaginative immersion as a further reason to believe that imagination and belief are less distinct than most think.

Neil Sinhababu (2013) recently defended the view that belief and imagination can be distinguished on functional grounds. Sinhababu departs from thinkers such as Velleman who holds that applying the norm of truth is enough to distinguish the two attitudes. In this sense Sinhababu and I agree. However, Sinhababu names three ways, other than the aim of truth, that belief can be distinguished from the imagination—(i) the way perceptual states shape belief, (ii) belief's relation to motivation, and (iii) belief's connection to sincere assertion. The second chapter of this thesis addressed (ii), so I will spend the beginning of this section addressing (i) and (iii) before moving on to other ways one could carve out the distinction.

Regarding (i) Sinhababu writes:

> …—the way perceptual states shape belief—is one that imagination clearly doesn't share. As I read Macbeth, my sensory perceptions are of the words in the open book before me. I believe that I'm reading a book and that particular words are on the page. I imagine three witches chanting over their cauldron. I don't believe that there are or ever were witches. Yet I vividly imagine that they exist and that they chant with a hypnotic rhyme. Imagining departs from perceptual evidence more drastically than belief can (p. 161).

The claim is that belief is, in some sense, constrained by what the subject perceives, whereas imagination is not. I can imagine that there are witches standing over a cauldron without seeing or hearing witches standing over a cauldron. By contrast, my belief that I am sitting at my desk is shaped by my seeing and touching the desk before me. If perceptual evidence presented something other than my desk in front of me, the implication is that I would not believe that my desk is in front of me.

I have no intention here of claiming that imagination is more, or equally, constrained than belief in this respect. Sinhababu's claim that "imagining departs from perceptual evidence more drastically than belief can" is not in question. I do, however, want to briefly point to the ways in which imagination is influenced by one's perceptions. If both belief and imagination are

susceptible to perceptual evidence, then there is reason to push back on Sinhababu's insistence that this criteria is sufficient for a stark contrast between the two attitudes.

The first thing to note here is that imagination has the property of being affected by perceptual factors. One can easily think of ways in which this is the case. For instance, I can imagine Harry Potter flying around the Quidditch field in a desperate attempt to catch the snitch, and I can do so without seeing such a thing take place. It is, however, a common occurrence for my imagining to be affected by reading a passage of similar events from the book itself. Furthermore, my imagining will be greatly affected by watching a scene from the movie. Typically in these instances my imagining will become intensified, and in some instances my imagining will be altered in content. Most of us have the experience of imagining an event from the book one way, but once we have seen the movie are unable to imagine it any other way than how it was presented on screen.

As we have seen, these observations are supported by empirical evidence demonstrating the imagination's susceptibility to external perceptual factors. The Segal (1972) is especially relevant. Individuals in the experiment were asked to imagine the New York City skyline, but were not told that experimenters would place a red tomato in the subject's visual field. The experiment resulted in the subjects imagining New York City at sunset, presumably due to the tomato's influence on their perceptual experience.

Not only do we have evidence that the imagination is partly constrained by perceptual experience, it is appropriate to note the relevance of the first chapter, where we found evidence that belief is not always governed by a regard for appropriate perceptual evidence. An individual with the positive illusion that he is above average in attractiveness will not necessarily change his position even in the face of evidence to the contrary. Cases of self-deception are relevant as

well. Most of us can think of instances in which a self-deceived individual maintains the deception even in the face damming evidence. Consider a mother who is fully convinced that her son does not drink. Her belief in her son's complete sobriety may be immune to certain perceptual evidence that points to the opposite conclusion, like seeing her son stumble into the house late on a weekend, or finding a half-drunken bottle of liquor in his closet.

So although I am willing to admit that belief is more constrained by perceptual factors than imagination, I am not willing to concede that this obstructs the hypothesis that the two attitudes overlap. Belief is affected by perceptual factors in some instances, and in some instances it is immune. Imagination is immune to perceptual factors in some instances, and in others it is constrained.

Sinhababu's last means of distinguishing the attitudes is that belief is connected to sincere assertion, whereas imagination is not. He writes,

> …—that we sincerely assert what we believe, under favorable conditions for sincere assertion—also marks a difference between belief and imagination…Belief, not imagination, determines what I assert. Perhaps there's some type of speech-act—supposition or storytelling—in which I state my imaginings and not my beliefs. But that there is such a distinction between speech-acts demonstrates the difference between believing and imagining (pp. 161-162).

Sinhababu admits of cases where an individual may assert an imagining, i.e. supposition and storytelling, but attempts to maintain his distinction based on the fact that we can distinguish speech-acts based on imagination from sincere assertions based on belief.

I would hope that our previous discussion regarding imaginative immersion would call this sort of distinction into question. Instances of imaginative immersion make the line between storytelling and sincere assertion somewhat nebulous. The immersed individual has lost contact with reality in some respect, and as such is entirely capable of sincerely asserting what was

originally part of a pretense. Jim Carey, for instance, was said to have taken on certain characteristics of Andy Kaufman during, and after, the filming of *Man on the Moon*. Now it is unclear as to what Sinhababu has in mind when he says "under favorable conditions for sincere assertion" but he may well insist that a film set does not meet such conditions. Admittedly, Carey may not claim that he is Andy Kaufman in a high stakes situation, but he may well sincerely assert that he thinks it is funny to lip sync over a Mighty Mouse recording, even if he did not find it funny before his immersion. The immersed individual has partially lost contact with reality, so whether or not an assertion in such conditions is storytelling or sincere is much less clear than Sinhababu lets on.

One need not rely only on instances of serious imaginative immersion to think of cases where imaginings result in sincere assertion. At the beginning of this chapter we noted cases of cognitive and affective transmission, where simply imagining something may cause an individual to act or perceive differently. Someone imagining she is in a warzone may come to perceive certain non-threatening objects as a threat and may begin to act in a way that is consistent with the belief that she is in a warzone. Part of this, of course, may involve sincerely asserting that she is threatened or scared for her safety. We can also think of less severe instances where imaginings result in sincere assertions. Responses to fiction, although largely considered to be a result of the imagination, can certainly lead to sincere assertion. If I am in a theater imagining that Michael Meyers is attacking innocent teenagers, I may sincerely assert that I am

terrified.[48] After finding out that Snape kills Dumbledore I may sincerely assert that I resent or hate Snape.

All of the above examples are borne out of imaginings, but we would still consider them to be sincere. So, although I admit that we sincerely assert what we believe more often than not, cases of imaginative immersion and contagion show that this is not without exception. Both belief and imagination are capable of grounding sincere assertion, so we are still in need of a theory that accounts for this.

Further Ways to Distinguish Between Belief and Imagination

There are, of course, other ways one might try to distinguish belief from imagination. Each of these methods, however, would come with a great deal of philosophical baggage, and for that reason I am unwilling to discuss these issues at length. Nevertheless, I would like to point to these possible objections and offer brief comments in defense. My goal is to simply demonstrate that other debates in the imagination literature, and the philosophy of mind more generally, are extremely relevant to our discussion which, in turn, may initiate further inquiry into these topics. As I see it, an opponent of my view has two claims remaining at her disposal—(i) belief is not voluntary, whereas imagination is voluntary, and (ii) belief can be non-occurrent, whereas imagination is always occurrent.

There are multiple unsettled debates regarding (i), both in terms of the involuntariness of belief and the freedom of the imagination. Bernard Williams' argument is perhaps the most

---

[48] I recognize that thinkers such as Kendall Walton and his sympathizers may reject that I have the true emotion of fear. Nevertheless I would hope that they would still accept that my assertion of fear is a sincere one.

notable with regard to the former.[49] However, it is worth noting that many philosophers have

brought forth considerable objections to his thesis. Barbara Winters (1979) maintains that there is

"no convincing reason to accept the impossibility of believing at will." Rik Peels (2014) also

defends the notion that one can believe at will.[50]

It is also worth noting that a main reason why Williams thinks believing at will is

conceptually impossible is due to his insistence that believing necessarily involves the aim of

truth, a claim we placed into doubt in an earlier chapter. Williams' argument relies on a reductio,

asking the reader to first assume that she can acquire a belief at will. However, if you can acquire

a belief at will, that would mean you could have a belief irrespective of whether or not it

accurately represents reality—but this conflicts with Williams' stance about beliefs and their

telos of truth. Funkhouser (2003) addresses this issue of Williams' argument at length. He writes,

> …it sometimes happens that an agent believes some proposition while sincerely
> conceding that the evidence points against the belief…We often hold beliefs
> about our friends or family members that are not justified given the evidence we
> have about them. We *want* to believe the best of them. We can admit that this
> evidence would be sufficient to form an unpleasant belief about someone *else*, but
> because of our special relationships to them we require much higher standards for
> our friends and family…Williams asserted that part of what it is to believe
> something is to think that there are reasons for that belief content to be true. But
> in these cases, the agents concede that there are better reasons for the truth of the
> *negation* of their belief-content (p.185).

Funkhouser points to a number of other similar instances in which individuals believe contrary to

the norm of truth, and argues that it is not a far jump to think of instances in which individuals

will to believe while consciously aware that the belief was willed. If belief is voluntary in the

---

[49] Kieran Setiya (2008) puts forth a substantive defense of this thesis.
[50] Thomas Cook (1987) holds that one can consciously manipulate one's beliefs even without the use of self-deception. Pamela Hieronymi (2006) sees herself as an opponent of the "believing at will" stance. She does, however, still admit that "you can bring yourself to believe for practical reasons…" This, I take it, is enough to do away with the distinction we are concerned with.

loosest sense, then one would be unable to use this as a means to draw a stark contrast between

belief and imagination.[51]

Very little attention has been paid to (ii), with the noteworthy exception of Kendall

Walton, 1990, who argues persuasively that imaginings need not be occurrent.[52]

> Suppose that Fred launches his daydream by (occurrently) imagining himself
> winning a huge lottery prize and using it to finance a successful political
> campaign, and that he then goes on to imagine winning the affection and
> admiration of millions while in office, eventually retiring to a villa in southern
> France. All of these thoughts course through Fred's consciousness as he
> fantasizes. But it may well be true also that he imagines winning the election
> without resorting to stuffing ballot boxes or bribing powerful opponents, that he
> imagines his place of retirement to be in a warm climate on the Mediterranean,
> that he imagines being in good health when he retires—even if these thoughts do
> not explicitly occur to him…He thinks of himself, implicitly, as being in good
> health when he retires; he imagines that he is, but not occurrently (pp. 16-17).

Although Walton's observations on the topic are brief, they certainly place doubt on the idea that

all imaginings are occurent. As he puts it "It is a mistake to think of a daydream as simply a

disconnected series of individual mental events…the various imaginings are woven together into

a continuous cloth, although only some of the strands are visible on the surface at any particular

spot (p. 17)." Carving out the distinction between belief and imagination in terms of occurrent

and non-occurrent mental events is of course a possibility, but, as Walton demonstrates, the

burden would be on the carver to show that imaginings must always have the characteristic of

---

[51] I should also note that although the imagination is largely seen as a controllable faculty, the
phenomenon of imaginative resistance, i.e. the inability or unwillingness to imagine that we have
certain moral convictions, calls into question the idea that we can imagine whatever we please.
See Gendler (2000) and Moran (1994) for discussions. Gendler is unconvinced that our
imagination is limited in this respect and boils the resistance down to an unwillingness to
imagine certain moral judgments rather than an inability.
[52] I thank Eric Funkhouser both for bringing up this possible objection, as well as pointing me to
this section in the Walton.

occurrent. As it stands now, I accept that both beliefs and imaginings can be both occurrent and non-occurrent.

Having addressed what I take to be the most obvious ways of driving a wedge between belief and imagination, I want to now turn to an account that accommodates the apparent overlap between the attitudes. I will first address a view of belief recently brought forth by Eric Schwitzgebel (2002, 2010), before moving on to my positive view of imagination. It is my hope that such a view of the imagination will satisfy the terms that we set out in the beginning of this chapter—i.e. it must account for cases where (1) imaginings cause affective responses, (2) imaginings affect beliefs, (3) imaginings guide or produce action, as well as account for our ability to keep imaginings and beliefs distinct.

Dispositionalism and Partial Beliefs

Consider the case of Michelle the moviegoer. As Michelle walks out of the theater having just seen a horror film, she verbally expresses a number of beliefs. For instance, she says that she was not scared during the film, and that she never thought she was in danger. Michelle's behavior, albeit affective and undeliberate, tells a story which is different from what she claims. During the film Michelle clenched her armrest, covered her eyes during especially scary scenes, and even jumped out of her chair and screamed at certain points.

This case presents us with particularly troubling problems. What beliefs are we to attribute to Michelle? Certain theorists are inclined to give more weight to whatever the subject verbally endorses, whereas others opt to give more weight to how the subject behaves.[53] If we

---

[53] Schwitzgebel coins the former the "pro-judgement view," of which both Gendler (2008a and 2008b) and Aaron Zimmerman (2007) are champions, and the latter the "anti-judgment view," explicitly endorsed by David Hunter (2009).

opt for the former, we are forced to accept that even though Michelle exhibits fear-like symptoms, she truly believes what she professes—her behavior, whether deliberate or simply reactive, plays, at the very least, an inferior role in belief-attribution. If we opt for the latter, we must, of course, ultimately place less weight on her testimony when attributing beliefs to her.

Schwitzgebel endorses a phenomenal, dispositional account of belief which seeks to give weight to a range of characteristics and, in so doing, admits that in cases like Michelle the moviegoer it is either quite difficult, or, in some cases, impossible to ascribe a belief to the subject in question. On this view, belief is linked with a number of dispositions—behavioral, phenomenal, and cognitive. In Michelle's case, she is disposed to stay seated, a behavioral disposition weighing in favor of the belief that she is safe where she is. She is also disposed to feel fear, a phenomenal disposition weighing in favor of the belief that she is in some kind of danger. On such an account, what it is to believe that p is to have a bundle of the appropriate dispositions associated with the belief that p. The dispositions are not merely justification for inferring a belief, rather, the dispositions are constitutive of a belief.

Schwitzgebel argues persuasively that there are great theoretical benefits to be gained from viewing belief in such terms and, indeed, although we forfeit the ability to make unequivocal belief-attributions in certain 'problem' cases, we appear to gain much more precision than we would had we made rigid decisions in cases like Michelle's. We may confidently assert that Michelle, for the most part, believed she was safe—after all, she stayed seated throughout the movie. Yet, it doesn't seem entirely misguided to say that because she had the disposition to scream at the top of her lungs when the monster was coming towards the screen, she at least partially believed she was in danger. I contend that not only does the

dispositionalist account do well to accommodate the flexible nature of belief, but it also makes clear the nebulous distinction between belief and imagination.

Dispositionalism and Imagination

Before putting forth my positive proposal, I want to take inventory of the work we have done thus far. We have evidence that the aim, or telos, of truth is not constitutive of belief. We also know of many theories which see imagination as capable of guiding, and perhaps producing action, in ways similar to that of belief. In this chapter, we have noted other ways of possibly driving a wedge between belief and imagination, and have found that they either come with a lot of philosophical baggage, or are unlikely to be successful. Furthermore, cases of contagion and imaginative immersion provide good reason to think that imagination and belief overlap in some respects. Given all of these considerations, the discussion is ripe for an account of imagination that accommodates this overlap.

We have granted that a dispositional account of belief does well to explain cases of in-between beliefs. On this account belief is associated with cognitive, behavioral and phenomenal dispositions. We have also observed that imaginings are associated with cognitive happenings, behavior, and of course phenomenal experiences. In each of these instances we see that, although imagination is connected to these events, that it often does not fulfill all of our criteria for a belief. For instance, when immersed in his Andy Kaufman character, Jim Carey may feel like Andy Kaufman, may behave like Andy Kaufman, and may even think like Andy Kaufman. However, if Carey's life depended on answering the question "Who are you?" we would expect him to reply with the answer "Jim Carey." Given these and the aforementioned considerations, I submit that both belief and imagination be seen as regarding as true attitudes, where imaginings

are seen as a subset of beliefs.[54] Just as to have a belief is to be disposed to think, act, and feel as

if p is true, to imagine is to be disposed to think, act, and feel as if p is true.[55] An imaginer that p

will have some but not all of the dispositions of a believer that p. I hope to show that when this

view is applied to the aforementioned problem cases of immersion and contagion, it holds up

better than inflexible DCA accounts.

Let us return to the examples initially presented—Stacy and the haunted house, Madeline

the birdwatcher, and the family of sailors. Stacy's affective response to the zombie in the

haunted house was explained, by the DCA theorist, as a matter of the PWB being connected to

the mental mechanism responsible for outputting affect. This is a plausible account, especially

for those attempting to explain the phenomenon while also holding to an intellectualist view of

belief—i.e. belief as necessarily aiming at the truth. Both Gendler and Velleman seem to be

largely sympathetic to this line of thought—Gendler so much so that she posited the entirely

novel mental state of alief to account for non-deliberate actions brought on by perceptual input.[56]

But a dispositional account of belief is far more robust. That is, to believe is just to be disposed

to fulfill behavioral, phenomenal or cognitive stereotypes. On such a view, belief need not be

seen as necessarily aiming at the truth, but simply regarding as true simpliciter.[57] To regard as

---

[54] David Hume may have a similar view as well, as he described imagination as simply a less
vivacious version of belief. See T 1.1.3.
[55] Although the inspiration for a dispositional account of imagination is largely due to the
writings of Schwitzgebel and my discussions with Eric Funkhouser, I should note that Kendall
Walton is the first to associate imaginings with dispositions. See Walton (1990, pp. 16-18).
[56] For a full discussion, see Gendler (2008a, 2008b) and Velleman (2000).
[57] I should note that Schwitzgebel does not explicitly describe belief in these terms. He writes,
"to believe that p…is nothing more than to match to an appropriate degree and in appropriate
respects the dispositional stereotype for believing that p (2002, p. 253)." Nevertheless, I see no
conflict between his account and an account explicitly claiming that to believe is to have certain
dispositions to regard as true. Schellenberg also works with the concept of belief as regarding as
true (p. 499). Explicit defenses of such a view can be found in Eric Funkhouser (2009) and Jack
Marley-Payne (2015).

true is to have certain behavioral, phenomenal and cognitive dispositions. So in Stacy's case, it should be clear that she does have at least one disposition to regard the proposition "I am in danger" as true—namely, the behavior of screaming and running, and, perhaps, the phenomenal disposition to feel something like fear.[58] Her reaction can be explained by appeal to the PWB, but can also be explained by appealing to certain dispositions which the dispositionalist sees as partially constitutive of belief.

As we noted before, Madeline the birdwatcher presents an intriguing problem for the DCA theorist. On the one hand, a proponent of a DCA account can explain why Madeline is acting as if there are birds in her backyard, when in fact she believes that there are no birds at all in her yard. Yet, on the other hand, a rigid DCA theorist has trouble explaining cases of cognitive contagion. That is, if she pretends to see birds for long enough, Madeline's perceptual mechanisms may, for instance, become more sensitive to identifying birds in real life. Furthermore, in more severe cases, Madeline may have lower evidential standards for what counts as a bird and begin to mistake non-bird objects for birds. Gendler notes that research on the Availability Heuristic provides concrete psychological evidence of cognitive contagion.[59] People tend to make judgments about how frequent or likely an object or event may occur based on the availability of the object or event to one's perception, memory, or imagination.[60]

---

[58] I add the qualification so as to not take a firm stance on the debate between quasi and genuine emotions with regard to engagement with fiction. My account would still apply even if we granted that Stacy's emotion was only quasi-fear. Even Walton (1990) must grant that it *feels* much like fear to Stacy, and thus the description of Stacy as having the phenomenal disposition to feel fear seems correct regardless.

[59] Gendler (2003), p. 135.

[60] See Tversky and Kahneman (1973). For more empirical evidence of cognitive transmission see Ceci & Bruck (1993) and Loftus (1979).

It should be noted that I am not attributing to Madeline the full-fledged belief that there are rare birds in her backyard. Even if Madeline starts to make these mistakes, we can be reasonably certain that she believes there are no rare birds in her yard. I am, however, calling attention to widespread instances in which our imaginings seem to blend into our beliefs, and that the DCA account is ill-equipped to deal with such instances. If we were to consider Madeline's imaginings as partial, non-robust regarding as true attitudes, our problem could be easily done away with. In cases of imaginative contagion, Madeline may have the cognitive disposition to infer that a certain object is a bird. She also may have the behavioral disposition to point to the object and assert that some object is a bird. Again, such an account is not committed to claiming that Madeline fully believes there are birds in her yard, but merely that Madeline has certain dispositions indicating that she partially believes there are rare birds in her backyard.

So, how is this picture applied to a case like Stacy's? Below is a table which illustrates the approach. Placing the dispositions next to each other is meant to highlight that the dispositions associated with imaginings are a proper subset of dispositions characteristic of a believer, and the overlap between the two.

Table 1

Table of Dispositions for Regarding as True Attitudes

Non-robust regarding as true (imagining)	Robust regarding as true (belief)
Behavioral	**Behavioral**
Disposed to walk quickly through the house	Disposed to sprint through the house
Disposed to scream	Disposed to scream for help
Disposed to walk through the whole house	Disposed to take the nearest emergency exit
Cognitive	**Cognitive**
Disposed to infer that there will be a zombie in the next room	Disposed to infer there will be a zombie apocalypse happening outside the house
Disposed to develop the habit of checking for monsters inside the house	Disposed to develop the habit of checking for monsters even once she has left the house

Table of Dispositions for Regarding as True Attitudes (Cont.)

Non-Robust regarding as true (imagining)   Robust regarding as true (belief)

Phenomenal	Phenomenal
Disposed to experience feeling of fun	Disposed to experience feeling of impending doom
Disposed to experience something akin to fear	Disposed to be paralyzed with fear
Disposed to think to oneself "this is really fun"	Disposed to think to oneself "these are my last moments

It should be made clear that Stacy, on the current account, is seen as having a regarding as true attitude no matter what side on which she falls. I have been using 'non-robust regarding as true' and 'imagining' interchangeably because I have no objection to describing someone on the left side as in a state of 'imagining.' If one accepts the overall account, whether she wants to describe someone on the non-robust side as in a state of imagining or in a non-robust state of regarding as true ultimately seems to boil down to a verbal preference.

Let us now return to the example of the family of sailors in order to fully flesh out this picture and understand how it can be applied to an extreme case of imaginative immersion. We said earlier that certain dispositions will weigh in favor of belief and others in favor of imagining (or less robust belief). Assume that the subject in question (we will call her Ashley) is one of the children with a mid-level ranking on the ship, and she has all of the typical day-to-day duties assigned to someone of that rank. Now, we are considering how strongly Ashley regards as true the proposition "I am a sailor in the US Navy."

What sort of cognitive dispositions will point to Ashley believing she is a sailor? Schwitzgebel specifically notes that cognitive dispositions include dispositions to acquire certain desires and dispositions to make certain inferences. Based on the testimony of those involved in the pretense, there are a number of plausible dispositions pointing to a robust regarding as true attitude. Ashley may become more disciplined than the average elementary school child. She

may acquire an aberrant desire to succumb to the demands of an authority figure. Ashley may also have inferential dispositions pointing to a robust regarding as true attitude. When confronted with a moral dilemma, she may be disposed to reason that forceful action is the best course to follow. Cases of cognitive transmission also factor into her cognitive dispositions. If she is ordered to stand guard and trained to be highly sensitive to possible attacks, Ashley may be disposed to perceive unthreatening objects as potential threats. She does, of course, have dispositions which would point to a non-robust regarding as true attitude. If faced with the decision to go to school or to stand guard, she will likely have the disposition to infer that school is the priority rather than stay to guard the ship.

Ashley will also have certain phenomenal dispositions pointing to the robust side of the table. If she and her family engaged in enough pretend training, she may be disposed to feel calm in pressure situations. Given the first-person testimony of the eldest daughter, it is plausible that she could be disposed to feel upset when one of her fellow shipmates fails to perform an assigned task. Again, she will also lack phenomenal dispositions which would be seen as constitutive of a robust regarding as true attitude. She may lack the disposition to feel comfort if her father treats her too much like an actual sailor.

Lastly, Ashley will have behavioral dispositions that will indicate the robustness of her attitude. In certain situations, she will be disposed to verbally assert that she is a sailor in the Navy. She will have a disposition to wake up in the early hours of the morning in order to stand guard. She may be disposed to act in a forceful manner in moments of conflict. She may also lack the disposition in certain situations to verbally assert that she is in the Navy. She may lack the disposition to act in a forceful and courageous manner in moments of conflict. She may lack the disposition to wake up early on a day when a sailor is expected to do so.

Given these sets of possible dispositions, in certain instances it will be more appropriate to attribute to her a robust regarding as true attitude. In others, it will be more appropriate to place her on the less-robust side of the table. The dispositionalist with regards to belief not only maintains that it is, in certain cases, unclear what the subject believes, but that there may be no fact of the matter about what the subject believes. There are, I take it, similar consequences when we apply the dispositionalist view to the imagination. In extreme cases of imaginative immersion, we can know all there is to know about the subject—behavioral, phenomenal and cognitive dispositions—and still have no clear answer as to whether or not the subject is imagining that p or believing that p. Ashley seems to present such a case. Her habits and decision-making processes point to a partial belief that she is, in some sense, a sailor; however, most would be hesitant to claim that she believes she is a sailor in the most robust sense of belief. If we commit to the dispositionalist view, we concede that we cannot be absolutely certain whether Ashley is, in general, a believer or an imaginer.[61] Yet, in that concession, we obtain the benefit of accuracy. We may say that Ashley partially regards it as true that she is a sailor, and amend our account of exactly how much she regards it as true as we gain more knowledge of her dispositions in particular situations.

Objections Considered

Considering that this view finds itself largely sympathetic to Schellenberg's project of connecting the two attitudes, I should address what I take to be two important objections, raised

---

[61] I take it that an implication of the dispositionalist view is that we can be more certain about where Ashley falls on the scale in specific instances than in others. In some circumstances, we can be sure that she is on the imagining side of the attitude, and in others we can be sure she is closer to the belief side.

by Liao and Doggett, to Schellenberg's thesis.[62] Liao and Doggett (henceforth L + D) object that the project of connected belief and imagination is insufficient for explaining, in cases of imaginative immersion, how one could start by pretending or 'imagining that p,' and end up with 'something-like-believing that p.'[63] In their view, although a continuum does explain how one could have a change in attitude, it does nothing to explain how a subject could have a change in content. That is to say, we are required to explain how Ashley, for instance, starts with the proposition "I am pretending to be a sailor" to the proposition "I am a sailor."

An answer to this worry is found in the dispositionalist view. When someone is asked to pretend or imagine that p, they are merely being asked to regard p as true in a non-robust sense, so the content remains the same throughout. We start with "I slightly regard it as true that I am a sailor" and as the pretender becomes more immersed we get closer to "I regard it as true that I am a sailor." Seeing as Schellenberg's picture places belief and imagination under the same category, it is not clear why a similar line of thought is not available to her. Schellenberg does note that on some level belief and imagination are functionally distinct mental states, but the mere fact that she describes them as being in the same "box" leaves her the option of asserting that belief states and imagination states may have the same propositional content.

L + D also deny that a continuum is necessary in order to explain why it is difficult to categorize an imaginatively immersed person's mental states. Their objection amounts to

---

[62] Liao and Doggett (2014), pp. 266-271. L + D's objections are directed specifically at Schellenberg's thesis. I, however, feel it is appropriate to address these objections, as Schellenberg's thesis is the most substantive defense of the view that belief and imagination are, in some sense, connected.

[63] Ibid., p. 266.

asserting that even the most immersed pretender does indeed have a grasp of reality.[64] Although they take it as a plausible premise that the immersed pretender could be unsure as to whether they are in a state of imagining or of belief, they hold that the pretender ultimately does know what is real. Although the method actor may claim to believe that he is the character and actually in the situation outlined in the movie script, if pressed, he would ultimately assert that he is merely playing a role. The very fact that the actor follows the camera during the scene tells towards this point.

This, I take it, is one way of objecting that a thesis allowing overlap cannot account for cognitive quarantining. The method actor is ultimately able to distinguish his identity from the role he plays. Children pretending that Playdough is a pastry are ultimately able to understand that the Playdough is not something that should be eaten, it is merely being imagined that it is a pastry. However, the dispositionalist with respect to the imagination can account for the fact that pretenders can and do distinguish pretense from reality. Remember, the dispositionalist is not committed to claiming that the method actor or the child playing make-believe bakery fully believe what they once imagined. Rather, the dispositionalist is merely claiming that the method actor partially believes that he has the identity of the character assigned to him. In certain instances, his dispositions place him on the robust side of the regarding as true attitude—e.g. he asserts that he does not have the identity his 'former self', and he makes decisions and has desires much like that of the character he is playing. In other instances, he lacks dispositions

---

[64] L + D cite a case from Marjorie Taylor (1999, p. 115) in which children who are engaged in a game of make-believe are surprised when another pretender bites into a piece of Playdough that they have imagined to be a cookie. This, they argue, is good evidence that the children are not really in an intermediate state between belief and imagination—the children's surprise indicates that they knew the whole time that the Playdough was not an actual cookie.

which weigh in favor of the robust side of the regarding as true attitude—e.g. if a gun is put to his head, he is not disposed to assert that he is the character he is playing in the film.

The DCA account is meant to explain how individuals can quarantine what they imagine from what they believe. An individual can imagine she is in a haunted house and still have that imagining not affect what she actually takes to be true about the world. In a sense, she imagines that she is in a haunted house, but she believes that houses aren't actually haunted. The idea is that these propositions must occupy different spaces in one's mental architecture so as to account for the fact that individuals can hold these propositions in their mind simultaneously without falling into contradiction. As stated above, the dispositionalist view, in a sense, refuses to let this problem get off the ground. It is not that Stacy holds both p and not-p to be true, it is that in some regards Stacy is disposed to regard not-p as true in a robust sense and in others she is disposed to regard p as true in a less robust sense.

So, the dispositionalist view does not fall prey to L + D's second objection because a proponent of the view need not claim that an immersed pretender has lost complete contact with reality. In fact, the view is perfectly suited to explain the phenomenon of cognitive quarantining while also explaining why it is difficult to categorize the mental state of an immersed imaginer. Although the immersed pretender has belief-like dispositions, as long as they are not entirely deluded, they will always lack a certain amount of the appropriate dispositions, which will indicate that they non-robustly regard the given proposition as true.

Concluding Remarks

There is, of course, much more to say about the implications of applying a dispositionalist framework to the imagination. [65] For now, my hope is that what has preceded has provided a convincing case for the need of a theory accounting for the overlap between belief and imagination, as well as provided a theoretical option to accommodate that overlap. Cases of contagion and imaginative immersion demonstrate that the line between imagination and belief is not as stark as common functionalist theories would have it. We can make sense of the overlap between the two mental states by positing a theory which sees both belief and imagination as dispositional, and describing the latter as simply a less-robust regarding as true attitude towards a proposition.

Bibliography

Bjorklund, D., & Green, B. (1992). The Adaptive Nature of Cognitive Immaturity. *American Psychologist*, 46-54.

Ceci, S., & Bruck, M. (1993). Suggestibility of the child witness: A historical review and synthesis. *Psychological Bulletin*, 403-439.

Cook, J. T. (1987). Deciding to Believe Without Self-Deception. *Journal of Philosophy*, 441-446.

Curry, G., & Ravenscroft, I. (2002). *Recreative Minds.* New York, NY: Oxford University Pres.

Dawkins, R. (1976/2006). *The Selfish Gene.* New York, NY: Oxford University Press.

Doggett, T., & Egan, A. (2007). Wanting Things You Don't Want: A Case For an Imaginative Analogue of Desire. *Philosopher's Imprint*.

Doggett, T., & Egan, A. (2012). How We Feel About Terrible, Non-existent Mafiosi. *Philosophy and Phenomenologial Research*, 277-306.

---

[65] Such a stance would certainly have interesting consequences with regard to the debate about the distinction between supposition and active imagination. I will say briefly that such a view indicates that supposition would most-likely be the least robust form of a regarding as true attitude. Perhaps we could say that active imagination entails certain phenomenal dispositions that supposition does not.

Fodor, J. (1983). *The Modurlarity of Mind.* Cambridge, MA: MIT Press.

Funkhouser, E. (2003). Willing Belief and the Norm of Truth. *Philosophical Studies*, 179-195.

Funkhouser, E. (2009). Self-Deception and the Limits of Folk Psychology. *Social Theory and Practice*, 1-13.

Funkhouser, E. (n.d.). Beliefs as Signals. *Forthcoming*.

Funkhouser, E., & Spaulding, S. (2009). Imagination and Other Scripts. *Philosophical Studies*, 291-314.

Gendler, T. (2000). The Puzzle of Imaginative Resistence. *Journal of Philosophy*, 55-81.

Gendler, T. (2003). On the Relation Between Pretense and Belief. In M. Kieran, & D. Lopes, *Imagination, Philosophy, and the Arts* (pp. 125-141). Routledge.

Gendler, T. (2007). Self-Deception as Pretense. *Philosophical Perspectives*, 231-258.

Gendler, T. (2008). Alief and Belief. *Journal of Philosophy*, 634-663.

Gendler, T. (2008). Alief in Action (And Reaction). *Mind and Language*, 552-585.

Helgesson, V., & Taylor, S. (1993). Social comparisons and adjustment among cardiac patients. *Applied Social Psychology*, 1171-1195.

Hieronymi, P. (2006). Controlling Attitudes. *Pacific Philosophical Quarterly*, 45-74.

Hume, D. (2009). *A Treatise of Human Nature.* Oxford : Oxford University Press.

Hunter, D. (2009). *Belief, Alienation, and Intention.* Unpublished Manuscript.

Krebs, J., & Dawkins, R. (1984). Animal Signals: Mindreading and Manipulation. In J. Krebs, & N. Davies, *Behavioral Ecology: An Evolutionary Approach* (pp. 380-403). Oxford: Blackwell Scientific Publications.

Langland-Hassan, P. (2012). Pretense, Imagination, and Belief: A Single Attitude Theory. *Philosophical Studies*, 155-179.

Leeuwen, N. V. (2007). The Spandrels of Self-Deception: Prospects for a Biological Theory of a Mental Phenomenon. *Philosophical Psychology*, 329-348.

Leeuwen, N. V. (2011). Imagination is Where the Action Is. *Journal of Philosophy*, 55-77.

Leslie, A. (1987). Pretense and Representation: The Origins of the "Theory of Mind". *Psychological Review*, 412-426.

Liao, S., & Doggett, T. (259-275). The Imagination Box. *Journal of Philosophy*, 2014.

Marley-Payne, J. (2015, March). *Against Intellectualist Theories of Belief.* Retrieved from Minds Online: http://mindsonline.philosophyofbrains.com/2015/session3/against-intellectualist-theories-of-belief/#comments

Mazzoni, G., & Memon, A. (2003). Imagination Can Create False Autobiographical Memories. *Psychological Science*, 186-189.

Mckay, R., & Dennett, D. (2009). The Evolution of Misbelief. *Behavioral and Brain Sciences*, 493-561.

Moran, R. (1994). The Expression of Feeling in Imagination. *The Philosophical Review*, 75-106.

Nanay, B. (2016). The Role of Imagination in Decision-Making. *Mind and Language*, 126-142.

Nichols, S. (2004). Imagining and Believing: The Promise of a Single Code. *Journal of Aesthetics and Art Criticism*, 129-139.

Nichols, S. (2006). Just the Imagination: Why Imagining Doesn't Behave Like Believing. *Mind and Language*, 459-474.

Nichols, S., & Stich, S. (2003). *Mindreading: An Integrated Account of Pretense, Self-Awareness, and Understanding Other Minds.* New York, NY: Oxford University Press.

NPR. (2015, September). *The Land of Make-Believe*. Retrieved from NPR: This American Life: http://www.thisamericanlife.org/radio-archives/episode/566/the-land-of-make-believe

O'Brien, L. (2005). Imagination and the motivational view of belief. *Analysis*, 55-62.

Peels, R. (2015). Believing at Will is Possible. *Australasian Journal of Philosophy*, 524-541.

Phillips, D., & Zimmerman, M. (1990). The devolopmental course of percieved competence and incompetence among competent children. In R. Sternberg, & J. Kolligan, *Competence Considered* (pp. 41-67). New Haven, CT: Yale University Press.

Rajagopal, P., & Montgomery, N. (2011). I Imagine, I Experience, I Like: The False Experience Effect. *Journal of Consumer Research*, 578-594.

Reed, G. (1989). *Stress, coping, and psychological adaptation in a sample of gay and bisexual men with AIDS.* Unpublished dissertation, UCLA.

Schellenberg, S. (2013). Belief and Desire in Imagination and Immersion. *Journal of Philosophy*, 479-517.

Schwitzgebel, E. (2002). A Phenomenal, Dispositional Account of Belief. *Nous*, 249-275.

Schwitzgebel, E. (2010). Acting Contrary to Our Professed Beliefs or The Gulf Between Occurent Judgment and Dispositional Belief. *Pacific Philosophical Quarterly*, 531-553.

Setiya, K. (2008). Believing At Will. *Midwest Studies in Philosophy*, 36-52.

Sinhababu, N. (2013). Distinguishing Belief and Imagination. *Pacific Philosophical Quarterly*, 152-165.

Taylor, M. (1999). *Imaginary Companions and the Children Who Create Them.* New York, NY: Oxford University Press.

Taylor, S., & Brown, J. (1994). Positive Illusions and Well-Being Revisited: Separating Fact from Fiction. *Psychologial Bulletin*, 21-27.

Thompson, S., & Spacapan, S. (1991). Perceptions of control in vulnerable populations. *Journal of Social Issues*, 1-21.

Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 207-232.

Velleman, D. (2000). *The Possibility of Practical Reason.* New York, NY: Oxford University Press.

Walton, K. (1990). *Mimesis as Make-Believe.* Cambridge, MA: Harvard University Press.

Williams, B. (1973). Deciding to Believe. In *Problems of the Self* (pp. 136-151). Cambridge: Cambridge University Press.

Winters, B. (1979). Believing At Will. *Journal of Philosophy*, 243-256.

Zimmerman, A. (2007). The Nature of Belief. *Journal of Consciousness Studies*, 61-82.