

WHY MARY LEFT HER ROOM

MICHAELA MCSWEENEY M3@BU.EDU

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ABSTRACT: I argue for an account of grasping, or understanding that, on which we grasp via a higher-order mental act of Husserlian fulfillment. Fulfillment is the act of matching up the objects of our phenomenally presentational experiences with those of our phenomenally presentational thought. Grasping-by-fulfilling is importantly different from standard epistemic aims, in part because it is phenomenal rather than inferential. (I endorse Bourget's 2017 arguments to that effect.) I show that grasping-by-fulfilling cannot be a species of propositional knowledge or belief, and that it is not essentially connected to justification. I motivate a revisionary epistemology on which achieving propositional knowledge and coming to grasp are dual epistemic aims. My account makes sense of a common occurrence—that we are often unmoved to act on our beliefs until we come to phenomenally experience them in some way. It also explains puzzling features of human inquiry.

INTRODUCTION¹

George Floyd, a black man, was murdered by Derek Chauvin, a white police officer, in May of 2020. Chauvin held his knee on Floyd's neck for 9 minutes and 29 seconds, continuing to do so after Floyd lost consciousness and even after paramedics arrived at the scene.² Floyd's brutal murder accelerated and grew a protest movement fighting against police violence against black people in the United States, and fostered and revitalized global movements against police violence and racism. The action spawned was led and organized by black Americans. But Black Lives Matter protests were so widespread that they sprang up even in small, rural, vast-majority-white towns, such as Millerton (New York), and Rochester (Vermont), and in cities that are hotbeds of white nationalism, such as Coeur d'Alene (Idaho).³

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² The New York Times, March 30, 2021.

³ The Wall Street Journal, June 22, 2020 and personal knowledge.

Omar Wasow claims that the central reason that Floyd’s murder played such a powerful role in growing the movement (given that similar atrocities regularly occur in the US) is that its video recording by Darnella Frasier:

...was very visceral, very intimate, very powerful, allowed people to *see* the profound indifference to human suffering that officer Chauvin indicated, as we could watch the life drain from George Floyd’s face... that footage was really exceedingly important (In Harris-Perry 2021).

Like Wasow, I believe that at least for many Americans, it was the widely available video of Floyd’s murder that sparked anger, and then action. (This doesn’t mean that I am endorsing the sharing or the viewing of the video—that is a topic for a different paper. It also doesn’t mean I am not cynical about white Americans’ temporary responses.) In particular, watching the video seemed to create an emotional, and motivational, shift even in some of those who already had all the relevant propositional beliefs. They already knew what happened; perhaps they even knew (by description) how much the video showed Chauvin’s disregard for Floyd’s humanity (or worse).⁴

So what happened to such people when they watched the video of Floyd’s murder? I think that they became much closer to understanding (or, as the kind of understanding I have in mind is often called in philosophy, “grasping”) these propositions that they already believed. And this happened, I will claim, in virtue of them coming to *identify* the objects of their visceral phenomenal experience (in this case, a perceptual one) with the objects of some propositional beliefs that they previously genuinely held, but did not grasp.⁵

⁴ On my account of grasping, watching the video (with the relevant background beliefs) could bring such motivation to both a white American with little personal knowledge or experience of police violence against black Americans, and a black American with previous personal knowledge and experience. That being said, I don’t want to diminish the centrality of black activists (many of whom had a long history of working against such injustice) in responding to police brutality. I also don’t wish to suggest that by watching a video, white Americans could come to grasp the facts. As we will see, to fully grasp is difficult and requires many acts of fulfillment. Indeed, I think their lack of full grasp partly explains the short-lived reaction from white Americans. Further, I think there is a gap between what can be grasped as *subject* of an experience vs. as observer, and in a separate paper, I suggest a way of cashing out standpoint epistemology that takes up this issues, but I set them aside here. See also Dror (forthcoming) for related discussion.

⁵ In this case, there is something *wrong* with using the video to grasp broader facts. Especially for white people, watching (and sharing) the video in order to grasp the horrors of police violence against black Americans is exploitative and sensationalist, a way of using a window into someone else’s (horrific) death against the will of that person’s family. I don’t think that the epistemic benefits of watching the video somehow outweighed Floyd’s family’s right to privacy, and racism and power surrounding how we “consume” others’ experiences in general exacerbates the challenge. Thus I don’t claim that people did the right thing by using the video to come to grasp a more general claim. There are hard questions at the intersection of the morality and the epistemology of grasping that are distinct from those that arise for traditional epistemology: questions about the morality of certain methods for understanding others’ subjective experience of the world.

This paper aims to explain this by providing an account of grasping that is loosely based on an old idea: Husserlian fulfillment. We grasp, I'll argue, by engaging in the sort of higher-order mental acts of identification just described: by matching up the objects of our phenomenal experience to those of our more abstract propositional thinking. Grasping is a central epistemic goal of human beings, and it plays an important role in why and when we act, both directly and indirectly, by grounding our motivational emotions such as anger. Developing even a partial grasp on something we might already have believed, but failed to grasp, is what helps us experience the emotions that are fitting to that belief's objects, and thus helps motivate us to act on that belief. I will argue that grasping is importantly *not* a species of knowledge, and that, while grasping can sometimes bolster justification or even secure knowledge, it is not essentially related to either justification or propositional knowledge.⁶

On my account, grasping is neither a rational activity nor an emotional attitude. The latter initially seems obvious; but it becomes less obvious given the role that grasping plays in grounding or generating our fitting emotions to things we might already believe. A natural idea would be that when someone watches the video, it spurs an emotional response to something that she already had the corresponding belief about; so she becomes angrier directly in virtue of watching the video. While I agree that such emotional responses are spurred by watching the video, these reactions are mediated by us coming to better understand a situation.⁷

That grasping is not rational, or inferential, is much less obvious. Grasping is, I think, itself *phenomenally presentational*; that is, as a matter of our own internal phenomenology, it seems to involve something being presented to us phenomenally rather than us representing that thing, as we do in propositional thought, and as we must in order to make inferences. Thus, while grasping might play a role in inference, it is essentially phenomenal, not inferential. I won't argue directly against inferential accounts here. Many good arguments—that I take to be essential groundwork for my own account—have already been given by David Bourget (2017). I am instead focused on the positive goal of fleshing out a promising phenomenal account. However, I will show that my particular account of grasping isn't essentially connected to justification, belief, or knowledge, but that, despite this, there is an important place in epistemology specifically for *phenomenal* grasping, because it is among our basic epistemic aims.

⁶ If one disagrees that racist police brutality is a serious problem in the US, keep reading; everything I say about grasping can be true without justification or truth.

⁷ Bourget (2017) makes a similar point, though we disagree about some of the (minor) details: part of the role of grasping is to explain certain kinds of emotional shifts (and thus, actions).

A few methodological notes. First, my aim in this paper is broad, exploratory, and programmatic; I sketch a big-picture view and show some of the work it can do in various degrees of detail. I won't be able to address every pressing issue with the view. Second, though I borrow a central idea of Husserl's, the account is not explicitly Husserlian. I won't explicitly note of all the ways in which I disagree with Husserl. But it's worth highlighting the central difference: I bifurcate knowledge and grasping into dual, and distinct, epistemic aims, and this is at odds with Husserl's ideal verificationism. On my view, unlike Husserl's, it is natural to sever an essential link between phenomenal experience (or the phenomenal character of experience) and justification, instead essentially connecting phenomenal experience to grasping. Finally, my account aims to be consistent with different theories of perception and consciousness, though I will refrain from detailed discussions of its relationship to various theories.⁸

1. THE TARGET

What is it to grasp something? It is to understand it in some deep sense. Michael Strevens says:

What is grasping, or understanding that, or direct apprehension, then? It is the fundamental relation between mind and world, in virtue of which the mind has whatever familiarity it does with the way the world is (Strevens 2013, p. 511).

I agree that grasping plays a central role in the connection between mind and world. On my view, though, we can grasp things that have little to do with the world (for example, far-flung metaphysical possibilities or simply false claims), and these kinds of cases can't be accounted for directly by any kind of mind-world connection. But grasping certainly has to do with connecting up propositions, qua abstract objects of thought, with something like *our experience* of states of affairs, qua obtaining or non-obtaining possibilities, and thus grasping may still be the (or at least, a) fundamental relation between mind and world.⁹

I take grasping to be roughly synonymous with *understanding that* (and importantly distinct from *understanding why*). Many have focused their attention on understanding why, and some think that understanding why has something to do with explanation. Consider the proposition I'll call MIGRAINE: <I have a proto-migraine right now>. If I want to fully understand why MIGRAINE, I

⁸ One unanswered question is how much of a commitment to nonconceptual perceptual content the view requires. This will be taken up in future work. A second is what kinds of views of phenomenal intentionality my view can accommodate. I briefly address this in footnote 26, but in the long run more should be said about that as well.

⁹ This obviously depends on one's view about the connection between perceptual experience and reality.

might need to know quite a bit about anatomy, physiology, medical science, neuroscience, etc. (indeed, no one fully understands why MIGRAINE); I need to know something about the underlying explanation for MIGRAINE. I have almost no such understanding.¹⁰

In contrast, I do have a good grasp on MIGRAINE. I understand *what things are like* when MIGRAINE; I know what it amounts to for MIGRAINE to be true. I understand that I have a proto-migraine right now, even if I don't understand why. That is to say, I grasp, or at least partially grasp, MIGRAINE. Grasping MIGRAINE can't be a matter of gaining new propositional knowledge. Nor does it have anything to do with knowledge of any kind of explanation.

Strevens makes basically this distinction, in basically the same way I want to (2013, §2). On his view, understanding why requires, first, *understanding that* (in the grasping sense), and second, having the object of understanding that itself be an explanation. However, he leaves analyzing grasping, or understanding that, aside, noting that we are quite far away from understanding what grasping *is*. It is this question that I take up in this paper.

My goal is not to argue that our general concept of understanding is distinct from knowing, or that our language suggests that it is.¹¹ I instead develop a positive account of grasping that does robust epistemic work for us, and show that on that account, grasping isn't essentially connected to knowledge or justification. I will take on board much of David Bourget's (2017) set-up, since both his argument and his cases help motivate the shape, but not the nature, of my position. I present some of his cases below:

Jane (Bourget)

Jane had been smoking for over fifteen years. Thanks to the government's aggressive information campaign, she was fully informed about the dangers of smoking, but this never compelled her to quit. One day, a colleague of hers (Giovanni) who was also a smoker was diagnosed with lung cancer. Learning about (Giovanni's) condition helped Jane grasp the dangers of smoking and made her quit for good. (Bourget 2017, p. 285)

Modeling (Bourget/my adaptation)

¹⁰ The following (and more) endorse something like the idea that understanding has to do with knowing the explanation for something: Kvanvig (2003), Salmon (1984), Kvanvig (2003), Grimm (2011, 2014), Greco (2014), Khalifa (2013, 2017). Strevens (2011, 2013) in some sense fits here, though see my discussion in the main text.

¹¹ In part because this work has already been done by others. Hills (2016) shows that understanding and knowledge terms come apart in many languages. Elgin's (2017) account of understanding squarely distinguishes it from knowledge (see also Elgin 2006). Others who think that understanding can't be a species of knowledge include Bengson (2015), Hills (2016), Zagzebski (2001), Kvanvig (2003), Pritchard (2010), Dellsén (2017). However, many philosophers maintain that understanding is a species of knowledge, e.g., Lipton (2009), Grimm (2006, 2011, 2014), Sliwa (2015). For an overview of the literature and general issues at stake here, see Hannon (2021).

Suppose I learn that the sun's volume is about 1,300,000 times greater than the volume of the earth. I come to know this, propositionally. But I don't grasp it. To grasp it, I need to have a sense of what it *is* for the sun to be about 1,300,000 times greater in volume than the earth. I begin to do that when I go to a museum and see a to-scale *model* of the relative volume of the sun and the earth. (Adapted from Bourget 2017, p. 287-88.)

Proof (mine, though Bourget (2017, p. 288) talks about something similar):

My students might come to believe, via my testimony, that there are infinite sets that can't be put in 1:1 correspondence with the natural numbers. But they don't begin to *grasp* this until they see Cantor's diagonalization argument.

Mary (Bourget, 2017, p. 288, my adaptation):

When Jackson's (1982, 1986) color scientist Mary steps outside her black-and-white room and sees a red tomato, she comes to grasp the proposition <tomatoes are red>. She already knew that tomatoes are red, but she did not grasp that proposition until she came into phenomenal contact with red tomatoes.

In each of these cases, someone comes to (at least partly) grasp something. But they don't have similar structures otherwise; Jane comes to grasp the dangers of smoking in a much different way than my students come to grasp that there are sets that can't be put in 1:1 correspondence with the natural numbers.

As I mentioned before, Bourget's central aim is to argue that grasping is *phenomenal*, not inferential. I agree. He gives many arguments against inferential accounts of grasping. I won't rehash all of these here, but two that are worth mentioning are as follows. First, there are serious difficulties with being able to *specify* the relevant inferences that grasping involves (2017, 298). Second, and more relevantly for my purposes, there seem to be clear counterexamples to inferential role being necessary or sufficient for grasping (299). Sufficiency: any case in which we know, for example, a mathematical-empirical fact that is beyond our grasp (such as that "the Sun has a volume of $1.412 \times 10^{18} \text{ km}^3$ " (300) seems to permit us to draw *all* the relevant inferences, but clearly without the relevant grasp. Necessity: Bourget's case here is staring at a piece of paper's shape—you immediately grasp what shape S is, but may not be able to draw inferences about it. My earlier case—of grasping that I have a proto-migraine right now—is somewhat similar.

My goal is not primarily to offer further support for phenomenal views more broadly, nor to argue *against* inferential accounts, but rather to argue for a particular phenomenal account. Thus my

account is largely intended to be friendly to Bourget’s, and in the rest of the paper, I am simply going to *assume*—relying in part on Bourget’s groundwork—that grasping is phenomenal.¹²

On my account, which I turn to in §2, we grasp by fulfilling; while propositions are what we grasp, the object of fulfillment is not a proposition, but instead is a phenomenal “match” between our abstract cognitive thinking of a proposition, and our phenomenal experience of the corresponding state of affairs. Along the way, I will also further clarify the relationship between Bourget’s argument and my own.

2. GRASPING BY FULFILLING

Michaela McSweeney, Eli Chudnoff, and Bourget provide accounts of, respectively, ‘subjective seeming’, ‘intuiting’, and grasping that provide a useful starting point for my own account.

McSweeney argues that for *S* to *understand that (grasp) P* requires it to *subjectively seem to S* that *P*, which is:

- (a) for *S* to believe that *P* and
- (b) for *S* to experience the world as *P*, that is, to either (i) *perceive* the world as *P* or (ii) to *phenomenally imagine* the world as *P*. (McSweeney 2023, p. 86.)

Chudnoff (2013a, 2013b, 2013c) argues for an account of intuiting on which to intuit is to experience *P*’s truth, and also to experience *P*’s truthmaker. While Bourget’s central aim is not, I take it, to extensively develop the phenomenal account, he does give us a “phenomenal theory” of grasping: “To occurrently grasp *P* is to have a phenomenal experience with *P* as content.” (2017, 303) All three of these accounts initially make sense of Bourget’s (and my) cases, but all three are problematic.

First, it is not plausible that (McSweeney) I must believe that *P* in order to grasp it, nor that (Chudnoff) *P* must be true in order to grasp it (though this is no strike against Chudnoff’s account as it is intended—as an account of intuiting); for example, I can grasp false claims by accurately visually imagining what the world would be like if they were true, without in any sense believing them, and similarly I can entertain propositions I am unjustified in believing (and don’t believe for that reason) and come to grasp them.

¹² However, while I am sympathetic to Bourget’s arguments, I also think it may well be that there are two different target phenomena at stake here, and so proponents of inferential accounts and phenomenal accounts are (perhaps) talking past each other. Whether this is true is not particularly central to my aims here, except that, as we will see, I think phenomenal grasping plays a particularly important role in our epistemic lives.

Second, all three accounts fail to focus on the connection between their two components. But grasping seems to essentially involve *matching up* the object of one's representational, propositional thought (the proposition) with what is being phenomenally presented in the act of perception (or imagination, hallucination, etc.). If we don't see the right kind of relation *between* the contents of our propositional thoughts with those propositional thoughts, then we aren't grasping. Consider someone who has developed expertise in the form of propositional knowledge over a given domain, e.g., agave plants, by reading a large number of non-illustrated books, but who fails to connect that knowledge to her perceptual experience of agaves. She might be able to propositionally tell us how to recognize the differences between two agave species, but be unable to actually do so with her own phenomenal experience, even when phenomenally presented with both species. And she can't visually imagine the differences between the species. She doesn't translate her expertise in propositional thinking to expertise in presentational phenomenology. Thus, she does not grasp propositions like <Parry's agave has wider, stouter leaves than agave tequilana does>.¹³

Similarly, imagine a variation on Mary: when she steps out of her room and sees color, has no idea what is happening to her despite her propositional knowledge. She doesn't see the red tomato and think "that's a red tomato! I'm seeing red!". Instead, she is terrified and confused, because, in our imagined scenario, she was so far from understanding what the phenomenology of color experience would be like while in her room that she was too phenomenally overwhelmed by that experience to use it to make sense of her preexisting beliefs.

All of this is suggestive of a better account: grasping requires not just a simple plurality of mental acts or states, but also a higher-order state that synthesizes those distinct states. On this view, grasping requires being in some higher-order state that e.g. matches up the contents of McSweeney's (a) and the contents of (b). My account of grasping, based on Husserl's account of fulfillment, provides just this, while also resolving the first worry by not requiring that we believe what we grasp. On my view, we grasp *by* fulfilling. So my first task is to explain what it is to fulfill.¹⁴

¹³ Hopp (2020, p. 103) gives a similar example about perceiving an elm and a beech tree, adapted from Putnam (1975, 124) to motivate the higher-order state. I don't think his case successfully shows that we need the higher-order state, because the subject is not thinking about the object in a sufficiently similar way to the way in which they are perceiving the object.

¹⁴ I am interested in *cognitive fulfillment*, not *intuitive fulfillment*. But I drop both labels here. Husserl's theoretical use of fulfillment was distinct from my own, since, again, he wouldn't have approved of the bifurcation of grasping and knowing. My adaptation follows Hopp's (2020) presentation of fulfillment. Hopp himself gestures (2020, p. 105) at the idea that fulfillment is the way to grasp, but he wouldn't agree with my fleshing out of that idea here.

As Dallas Willard puts it, for Husserl, fulfillment is “The “matching up” of mere meaning with corresponding intuition to establish a relation to the object “itself.”” (1995, §5). To see what this “matching up” amounts to, we need to distinguish between *intuitive* and *empty* mental acts.¹⁵ An intuitive act is one in which, *phenomenally speaking*, something is presented rather than being merely represented. On my view, though, something’s being intuitive is consistent with consciousness being “representational” in the standard sense. Its intuitiveness is not about its metaphysics, but rather about its phenomenal role: about its phenomenal similarity to perceptual acts. (This is why I used the phrase “phenomenally presentational” rather than just “presentational”.) If you’re propositionally thinking without much or any accompanying imagining of the things you’re thinking about, you’re not performing an intuitive act (you’re performing an “intuitively empty” or an “empty” act). If you see a tree, or visually imagine a flamingo, or hallucinate a desert oasis, you are having an intuitive experience. While for other purposes we must distinguish between these different kinds of intuitive experiences, I will mostly ignore those distinctions here. I also note: I use “act” as an umbrella term to cover any mental act, and “experience” to specifically talk about phenomenal acts.¹⁶

Since my focus here is not on the details of Husserl’s account (or what he is using it for), I am going to instead adapt a version of Walter Hopp’s slightly more approachable characterization of Husserlian fulfillment:

Fulfillment: X fulfills a thought about some object of thought, O, when:

1. **Intuitive Experience:** X has an intuitive experience of (that is: perceives or imagines (e.g. visually) or hallucinates...) some object of thought O’.
2. **Empty Act:** X thinks “emptily” (for our purposes, propositionally/cognitively/not in a way that is “like” perception; not in a way that presents its object to us) about O.
3. **Higher-Order Identification:** X matches O and O’, that is, matches the intuited object with the thought about object. (This is really the “act” of fulfillment, (1) and (2))

¹⁵ Husserl introduces the notion of an intuitive act in *Logical Investigations* Vol 1, p. 192. For the contrast, see especially *Logical Investigations* 6. Hopp 2020, chapter 1, section 5 provides a clear discussion of the distinction, and Byrne 2021 provides critical discussion of Husserl’s terminological and philosophical evolution on the distinction.

¹⁶ The distinction here is meant to be consistent with there being cognitive phenomenology (see e.g. Bayne and Montague 2011)—the distinction is not between “phenomenology” and “no phenomenology”, but rather between phenomenology that is *like* our sensory phenomenology. (Though there is a further debate about what cognitive phenomenology is like, and it is not clear that the distinction can be made sense of by everyone.)

are components of that act, which are necessary for it to happen.) (see Hopp 2020, 102, though I have adapted components of his presentation.)¹⁷

Fulfillment is the act of synthesizing (1) and (2) in the way described in (3). It's not enough to have (1) and (2); we also need a higher-order mental state which identifies the object intended in (1) with the object intended in (2), by matching (1) and (2) to each other (so, (1) and (2) are constituents of the act of fulfillment, which really occurs in (3). Setting aside the details of Husserl's own view, I mean "object of thought" broadly—for example, properties can be objects of thought.

When Mary steps outside her room and sees a red tomato, she intuitively experiences <this tomato is red>; she matches this to her belief that this tomato is red by identifying the objects of the two acts, and the matching in question is the act of fulfillment—step 3. Fulfillment is the mechanism by which we grasp both specific propositions like this one, but also, through distinct acts of fulfillment with distinct objects of the same kind, more general propositions like <tomatoes are red>. If Mary already believes that tomatoes are red, even a single act of fulfillment of a proposition about a particular tomato might allow her to have a significant grasp on both the proposition about this particular tomato, and the general proposition. If instead Mary believes very little about what color various things are, and she steps out into the world and fulfills <this tomato is red> without the background general belief that <tomatoes are red>, it might take her many more acts of fulfillment (regarding specific tomatoes) for her to grasp <tomatoes are red>. In the latter case, Mary is coming to believe that <tomatoes are red> *through* fulfilling particular propositions about particular tomatoes. In the former case, Mary already holds the general belief, and so her act of fulfillment of the specific proposition is enough to grasp the general proposition. (I will say more about how we manage to fulfill general claims (like <tomatoes are red>) in §2.3.)

To show how grasping-by-fulfilling works for a different kind of case, consider Jane. Jane comes to grasp the causal connection between smoking and cancer by experiencing Giovanni as himself *instantiating* that connection. (I disagree with Bourget about how phenomenal accounts should account for grasping in more abstract cases like this.) Grasping-by-fulfilling suggests that Jane comes to better grasp <smoking causes cancer> by experiencing Giovanni, who she already

¹⁷ For Husserl's presentation, see *Logical Investigations* 6. As we will see in §2.1, we needn't *identify* O and O' as the very same object, since we can fulfill propositions using models, while being fully aware that the models do not involve the objects of those propositions directly. For issues about the relationship between O and O', and whether error is possible on this picture, see §4, though some of this will not be addressed here as I am trying to avoid getting into the details of the metaphysics.

understands well as a smoker, *as having cancer* when Giovanni tells her he has lung cancer (or someone else tells her this, etc.) Thus this case is not, in fact, all that different from the first one: Jane believes that smoking causes cancer, but doesn't grasp it: she then fulfills the specific proposition <Giovanni has cancer that was caused by his smoking>; that enables Jane to grasp the general proposition <smoking causes cancer>, which she then applies to herself. It is this last step that shifts her motivations and dispositions.

A few clarificatory remarks: first, while there are “steps” in fulfillment, they aren't chronological steps. These things all happen at the same time, or close enough to the same time. Second, despite the “act” label, fulfillment is just an ordinary part of our experience of the world, one which occurs constantly and which we only occasionally might notice ourselves doing (perhaps in certain “aha” moments). Fulfillment itself is intuitive and not empty. It is somewhat similar, in its role in our conscious experience, to perception—it *happens to us* constantly, and presents us with its objects, and we needn't always be attending to it happening to us.

Third, grasping is not identical to fulfilling. Instead, we grasp *by* fulfilling. There are many reasons to distinguish the two. As we have seen, fulfilling more specific propositions like <this tomato is red> can help us grasp general propositions like <tomatoes are red>. Also, grasping seems to come in degrees—we can grasp something a little bit, or a lot, or almost wholly—but fulfillment does not; an act of fulfillment typically helps us grasp a proposition, but does not bring full grasp. Further, while fulfillment is what allows us to grasp, distinct acts of fulfillment can make up the grounds for our overall grasp of something, not just in a case of moving from a specific to a general proposition, but even in a specific case. I can fulfill my belief that Lizzo's song 'Juice' is a masterpiece each time I hear it, and each instance of fulfillment will contribute to my overall grasp of the proposition <'Juice' is a masterpiece>. This will be further clarified.

Finally, fulfillment's object is the relational identity (or, more neutrally, “match”) between, on the one hand, the object of our intuitive act, and on the other, the object of our empty act. But what we grasp are propositions, not relational identities or matches. It is the act of fulfillment, with its object being an identity (or, more neutrally with respect to different theories of perception and mental acts, a “match”), *through which* we come to grasp a proposition.¹⁸

¹⁸ A potential drawback of this approach is that it looks like, e.g., we can't directly fulfill properties (e.g. redness) via the process of matching up our phenomenal experience of a red tomato with the proposition <this tomato is red>. I don't think this is actually a drawback: it is natural to think that what it takes to begin to *grasp* a property will be an act of higher-order fulfillment, i.e. matching properties that are acting as objects, like what we might do when we match the

Here it is useful to pause and say some things about the relationship between my own view and Bourget's (2017). Again, the main difference in our projects is in our *aims*. Bourget's central aim is to argue that grasping is a matter of phenomenal consciousness and not (as has been a much more popular view in the literature) inference.¹⁹ My central aim, as I hope to have made clear in this section, is to provide a more detailed (though still somewhat exploratory) account of the *mechanism* of grasping. My view is largely friendly to his: it is a refinement of the broad phenomenal position that he lays out.

However, there are important differences between our views beyond the differences in aims. Let me quickly highlight two. First, it is only loosely speaking that I claim that grasping is phenomenal. It is the mechanism of grasping—fulfillment—that is a phenomenal act. As I will point out in §3, this view allows me to develop what I think is a more natural view than Bourget does—on my view, almost all grasp is partial grasp; on his view, apparent partial grasp is actually explained away by (fully) grasping nearby propositions (2017 p 308-09). My account explains this because we can fulfill the very same proposition over and over again, in different ways; except in very unusual cases, single acts of fulfillment cannot bring full grasp of that proposition. I will say more about this in §2.1 and §2.2.

Second, both Bourget and I want to divorce grasping from justification, knowledge, and truth (see Bourget 2017 p 292). Bourget, however, does not spend much time arguing for this. In §3, I will provide further motivation for the claim that grasping-by-fulfilling is neither merely instrumental to justification or knowledge, nor a species of knowledge. For now, I suggest that some version of this claim is trivial: since you don't have to believe P to fulfill P, and fulfillment of P doesn't entail knowing P, it follows that grasping-by-fulfilling is neither a kind of propositional knowledge, nor can it be directly essentially connected to propositional knowledge.²⁰ The first claim follows trivially from the definition of fulfillment; the second can be seen by considering cases of false propositions and considering what it would be to fulfill them; we can do so through imagination, dreaming, or hallucination without thereby coming to know that P. Where I believe Bourget and I come apart on this issue is that part of my motivation for wanting to provide a more

proposition <the redness in the tomato is the same as the redness in the ketchup bottle> to our experience of the redness in each. But I am open to the idea that the account should instead be broadened.

¹⁹ See e.g. Grimm (2011), Kvanvig (2003), Nida-Rumelin (2006), Wilkenfeld (2013).

²⁰ Here my view comes apart from Husserl's (e.g. on one interpretation of Husserl, belief simply doesn't enter into the picture at all; we can get knowledge directly from fulfillment). But I'm trying to hold fixed shared assumptions in contemporary analytic epistemology about the relationship between belief and propositional knowledge.

detailed account of the mechanism of grasping is that I believe grasping is an independently valuable epistemic good, whereas Bourget wants to separate grasping from the epistemic altogether. I begin to argue for this in §5.

In §2.1, §2.2, and §2.3, I elaborate on three features of my account of grasping-by-fulfilling: first, the expansiveness of the account: we can fulfill using all sorts of veridical and non-veridical experiences, including imagination, the perception of models, and hallucination. Second, the relationship between fulfilling (as the mechanism of grasping), partial, and full grasp. And finally, the way in which the account can allow for grasping propositions that are more general than what we might seem to be phenomenally aware of.

2.1 IMAGINATION, MODELS, AND PARTIAL GRASP

One crucial way in which my use of fulfillment does not exactly fit with Husserl's is that, on my view, we can have intuitive experiences of something in many different ways, including by visually imagining it and by looking at a model of it. In both cases of modeling and visually imagination, the experience is somehow less direct than veridical perception, but in neither case does that affect whether the experience can be used to fulfill.²¹

The similarity between imaginative and model-based fulfillment lies in the fact that visual imagination is often less fine-grained and more “structural” than perception is, just as models are often less fine-grained and more structural than their targets. What does “structural” mean here? The more structural with respect to a target proposition a model is, the less it fills in fine-grained details of what it is like for that proposition to be true that are part and parcel of our intuitive experience, but not a part of the content of the proposition itself. Our perceptual experience is typically much more fine-grained than our propositional thought, at least in the following two respects: First, there are many different kinds of intuitive experiences that fulfill the same proposition. For example, many different visual experiences could fulfill <there is a horse in the field>. Second, intuitive experiences almost always go beyond the corresponding proposition. Following along with our example, my seeing a horse standing in a field fulfills the proposition <there is a horse in the field>, but it also does more: it presents the horse as facing in a particular direction, as standing or sitting, and so on.

²¹ See Husserl, *Analysis Concerning Passive and Active Synthesis*, Division 2, Chapter 2, §19.

Many models are more structural with respect to the propositions they model than their targets are. A model of the sun and the earth that aims at modeling the relative volumes of the sun and the earth will pack in all sorts of idealizations and simplifications along other dimensions. In such a model, what is modeling earth is likely to be smooth and nearly perfectly spherical, and won't have any surface variation to represent land or water.

That doesn't mean that our experience of looking at the model will be less fine-grained than our ordinary perceptual experience (it might not provide an "all things considered" more structural perceptual experience); instead, our experience of looking at the model removes some of the detail *in the bits of the model relevant to the target* that would be present if we were to have an actual perceptual experience of the target. In some cases that detail might be replaced with false detail, for example the grain of the wood that the model might be made of. In others, the model allows us to more easily attend to the simpler parts of our experience, because the detail is backgrounded.

I am only focused on certain kinds of models—models that produce phenomenally presentational experiences. While they represent their target, they do so in a way that produces a phenomenally presentational experience in us—an intuitive, rather than empty, one. For example, I can fulfill the proposition <Parry's agave has much wider leaves than agave tequilana does> by looking at a clay model that depicts a Parry's agave and an agave tequilana, getting the relative shape of their leaves correct, even though there are all sorts of other propositions about the two agaves that that model cannot be used to fulfill, such as <Parry's agave is a live plant>. We needn't require the same thing of our models, for grasping, that we do when we use models for certain scientific purposes. Scientific models must license inferences (thus, when we use models for scientific purposes, they are often tied up in justification and knowledge—not just understanding) and capture other information about what we should believe systematically.²² Because fulfillment—and grasping—are not essentially connected to justification and knowledge, we don't need our models to license inferences in the same way we do in scientific modeling, so there is more flexibility in how we can use models to grasp than there is in how we can use them to scientifically reason, theorize, and experiment.

The reasons for thinking that we can fulfill using models carry over to intuitive imagination, hallucination, and other non-perceptual but phenomenally presentational/intuitive experience. Your visualization of an oak tree either is, or presents, a model of an oak tree. If there is something you

²² See Bokulich (2011, 2018) for accounts of scientific modeling that could be loosened further to account for grasping.

are seeing when you visualize, it is not the oak tree itself, but a depiction of the oak tree that you take to represent (model) the oak tree. That's not to say that your experience of visualizing an oak tree is *phenomenally* representational and not phenomenally presentational. It's to say that it presents something that isn't a real oak tree, that itself is representational of oak trees. Representations can help us grasp things—models, visualizations, photographs, maps, and so on. For our purposes, there is no important distinction between looking at a clay model of an oak tree and visualizing an oak tree. We sometimes visualize in order to help us understand what something would be like if it obtained, which is also one function of looking at a model. While models are representations of their targets, they fulfill *presentationally*—that is, we experience them intuitively.

In short, both non-perceptual phenomenal experiences (visual imaginings, hallucinations, misperceptions, and dreams) and perceptual experiences of external ontic representations (maps, models, etc.) allow us to fulfill, and, when it comes to the role they play in fulfillment (and thus grasping), there is no important distinction between them.

Here I disagree with Bourget, who claims that what appear to be partial grasps of P are in fact full grasps of some similar proposition Q (2017, 308-09). On Bourget's picture, occurrent partial grasping is not possible, and we can explain away apparent cases of it via claiming that we are mistaken about which proposition we are fully grasping. I agree with Bourget that this sort of thing might happen. To use one of Bourget's own examples: if we look at a toy model of the relative size of the earth and the sun that is made from an apple seed and a basketball, we probably aren't thus grasping <the sun is 1,300,000 times bigger than the earth> but rather some nearby less specific proposition (2017, 38-309). On my view, in this case, we *are* likely fulfilling a less specific proposition about relative size, but, provided we have the thought <the sun is 1,300,000 times bigger than the earth> and we experience the apple seed and basketball, and we match the experience and the thought to each other, we are *also* (directly) fulfilling the more specific proposition.

I hold that the ontological differences between a model of an oak tree (whether it be a mental model or a physical one) and an actual oak tree don't entail that we can't grasp propositions regarding the actual oak tree by phenomenally encountering the model oak tree. Because our empty thinking is more structural than our phenomenal experience, many different phenomenal experiences can fulfill the very same proposition. The mental model oak tree might do just as good of a job, for example, providing us with a phenomenal fleshing-out of a claim like 'oak trees have lobed leaves' as my actually seeing an oak tree's leaves does, so long as the relevant particular feature

of my mental model accurately fulfills the proposition (that is, has lobed leaves). I am fulfilling the very same proposition when I experience the mental model and encounter the actual tree, but doing so in two different ways. And because, as I will argue in §3, fulfillment, and grasping, are not essentially connected to justification or truth, there is no sense in which experiencing “the real thing” is superior with respect to grasping.

2.2 FULFILLMENT TYPICALLY BRINGS ONLY PARTIAL GRASP

We grasp *by* fulfilling, but each act of fulfillment does not bring full grasp (except perhaps in unusual cases like <this migraine feels like this at this exact moment>). The more structural a proposition, the more, and diverse, acts of fulfillment are required to fully grasp it.

Fulfillment doesn't clearly come in degrees. But grasping seems to. As I just explained, Bourget considers, and rejects, trying to make his general phenomenal account graded, instead arguing that the right move for phenomenal accounts is to claim that apparently partial cases of grasping are actually cases of grasping nearby propositions (2017, 308-309). The grasping-by-fulfilling view, however, has the tools to provide a different—and, I believe, superior—explanation of this apparent feature of grasping.

On my view, we either never, or almost never, fully grasp propositions—but, by the same token, we partially grasp many more propositions than we might initially think. For to fully grasp a proposition is to fulfill it in every possible way. Fully grasping a proposition would require us to *experience* every kind of phenomenal content that can accurately fulfill that proposition

Consider the proposition <Tillie the table is made of wood>. I picked this proposition because it is about a particular individual, Tillie, and so is significantly less structural than many other propositions (like <some roses are red>. Still, it can be fulfilled in infinite ways: first, there are all the different ways we could actually perceive Tillie being made of wood—seeing it from different angles and in different lighting and from different distances away; feeling it with our hands; and so on.²³ But there are also infinitely many ways we could fulfill <Tillie the table is made of wood> by phenomenally imagining Tillie. Which cases of phenomenal imagination count as fulfilling the relevant proposition will vary depending on our commitments with respect to what Tillie's essential properties are, but almost all of us should agree that there are various changes we can imagine of

²³ There will naturally be some disagreement about what kinds of experiences can count as fulfilling experiences here (e.g. does knocking on Tillie count as a way of experiencing it being made of wood? I think that we do hear the table, but I am no expert here. See O'Callaghan (2011, see also 2019) for a sympathetic view and Matthew (2010) for one on which we do not hear Tillie).

Tillie that don't change her identity (e.g., imagining Tillie exactly as she is presented to us in visual experience but with a large nick in her top (which almost everyone will agree fulfills the relevant proposition) to imagining her being made of walnut instead of pine (which fewer will agree does).

For Husserl, eidetic variation—which, applied to our case, roughly involves trying to run through all of the different ways in which Tillie could *be*, and yet still be Tillie—is a method for getting at the essences of things.²⁴ I do not endorse this (nor its connection to his ideal verificationism). However, it is natural, on my account, to endorse something approaching it for grasping: either to claim that the only way we could fully grasp a proposition is if we could somehow fulfill it in every way possible—which would be achieved only by a similar method of eidetic variation, by an ideal, infinitely-capacitated-agent, or, if we want full grasp to be more attainable, to claim that there is some “fulfillment threshold” we must meet in order to fully grasp.

There are potential counterexamples: propositions like MIGRAINE, which are about features of us that are fully transparent in the way they present to us and with which we are directly phenomenally acquainted.²⁵ I take it that (likely) there are important propositions we can fully grasp. Still, in most cases, we will never come to fully grasp a proposition. This might seem like a strike against my account, since it is inconsistent with the way we sometimes use the word “grasp”. I think it is actually a virtue. It makes sense of our experience: each time we fulfill a proposition in a slightly different way, we develop a better grasp on it.

Consider my experience of listening to Lizzo's song 'Juice'. Each time I hear the song 'Juice' my phenomenal experience is at least slightly different. Even if I am simply listening to the same recording on the same sound system over and over again, I may focus my attention on distinct features of the song, or hear things differently. When I see Lizzo perform live, or when I watch a video of her, I have very different phenomenal experiences, involving not just auditory but visual perception of the performance of the song. Distinct acts of fulfillment of, for example, the proposition <Lizzo's song 'Juice' is a masterpiece> may bring me closer to grasping that proposition. (Lest one worries that this has to do with the proposition involving an evaluative component, something similar is true about repeatedly hiking in the Rockies and fulfilling the proposition <the Rockies are very exposed above the tree line>.)

Indeed, it seems plausible that the way in which we develop expertise in at least some domains involves fulfilling, and re-fulfilling, the same propositions, in distinct ways, such that we

²⁴ E.g. *Ideas* I, section 137.

²⁵ See Hopp (2020, 105), to whom I partially owe this point.

come to better grasp them (e.g. for the botanist, <Parry’s agave has wide, stout leaves for an agave>). Non-trivially distinct acts of fulfillment can help us better grasp the same proposition; when the botanist sees a live Parry’s agave plant, she fulfills the above proposition in a distinct way than when she looks at a botanical drawing of that plant alongside drawings of other agaves; doing both will bring her closer to fully grasping the proposition than doing only one or the other will.²⁶

Thus, I see no problem with claiming that (i) grasping comes in degrees; (ii) fulfilling does not; (iii) we grasp *by* fulfilling; and (iv) typically, separate acts of fulfillment increase our grasp on a proposition, because they involve distinct phenomenal content; and (v) we likely typically never fully grasp; if there are propositions we can fully grasp, though, they are those like MIGRAINE. I should note, though, that I am open to the idea that there is some threshold we can meet in order to fully grasp other propositions. What is important is just to preserve the idea that grasping is typically *difficult* and not typically immediately achieved via a single phenomenal experience (or, to be more clear in our case, by a single act of fulfillment).

2.3 THE GENERAL AND THE PARTICULAR

How, exactly, do we fulfill more general propositions? At first glance, the step from grasping specific propositions to the corresponding general propositions (e.g. <tomatoes are red>, <smoking causes cancer>) seems to involve inference, not phenomenology. But that isn’t the right way to understand fulfillment. Mary can fulfill <tomatoes are red> by thinking to herself “tomatoes are red” while experiencing a red tomato. Here one might object: she’s matching up an *instance* of the general claim with the general claim, instead of with something more specific describing the instance, so this doesn’t seem like a good case of fulfillment. I disagree; remember that fulfillment isn’t about coming to believe, or justifiably believe, something. It’s rather a step towards *phenomenally understanding* something, and experiencing particular instances of general propositions *is* what helps us phenomenally understand those propositions. Similarly, Mary might fulfill <tomatoes are red> by visually imagining a generic tomato (or a bunch of tomatoes). She could have pictured a different tomato, but nothing has gone wrong for her if she uses the particular one she imagines to fulfill <tomatoes are red>. (And she might do so without using it to fulfill any thought about any

²⁶ There are complicating questions here: for example, does forgetting, and then re-fulfilling, a proposition bring us a better grasp of it? Do we sometimes need to “re-up” on fulfillment in order to even maintain a minimal grasp? And do even trivially distinct acts of fulfillment bring us increased grasp? Hopefully, regardless of how these questions get answered, the idea that fulfilling the same proposition in two quite different ways increases our grasp on it is intuitively plausible.

particular tomato!) Thus, we can directly phenomenally fulfill very general propositions (like <tomatoes are red>) and not just ones specific to the objects in front of us (like <this tomato is red>).

One helpful way to think about fulfillment of, and grasping of, general propositions is by conceiving of those phenomena as coming close to replicating something that is already present in cases of fulfilling and grasping particular propositions like <this tomato is red>. (Though, as a disclaimer, I think the two cases have important dissimilarities.) I can fulfill that proposition by only having a small portion of the surface area of the tomato in my visual field. I needn't—and indeed cannot—experience the whole tomato at once. As I argued above, it doesn't follow that I fully grasp <this tomato is red> after one (or even multiple) such acts of fulfillment. While I do not advocate conceiving of generics or universal generalizations mereologically, there's an obvious analogue here in the relationship between the experience of seeing a cluster of three red tomatoes and using that to fulfill <tomatoes are red>; we needn't experience something *completely*, so to speak, in either case, in order to fulfill it. (Here one may start wondering about whether there are constraints on which experiences can fulfill which propositions. I address this in §4.)

We might instead (or in addition) think of using the visual experience of three red tomatoes to fulfill <tomatoes are red> as being more similar to cases of using a model to fulfill. There is a sense in which our three red tomatoes *demonstrate* the (more general) redness of tomatoes; so we might use our experience of them similarly to the way we might use our experience of a model of the relative size of the sun and the earth to fulfill a proposition about the actual sun and earth.

Significantly more should be said here. For now, I emphasize that the account is meant to be exploratory, and that I am only providing some promising strategies for explaining fulfillment of propositions that seem to be more general than our experience is.

2.4 SUMMING UP

I propose that fulfillment gives us a candidate account of how we grasp that we ought to take seriously. While I happen to believe that fulfillment exhausts the methods with which we grasp, I will not argue for that here. Instead, I hope to establish that my account of fulfillment provides us with a plausible account of at least one kind of grasping; one might hold that there are other ways of grasping (e.g. synthesizing two empty thoughts) that don't involve fulfillment.²⁷

²⁷ Another account that is (sort of) a friend to my own is Bengson's (2015) noetic account of understanding. Our accounts can be motivated by (some) similar argumentation, and there are other important similarities. However, there

John Bengson says that, pretheoretically, to “genuinely understand something is to grasp it—whatever is understood—in such a way that it makes sense to you” (2017, 19). At least one way to do so is to grasp what the world would be like for you if it were true, or what the world is like for you given that it is true, and at least one important way of doing *that* is to fulfill: to connect your experience to your representational thoughts by seeing that they are of the same things.

3. GRASPING ISN'T ESSENTIALLY LINKED TO JUSTIFICATION OR TRUTH

Consider Emma, a purportedly anti-racist white ally who has all the relevant beliefs, and justification for those beliefs, about police brutality against Black people in the US, but who fails to be motivated to act on those beliefs. Both she and Jim, who has different general beliefs (e.g., believes that there is not any kind of systematic problem with racist police violence in the US, that it's “a few bad apples”, etc.) watch the video of Floyd's murder. Both might fulfill the particular proposition that <George Floyd was murdered by a police officer>. But Emma might use that fulfillment to come to grasp a more general proposition about racist police violence in the US, whereas Jim might use it to come to grasp, say, a proposition about rare but vicious “bad apple” cases among police in the US.

What this example shows (and what I will argue in this section of the paper) is that grasping-by-fulfilling isn't essentially connected to justification, truth, believing the right thing, etc., even setting aside any kind of skepticism about our phenomenal experience of reality being truth-tracking. (Though, as we see here and as we saw in the Mary and Jane cases, there are often important relationships between what we believe, what we fulfill, and what we grasp.) Among other things, grasping-by-fulfilling allows us to come to grasp general propositions that we already believe, but may not be justified in believing, or which may be false; it also may compel us to come to have new beliefs (or to act in different ways), despite it *not* being essentially connected to the structure of justification. The relationship between grasping particular facts that we are intimately phenomenally familiar with, and using (or not using) that grasp to come to believe or grasp more general truths, is fragile and dependent on all sorts of things, perhaps especially the ideology we are under the grip of. We might instead use our grasp on particular facts (or falsehoods) to come to believe more general

are important differences between them. First, Bengson is focused on non-sensory and non-explanatory intuitions as contributing to sense-making; I am focused on presentational phenomenal experience in general, which sensory experience is the paradigm of. Second, Bengson thinks that intuition (by which he means something distinct from me) is a *source* of understanding—that is, it is something in virtue of which we can come to understand; it causes a conceptual shift. For me, intuitive states are *constituents* in the higher-order act of understanding, rather than catalysts for our conceptions of things.

falsehoods. For example, someone might grasp that their parent had died of covid-19 despite being vaccinated, and use that grasp to bolster their confidence in their false belief that vaccines don't help prevent death or serious illness.

In this section, I'll first argue (§3.1) that grasping often plays a role in our being justified in believing a proposition (and thus can contribute to knowledge), but doesn't always do so; and that even in the cases in which it does do so, it's not reducible to anything about justification. Next (§3.2) I'll argue both that fulfillment can't itself involve coming to know new propositions (even though it sometimes helps us to come to know new propositions), and that fulfillment can't be an "empty" (phenomenally representational) act, and must itself be an intuitive mental act.

3.1 FULFILLMENT AND JUSTIFICATION

Fulfillment might sometimes play a role in justification. Suppose (in a variation on a case discussed throughout Hopp 2020) that I am at dinner with a friend, who is slightly drunk. He goes out for a cigarette and comes back and tells me that the hood of my car is scratched. My friend's intoxicated testimony is not enough for me to be fully justified in believing that the hood of my car is scratched, but it is enough for me to entertain the proposition, and increase my credence in it. But then I go outside, look at the hood of my car, and then I fulfill. Perhaps my fulfillment now justifies me in believing that the hood of my car is scratched.

However, one needn't think that it is the *act of fulfillment* at all in perceptual cases that provides justification for the belief it fulfills; as a referee helpfully points out, perhaps a more natural view is that it is the perceptual experience itself, not the higher-order act of fulfillment, that justifies (so: it is my *seeing* the scratched hood of the car that justifies, not my act of using that visual experience to fulfill <the hood of the car is scratched>). I leave this issue open because I do not think it is crucial to the view I develop here, and I want to stay neutral about broader accounts of the relationship between perception and justification.

Another way that fulfillment might play a role in justification is that it might provide us with evidence for claims about possibility or essence. Indeed, as I alluded to before, Husserl uses it this way in his account of eidetic reduction (or "free variation"): very roughly, coming to know the essence of something by imaginatively varying its properties.²⁸ And various more contemporary approaches to modal epistemology involve a kind of imaginative conceivability or variation. So

²⁸ See Husserl, *Experience and Judgment*, 87, and *Ideas*.

perhaps when we fulfill imaginatively we are providing ourselves with some evidence for modal claims.²⁹

But regardless of whether it plays a role in justification in modal or perceptual cases, fulfillment can occur without any effect on justification.³⁰ Three cases support this. First, recall that we can fulfill using hallucination, phenomenal imagination, and even dreams as the “intuitive” input into the fulfillment. So I might have a vivid daydream of free-soloing (climbing without any protection) El Capitan, and I also might have propositional thoughts about free-soloing El Capitan, for example, <that free-soloing El Capitan is terrifying>; I can enter into the higher-order state of matching my empty thought and my daydream.

If my daydream is entirely accurate to how my experience in fact would be (if I really were free-soloing El Capitan), the fulfillment arguably does help bolster my justification (I am accurately imagining myself in the scenario and doing so should increase my confidence that free-soloing El Capitan is terrifying). But my daydream needn’t be accurate to how my experience in fact would be (were I free-soloing El Capitan) in order to fulfill; it just needs to be somewhat vivid and involve me being terrified. And if it isn’t accurate to how my experience would really be, it’s hard to see how it would help justify my beliefs about that experience. In order for me to fulfill, it needs to be a possible phenomenal fleshing-out of the proposition in question, but it doesn’t need to be just like

²⁹ E.g. Yablo (1993) and Chalmers (1996, 2004, 2010) on conceivability, Williamson (2007) on counterfactuals., among many others. Other roles might be served by fulfillment in accounts of imaginative knowledge as well, for example, Balcerak Jackson (2018) argues that imagination can provide us with knowledge about the nature and structure of perceptual experience, and, more tentatively, about the structure of the world, and Brainard (2020) appeals to imagination in knowledge of how-possibly explanations in a way that my account of fulfillment plausibly buttresses.

³⁰ I also think that fulfillment is not necessary for justification, but I take that for granted here—I can hold a justified belief on the basis of trusted testimony, for example; I can fully know some mathematical fact merely emptily, without fulfilling it. However, I want to remain neutral on the question of whether fulfillment might be required (by being the kind of sensory or perceptual experience that we need) in justified belief formation when it comes to beliefs that seem to require sensory or perceptual justification. (See Johnston 2011, Smithies 2019.) Relatedly, one might wonder about what kinds of views of phenomenal intentionality my view is compatible with. I am clearly committed to there *being* some kind of phenomenal intentionality, and moreover for it being built into the nature of grasping that it involves phenomenal intentionality (zombies, on my view, can’t understand—at least in the sense at play in this paper), but I otherwise intended the account to be as neutral as possible about the many different views held thereof. However, it may be that the account is either not compatible with, or would need to be adapted to accommodate, the strongest possible views there: if the only kind of mental states that are “about” anything at all are phenomenal states, and if all phenomenal states go on the “intuitive” side of the empty/intuitive divide, then it might not make sense to hold onto the kind of epistemic dualism I am advocating here (phenomenal understanding plays by radically different rules, and aims at something completely different, than justification/propositional knowledge do). Whether the view is compatible with any given view in the “strong to moderate” realm here (e.g. Loar 2003, Mendelovici 2018, Pitt 2004, 2009, Kriegel 2011, Pautz 2013, Farkas 2008, among many others; also see Bourget and Mendelovici 2019, 2020 for overviews) would have to be hashed out in detail, which I don’t have space to do here (and is further complicated by where cognitive phenomenology lives on both my view and the views of these proponents of phenomenal intentionality). Instead, to simplify things and put them in terms of Smithies (2019)’s “zombie” challenge: on my view zombies couldn’t possibly grasp, but they (perhaps arguably) could know. For a good discussion of Husserl’s commitments here, see Hopp 2021.

the fleshing-out of that proposition that is what things would in fact be like for me were I to experience freely El Capitan. Because our intuitive (phenomenally presentational) experience is less structural than our propositional thinking, there are many ways, inconsistent with how my actual experience would be, that I can accurately fulfill the proposition. When those ways are inconsistent with what my actual experience would be, they are not properly connected to mind-independent reality, and thus do not bolster my justification.

Second, return to Mary (still in her room) and her concept of a red tomato. She might dream in color, and be presented with a red tomato in her dream, and fulfill the proposition <some tomatoes are red> with it. And she might correctly fulfill it (which would happen if her dreamt-red-tomato in fact appeared red to her, not, say, green). But she won't come to be any more justified in any particular beliefs she has about red tomatoes on that basis, because she doesn't have any reason to believe that her fulfillment was correct, even if it in fact is correct. In at least some cases (such as when we encounter a property we are unacquainted with for the first time), for our fulfillment to bolster justification, we need to know that we've correctly fulfilled. Mary doesn't know this, so she is no more justified.³¹

Third, you might correctly fulfill your propositional belief about the relative volume of the sun and the earth with a to-scale model, without knowing that the model was to scale. But doing so wouldn't bolster justification unless you had more information. First, you need a reason to believe that the model is to scale. (You need information about the relationship between the model and its target to have fulfillment-via-modeling bolster justification.) Second, if your source of belief is the same as the source of the model-maker's belief (say, you both read it in an astronomy textbook), then (arguably) you shouldn't increase your confidence in your belief. In that case, while looking at the model immediately helps you grasp the proposition, it does no more to bolster your justification than, after you've read a headline, your friend stating that headline to you because she read it in the same newspaper does.³²

These cases show two things. First, while fulfillment can bolster justification even in cases where we are not veridically perceiving, it can only do so under certain conditions. And second, in

³¹ This case relies on some loaded epistemic assumptions that one might argue against, but I won't go into detail here since the first and third cases are sufficient to make my point.

³² The standard view in epistemology (and in particular the disagreement literature), stemming from Wittgenstein's famous example, is that sources that are completely dependent on others (such as in my headline case) don't provide more support for a claim than does the original source (the New York Times' headline). (See e.g. Huemer 2001, Elga 2010 (p. 177-78). This is challenged by Lackey (2013). Barnett (2019) responds.)

cases where we are veridically perceiving, but the object of our perception is a model, depiction, photograph, map, etc., whether we become more justified by fulfilling depends on us having further information about the status of the model itself, as well as the status of its creator's beliefs. In short, justification is bolstered by fulfillment only when certain further constraints are met, and thus there is no direct essential connection between fulfillment and justification.³³

3.2 FULFILLMENT IS PHENOMENAL

One crucial feature of fulfillment is that *it*—the act of matching the objects of the intuitive and empty states— is intuitive, not empty. The act of fulfillment is not a propositional-thought kind of identification of the perceived object with the thought-about object; it's much more akin to perceiving the perceived object as the thought-about object. Fulfillment is just what we do when we match our propositional thinking to our direct or indirect intuitive experience of objects, properties, and states of affairs in the world. And, I will argue, this does not happen by way of propositional thinking.

Suppose again I attend a Lizzo concert, and I think emptily/propositionally about Lizzo, say <Lizzo is beautiful>, <'Juice' is a masterpiece>, <Lizzo is an extremely talented musician>. I will engage in many acts of fulfillment at the concert, but if I try to characterize that fulfillment propositionally, I will without fail lose something about my experience of Lizzo's music. That will be true regardless of whether I try to give a long propositional account of the ways in which Lizzo's music presented it to myself—it will be true regardless of the sense with which I reference Lizzo's music, emptily speaking. Think of trying to capture your favorite music in language, as opposed to experiencing it for yourself. I have suggested one reason for this: that your empty acts of thinking will regularly be more structural than your intuitive experience.

However, even if one denies this, one should be able to get on board with the more general claim: regardless of whether it is true that our intuitive acts are less structural than our empty acts, a great deal is lost when we move from experiencing something intuitively to trying to think about it emptily. In our case, what is lost is your phenomenal experience of the sound of Lizzo's singing, your experience of what it was like to be at her concert, the collective emotion of the crowd that infected your sensory experience, and so on. If fulfillment is itself an empty act, then it is just propositional thought. And if it is just propositional thought, it is missing pretty much everything

³³ Bengson (2015) makes some similar arguments about why his noetic theory of understanding must come apart from justification and knowledge.

about your intuitive experience of Lizzo and her music. But then it is hard to see how it actually synthesizes your propositional thought with your phenomenal experience, since it misses out on the phenomenal nature of one of the constituents it is purportedly synthesizing. Further, part of the appeal of grasping-by-fulfilling is that it isn't a "loss" of experience but instead brings the richness of phenomenal experience to bear on our propositional thinking, and vice-versa. If fulfillment is itself an empty act, it is hard to see how it can do that.

In simpler terms, here is the argument: if our intuitive experience is richer than our empty acts, then any mental act E that has both intuitive and empty acts as constituents must be at least as rich as the intuitive experience is. Since empty thinking cannot be as fine-grained and rich as our intuitive experience, then E cannot be an empty act.³⁴

I conclude that fulfillment itself can't be an empty act. A consequence of this is that it can't be propositional knowledge that it brings us, and so, if we grasp by fulfilling, grasping can't be reducible to gaining new propositional knowledge. And this is true even though it does often help us come to learn new things propositionally. That is to say that fulfillment can help bring new propositional knowledge, just as it can bolster justification (in Hopp's "hood of the car" case, I do come to know, via fulfillment, that the hood of my car is scratched)—but since the central act of fulfillment (matching our intuitive act to our empty act) is not itself an empty act, fulfillment itself is not centrally about gaining new propositional knowledge, which is itself empty.³⁵

4. THE CONDITIONS OF SUCCESSFUL FULFILLMENT

What are the boundaries of what we can use to fulfill what? Can *any* experience fulfill any proposition? Arguably, the internal and subjective features of fulfillment, along with its lack of essential connection to justification or truth (or veridicality of intuitive experiences) should make us worry about whether there are any constraints on our phenomenal experience in fact matching the propositions we use to fulfill it, and about what those constraints could be.

Before I answer this challenge, let me first clarify my aims. I take myself to be trying to give an exploratory account of the general phenomenon of grasping and, more specifically, the *way* in which we come to grasp: by fulfillment. The mechanism needs to roughly get the cases right—but

³⁴ There is a more detailed (and perhaps more convincing) argument to be given for this conclusion that appeals to the difference between grasping and knowing, but I do not have the space to give it here.

³⁵ See also Hopp 2020, ch. 5.

ours does. What my account needn't do, I think, is *decide* every case. Still, I need to say something about the conditions of successful fulfillment.

Let us imagine a bad case of fulfillment. Suppose Mary took her experience of the red rose to fulfill <penguins are black and white> (assume, for the sake of simplicity, that she did so relatively systematically). It seems one of two things has gone wrong for her. Either (a) her perceptual experience is not properly connected to its external object: she is looking at a red rose, but having a perceptual experience of a black and white penguin, or (b) she is making an error in the “matching” step of fulfillment: that is, she really is taking her experience of the red rose—which is very much like ours—to be an experience of penguin(s) being black and white.

What does my view have to say about each of these possibilities? If Mary is in situation (a), then she is *correctly* fulfilling the proposition <penguins are black and white>, despite not veridically perceiving. That's because situation (a) is very similar to one in which someone *hallucinates* black and white penguins and uses the hallucination to fulfill <penguins are black and white>. Mary's problem is with the lack of veridicality of her perceptual experience, which is not properly connected to the red rose. But that's a perceptual problem, not an error of fulfillment. And thus if I am right that we can increase our grasp via (say) hallucination, then there is no reason to think Mary can't come to better understand some of the properties of penguins by matching up a visual experience of penguins with a proposition that that experience does, in fact, capture.³⁶

I have my doubts about whether cases like (b) are mental acts that humans ever engage in, but there are more plausible cases of acts of misidentification. My account gets those cases right.

Consider what I suspect is a common such mistake in the United States: using a visual experience of kimbap to fulfill a proposition about maki. Kimbap and maki have many important differences (for example, the rice in kimbap is seasoned with sesame oil and no acid, and the sushi rice in the maki is seasoned with rice vinegar and no oil). But kimbap and maki look superficially somewhat similar. Someone who, eating kimbap, used their experience it to fulfill <sushi rice is seasoned with rice vinegar> would be making a genuine mistake (either at the linguistic meaning level, or the perceptual level, or the fulfillment level, depending on the details), but someone who, looking at kimbap, used their experience to fulfill <maki is wrapped in seaweed> would, on my account, be successfully fulfilling. She would be looking at a model, not knowing it is a model

³⁶ We might, or might not, have different views with respect to, for example, propositions with demonstratives in them, like <*that* penguin is black and white>, but that issue depends on one's account of demonstratives and, just generally, is beyond the scope of this exploratory paper.

(thinking it is the real thing), and using it to successfully fulfill a proposition. If the model genuinely helps her grasp the proposition, she can correctly fulfill regardless of how well she understands the relationship between the model and the real thing, or indeed, whether she think the model just *is* the real thing. If she had never seen maki, or even seaweed, before, seeing kimbap would give her a much better grasp on maki than she had before, regardless of whether she knew that kimbap was merely superficially similar to maki, or thought they were the same thing. That is what the account correctly predicts. Moreover, this is yet another case of someone seemingly making an epistemic gain that can't be (at least easily) cashed out in terms of knowledge or justification.

There is a lurking objection to my view that I have only indirectly addressed: why not distinguish between justificatory fulfillment (that is, fulfillment that helps justify our beliefs, as in the case where I look at the hood of the car and see that it is scratched) and non-justificatory fulfillment (when an act of fulfillment doesn't help bolster justification for any of our beliefs, e.g. when I look at the kimbap and use it to fulfill <maki is wrapped in seaweed>)? We might attempt to divide these cases by distinguishing between perception-based cases of fulfillment and imagination-based cases. (Though more would have to be said to rule out the case of using a veridical visual experience of kimbap to fulfill a thought about maki, and more generally to ensure that modeling cases fall on the correct side of the divide). Doing so would allow someone who wanted a more narrow view of epistemic value to argue that justificatory fulfillment is epistemically valuable, but non-justificatory fulfillment is not. My response—already implicit in what has been said—is that when I look at the kimbap and use it to fulfill <maki is wrapped in seaweed>, it seems clear that I am achieving a better grasp on <maki is wrapped in seaweed>, just as Mary's dream of the red tomato helps her grasp <tomatoes are red> without bolstering her justification for that belief. What we are looking for is a natural account of grasping. There is good reason to think that a general view of fulfillment, that doesn't divide justificatory and non-justificatory cases, is the best candidate.

The upshot of this section is this: I can't give an account of exactly when each act of fulfillment is *incorrect* vs. *correct*, but I can show that my account generally seems to capture a lot of our judgments about what brings better understanding or grasp. As we have just seen, the account may be useful for helping to conceptually separate different kinds of mistakes we might make in more complex cases. Some will likely still be unhappy with the boundaries of the account because we can fulfill using models or (external) representations of target objects. Accounts of resemblance-based representation (which is what we would need to sharpen the boundaries of the account) are difficult to pin down. Elsewhere, I try to propose a series of constraints on the kind of

representation involved in these cases, but here I simply want to suggest that it is not surprising that there will be hard cases in which we aren't sure whether someone's act of fulfillment should count as correct or not, just as there are hard cases all over epistemology (whether something counts as knowledge, whether something counts as evidence, whether someone is justified).

5. THE INDEPENDENT EPISTEMIC VALUE OF GRASPING

Bourget claims that “grasping seems to be a purely mental phenomenon that is independent of one's epistemic state. In all transition cases above, no change in the epistemic status (truth, justification, etc.) of the subject's beliefs is required for the subject to grasp their contents” (2017, p. 292). I agree that there is no need for a change in truth or justification regarding the propositions that are the targets of our grasping in order for us to say that we grasp them. However, I disagree that this entails that there is no change in epistemic status when we come to grasp something. Grasping a proposition is a crucial part of what it is to be epistemically connected to that proposition. So while there may be no change in truth or justification, there is a change in epistemic status, and it is important that we center this change in epistemology instead of just treating it as some sort of non-epistemic change in our conscious experience.³⁷

One reason to think that changes in how well we grasp things matter, epistemically and agentially, is that they alter our dispositional and motivational structures, and thus, our agency. Jane is moved to act to quit smoking by witnessing Giovanni's cancer; many people who watched the George Floyd video were moved to act upon watching it (if they didn't already grasp the horrific facts about police violence against black people in the United States), even if they didn't come to have any new beliefs by watching it. Thus while we can understand epistemology narrowly, to be concerned only with knowledge and justification, doing so misses out on something—something that is neither moral nor practical, but has important (but non-essential) connections to some other things we care about epistemically (perception, belief, justification, and so on)—and plays an important role in our agency.³⁸

³⁷ Elgin (2017) takes *the* aim of inquiry to be understanding. While I agree with many of Elgin's claims, I believe we have multiple epistemic aims, including both knowledge and understanding. Bengson (2020) offers important critiques of Elgin's view, most notably about the dangers of truth dropping out of the epistemic picture. Since on my view both knowledge and understanding are epistemically valuable, I avoid these worries.

³⁸ Kate Nolfi gives an account of “action-oriented” epistemology on which “the function of a belief is to play a... distinctive role in action production” (2021, 6727). While I don't want to endorse a functionalist account of grasping, the idea here is vaguely similar (though conflicts with Nolfi's claims)—one function of grasping is that *it* plays a distinctive role in action production, and importantly, that role differs from the role of belief.

I believe that grasping-by-fulfilling is one of our *basic* epistemic aims as human beings: it is not merely instrumental to some other aims, but is instead itself an end in itself. (I'll drop "basic" in what follows.) We want to have perceptual and perception-like experiences of the world; but we don't want to do so without being able to make sense of any of them. Instead, what we want is to match them to the linguistic-conceptual framework that we use to cognize the world.

We might worry that such a picture confuses aiming to fulfill our non-epistemic desires, or simply our prudential reasons for action, with true epistemic aims. This worry will hopefully be assuaged by three different types of cases.

First, as someone who already held the relevant beliefs about police brutality against Black people in the United States, I felt compelled to watch the video of Floyd's death despite knowing both that it would make me distraught, and that I, at least arguably, had a moral duty *not* to watch it (so I was neither compelled by my own desires nor by a sense of moral duty—indeed, those both pulled in a different direction). My account explains this: I have an epistemic aim of better grasping even the things I already believe. It's not that I was seeking new beliefs or propositional knowledge; I was seeking a deeper understanding of *what it really is* for police brutality against black people in the US to be the horror that it is. For those shielded from that reality, to refuse to watch the video (or find some alternate way to better grasp the situation) might even be to exhibit a kind of epistemic cowardice, not with respect to belief formation, but with respect to grasping. (Though, again, this aim of grasping may conflict with what we morally ought to do.)

Second, grasping-by-fulfilling as a basic epistemic aim also helps make sense of related questions about our engagement with fiction and art. Why, for example, do we seek out and immerse ourselves in fiction (films, novels, etc.) that invokes negatively-valenced emotional reactions in us—horror films that make us feel genuinely afraid (Carroll 1990); serious tragedies that make us feel genuinely devastatingly sad (Aristotle, *Poetics*), and so on? If grasping is among our fundamental epistemic aims, then we do so, in part, to fulfill that aim—an aim that needn't cohere with nor support either our practical or moral aims. Instead, we can simply be epistemically compelled to grasp things that fiction helps us to grasp; this epistemic compulsion is like our epistemic compulsion to know, but it is much better placed to account for why we immerse ourselves in tragic or horrific fiction. Taking our aim in immersing ourselves in fiction to be propositional knowledge requires theoretical work (since the obvious candidate propositions are false, we must work hard to find the relevant propositions, or endorse fictionalism). But if our aim is to grasp, truth is irrelevant and we needn't go searching for propositions—the propositions we grasp can be the false ones

literally represented in the novels, films, etc. we read. Further, fiction can fulfill propositions that are true by producing phenomenal experiences of the relevant content that don't fulfill in the same way that reality does.

Third, consider a wildly different kind of case—one which initially motivated my own interest in grasping. Some of our activity as inquirers seems most easy to make sense of if we include grasping in our set of epistemic aims. Within philosophy, many have recently discussed the importance of understanding—sometimes specifically phenomenal understanding—as an epistemic aim. McSweeney (2023) argues, in part, that metaphysics aims at phenomenal understanding, not knowledge or justification. Though all of the following seem to have a broader notion of understanding in mind, Hannon and Nguyen (2022) argue that the aim of philosophy in general is understanding; Dellsen, Lawler, and Norton (forthcoming) discuss the nature of philosophical progress and consider noetic aims of philosophical work; and Keren (forthcoming) makes similar arguments. Elgin (e.g. 2006, 2017) has long espoused understanding as an epistemic aim, including in science, and Dellsén, Lawler, and Norton (2022) display some connections between the role of understanding in science and philosophy. Brainard (2020) argues for an account of “how-possibly” explanations—important in both science and the humanities, as well as everyday life--which crucially distinguishes between knowing that something is possible and knowing *how* it is possible, which she takes to involve a kind of imaginative understanding of the possibility. All of these arguments only work if understanding is in fact epistemically valuable. (Though many of these authors don't have specifically phenomenal understanding in mind.) If the above philosophers are onto something, then one benefit of treating grasping-by-fulfilling as an epistemic aim is that it can at least help descriptively account for our actual practices of philosophical, humanistic, and scientific inquiry. Of course, much more would have to be said here to make this into an independent argument for my claims in this paper. Instead, I just mention it as a quick demonstration of the kind of work grasping-by-fulfilling can do for us.

More generally, grasping is a useful epistemic notion because it is essentially subjective in a certain way: both what we can grasp and the way in which we do it are not based on the kind of shareable evidence that propositional knowledge is supposed to be based on, according to standard views in traditional epistemology. If it turns out to be correct that propositional knowledge is more

of an objective achievement, and grasping is more of a subjective one, then dualism about our epistemic aims may be able to help resolve further issues in epistemology.³⁹

6. CONCLUSION

I have presented and motivated a particular account of grasping—an account that fills in some details about exactly *how* we might grasp if grasping is phenomenal. I emphasize that my view is exploratory; my aim has not been to convince every reader that my view is correct, but rather to have shown that it is theoretically fruitful—by showing that it explains various features of our epistemic lives and of human inquiry, including providing answers to challenges to the value of philosophy and the humanities more broadly; that it serves as a missing link between belief and motivation or action, in cases where that belief does not motivate agents to act; and that it provides us a dualist epistemology of grasping and knowing that has the potential to resolve various issues about the role of subjectivity and objectivity in epistemology.

My central goal in this paper has been to develop an exploratory account of grasping by fulfilling, and to demonstrate some of the theoretical work it can do, rather than to argue against other potential phenomenal accounts. However, I also take what I have said to provide an indirect argument against certain other natural candidates for providing us with phenomenal accounts, such as Russellian knowledge-by-acquaintance. Bourget (2017, p. 296, note 19) points out that Russell seems to have endorsed a phenomenal account of understanding. Russellian knowledge-by-acquaintance is at best something like direct intuitive (rather than empty) awareness. But knowledge-by-acquaintance, on my view, can only be an ingredient in a higher-order act that is required to grasp, since grasping involves matching empty or propositional mental acts with more fine-grained phenomenal experiences that fulfill those structural propositions.

I also haven't addressed the question of why grasping changes our motivational structures, and transforms the kinds of agents we are: why, exactly, does Jane's grasp of the connection between smoking and cancer move her to quit, when her previous belief did not? This is a crucial question for another time. But in some sense its answer is obvious: grasping is among our basic

³⁹ Bengson (2015, p.6) explicitly takes understanding and knowledge to both be objective achievements. In part I agree. Merely having the *feeling* of having grasped something doesn't entail that we have grasped it—even partially. Still, grasping-by-fulfilling is clearly subjective in the sense relevant here. In future work, I plan to develop an account of how grasping and knowing can fulfill distinctive roles in our epistemology, and bring an array of benefits (including, for example, allowing us to account for most of the motivation for standpoint epistemology—by developing a standpoint epistemology of grasping--while holding onto some of the “traditional” properties of knowledge).

epistemic aims precisely because it is what connects our abstract thought to our embodied phenomenal experience, allowing us to make sense of each by way of the other. Thus it shouldn't be surprising that grasping makes a difference to our agency.

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