Obsessive-Compulsive Disorder and Recalcitrant Emotion: Relocating the Seat of Irrationality

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Abstract: It is widely agreed that obsessive-compulsive disorder involves irrationality. But where in the complex of states and processes that constitutes OCD should this irrationality be located? A pervasive assumption in both the psychiatric and philosophical literature is that the seat of irrationality is located in the *obsessive thoughts* characteristic of OCD. Building on a puzzle about insight into OCD (Taylor 2022), we challenge this pervasive assumption, and argue instead that the irrationality of OCD is located in the *emotions* that are characteristic of OCD, such as anxiety or fear. In particular, we propose to understand the irrationality of OCD as a matter of harboring *recalcitrant* emotions. We argue that this account not only solves the puzzle about insight, but also makes better sense of how OCD sufferers experience and describe their condition and helps explain some otherwise puzzling features of compulsive behavior.

Keywords: Obsessive-compulsive disorder; insight; rationality; belief; recalcitrant emotion.

1. Introduction

Obsessive-compulsive disorder (OCD) is a relatively common and in many cases debilitating condition characterized by recurrent, anxiety-evoking thoughts (obsessions) and compulsive behaviors (APA, 2013). It is widely agreed that OCD involves irrationality. Indeed, in most cases, OCD patients themselves recognize that there is something irrational about their state of mind. However, rather than protecting patients from the substantial emotional distress and impairment caused by their irrational state, this insight into their own irrationality often contributes to the disturbing and bewildering experience of the condition.

But where in the complex of states and processes that constitutes OCD is this irrationality be located? A common assumption in both the psychiatric and philosophical literature is that the seat of irrationality is located in the *obsessive thoughts* characteristic of OCD. For example, according to this assumption, an OCD sufferer might be considered irrational in thinking that her hands are contaminated, or in thinking that her house might burn down unless she flicks the light switch some particular number of times.

In this paper, we challenge this common assumption and propose an alternative. Our challenge builds on a recent puzzle posed by Evan Taylor (2022), arising from the common phenomenon of *insight* into one's own OCD. Insight can take two forms: "world-directed insight" in the form of knowledge that one's own obsessive thoughts are *false*; and "self-directed insight" in the form of knowledge that one's own obsessive thoughts are *irrational*. However, as Taylor shows, none of the candidate theories about the nature of obsessive thoughts allow these thoughts to be the object of both kinds of insight. In light of this, we

argue that it is a mistake to assume that both kinds of insight take the same object. While world-directed insight is indeed a matter of knowing that one's obsessive thoughts are false, we argue that self-directed insight into one's own irrationality does not take obsessive thoughts as its object. In other words, the irrationality associated with OCD should not be located in obsessive thoughts.

Where, then? We propose to locate the irrationality of OCD in the *emotions* that are characteristic of OCD, such as anxiety or fear. In particular, we propose to understand the irrationality of OCD as a matter of harboring *recalcitrant emotions*, i.e. emotions that endure in spite of standing in a tension or conflict with one's own considered judgments. For example, an OCD sufferer who is obsessed with the cleanliness of her hands is not irrational in virtue of having thoughts about her hands being contaminated, but rather in virtue of experiencing anxiety about her hands being contaminated in spite of her considered judgment that they are not. We argue that this account not only solves Taylor's puzzle about insight, but also makes better sense of how OCD sufferers experience and describe their condition, as well as helps explain some otherwise puzzling features of compulsive behavior.

Here is how we will proceed. In §2, we describe the diagnostic criteria for OCD and describe an illustrative case. In §3, we introduce the phenomenon of insight and discuss Taylor's puzzle, leading us to the conclusion that we should abandon the assumption that self-directed insight takes obsessive thoughts as its object. In §4, we describe our main proposal, namely, that the irrationality associated with OCD should be located in recalcitrant emotions. In §5, we explore some further theoretical and therapeutic implications of this proposal for our understanding of OCD, before concluding in §6.

2. Obsessive-compulsive disorder

Obsessive-compulsive disorder (OCD) has two defining diagnostic criteria: obsessions and compulsions. Obsessions are defined in the DSM-5 as "recurrent and persistent thoughts, urges or images that are experienced, at some time during the disturbance, as intrusive and unwanted" (APA, 2013, p. 252). Obsessions often cause significant emotional distress in the form of anxiety or fear. Compulsions consist of repetitive or ritualistic behaviors or mental acts, which OCD sufferers engage in order to suppress the anxiety caused by the obsessions, or in order to achieve a sense of having neutralized or prevented some feared event from happening. Compulsions are often excessive and tend not to stand in a realistic causal relationship to the feared event, although they do often achieve some temporary relief from anxiety.

In a book on OCD that reviews a number of case studies and scientific explanations, David Adam, a science writer and editor at the journal *Nature*, describes his own suffering from OCD in the following manner: I obsess about ways that I could catch AIDS. I compulsively check to make sure I haven't caught HIV and I steer my behaviour to make sure I don't catch it in future. I see HIV everywhere. It lurks on toothbrushes and towels, taps and telephones. I wipe cups and bottles, hate sharing drinks and cover every scrape and graze with multiple plasters. My compulsions can demand that after a scratch from a rusty nail or a piece of glass, I return to wrap it in absorbent paper and check for drops of contaminated blood that may have been there. Dry skin between my toes can force me to walk on my heels through crowded locker rooms, in case of blood on the floor. I have checked train seats for syringes and toilet seats for just about everything. As a journalist, I meet a lot of people and shake their hands. If I have a cut on my finger, or I notice that someone who I talk to has a bandage or a plaster over a wound, thoughts of the handshake and how to avoid it can start to crowd out everything else. My rational self knows that these fears are ridiculous. I know that I can't catch Aids in those situations. But still the thoughts and the anxiety come. (Adam 2014, pp. 6–7)

Adam's careful account conveys a sense of what it is like to live with this condition, but it also represents a quite frequent obsession with contamination and disease, highlights features of the forceful compulsion that the obsession is associated with, and portrays the search for relief through compulsive behavior. Adam obviously possesses good insight into the nature of his obsessive thoughts and ruminations, but he nevertheless feels compelled to perform certain behaviors in response them, while recognizing that they lack a credible connection to the event they are supposed to help prevent. Also, he is keenly aware that performing these behavioral responses are unlikely to bring lasting relief and fully prevent the obsessive thoughts and the anxiety from tormenting him.

While Adam's account sensibly portrays obsessions and compulsions, it also assigns a prominent place to anxiety and emotional distress, which elsewhere is often relegated to the background, even if OCD almost always involves anxiety. In fact, OCD was traditionally classified as an anxiety disorder, and it was only with the DSM-5 that OCD was placed into the distinct category of Obsessive Compulsive and Related Disorders. The reclassification was in part justified by research linking OCD more to problems with executive functioning, and anxiety disorders more to problems with emotion regulation (Stein et al., 2010; Snyder et al., 2015).¹ Still, anxiety disorders and OCD remain closely connected, and this is not merely due to similar phenotypic presentations or the fact that they respond to similar treatments (Falk et al., 2020). While the inflexibility of cognition and behavior in OCD is certainly associated with reduced executive functioning, executive functioning is also closely linked to emotion regulation, such that it is likely that reduced executive functioning brings about maladaptive

¹ It is interesting to note that a paper commissioned by the relevant DSM working group initially recommended that OCD be kept in the category of anxiety disorders (Stein et al. 2010).

anxiety-regulation strategies that contribute to developing and maintaining the primary features of OCD (Snyder et al., 2015).

3. The insight puzzle

According to the DSM-5, in addition to the main diagnostic criteria, diagnosis of OCD also involves specifying the degree to which the subject enjoys *insight* into her own condition. Roughly speaking, this refers to the degree to which the subject is aware that her obsessive thoughts are false or irrational. To this end, an "insight spectrum" is described, ranging from "good or fair" insight, to "absent" insight:

With good or fair insight: The individual recognizes that OCD beliefs are definitely or probably not true or that they may or may not be true.

With poor insight: The individual thinks OCD beliefs are probably true.

With absent insight/delusional beliefs: The individual is completely convinced that OCD beliefs are true.

Most OCD sufferers are relatively insightful about their own condition. Indeed, according to recent studies, approximately 80% of persons with OCD have a relatively high degree of insight (Catapano et al., 2010; Jacob et al., 2014).

The DSM-5 does not specify precisely what is meant by "OCD beliefs." In particular, it is not specified whether this term is meant to cover only the particular obsessive thoughts that OCD sufferers might experience, or if it is also meant to include the kind of dysfunctional general background beliefs that the cognitive model of OCD postulates to explain OCD symptoms.² Presumably, insofar as these background beliefs exist, the term should cover both. Insight into the falsity of particular obsessive thoughts can be expected to go hand in hand with insight into the falsity of the postulated background beliefs, and *vice versa*. However, since the nature of these states is partly what is at issue in the following, we cannot assume at this stage that either of them should be interpreted as beliefs, and not some other kind of state, despite the DSM-5 referring to them as such.

As noted by several recent authors, the phenomenon of insight into OCD gives rise to an interesting philosophical puzzle about the nature of the states that are the objects of insight. Robert Noggle (2016) notes specifically that insight raises questions about whether and how we should ascribe beliefs to insightful OCD sufferers. But more recently, Evan Taylor (2022) has described a more general puzzle that subsumes the questions raised by Noggle. This puzzle will provide the point of departure for our discussion in this paper.

² Such background "beliefs" might include, for example, an inflated sense of responsibility for causing or preventing feared events, or a feeling of needing to control one's thoughts. See e.g., Faull et al. (2004).

Crucially, Taylor notes that we should distinguish between two sorts of insight. First, and most in line with the description in DSM-5, insight might take the form of recognizing that the contents of one's obsessive thoughts are *false*. Taylor calls this "world-directed" insight, since it involves recognizing that something fails to be true as a matter of worldly fact. Schematically, this becomes:

World-directed insight: Where S has an obsessive thought m with content p, good insight into m can take the form of recognizing that p is false.

For example, someone suffering from the obsessive thought that her hands are contaminated might recognize that her hands are *not* in fact contaminated. Importantly, this recognition can amount to *knowing* that the obsessive thought is false. As Taylor points out, it is quite natural to describe OCD sufferers with good insight as having such knowledge. Indeed, the terms "insight" or "recognize" seem to imply what we would normally describe as knowledge, in the sense that they refer to mental states that are both *factive* (i.e. true) and *rational* (i.e. held on a reasonable basis in a way that is appropriately connected to the facts).³

The second kind of insight is not a matter of recognizing that one's obsessive thoughts are false, but rather of recognizing that they are *irrational*, for example, in the sense of being epistemically baseless. Since this is a property that depends on one's own state of mind, rather than on what is true or false in the world, Taylor calls this "self-directed" insight. Schematically, this amounts to:

Self-directed insight: Where S has an obsessive thought *m* with content *p*, good insight into *m* can take the form of recognizing that it is irrational to have *m*.

For example, someone suffering from the obsessive thought that her hands are contaminated might recognize that it is *irrational* to have this thought. And again, this recognition can arguably amount to knowledge, that is, *knowing* that it is irrational to have this thought.

The two kinds of insight do not amount to the same thing, since they do not ascribe the same property to the target state: it is possible for a thought to be false without being irrational (e.g. if it is based on good reasons, but happens to be false), and for it to be irrational without being false (e.g. if it is not based on good reasons, but happens to be true).⁴ Of course, it might be difficult to think of cases where the two kinds of insight come apart. If I recognize that a thought of mine is irrational, I might also tend to think that it is false (or at least I will be unconvinced that it is true), and vice versa. But the fact that the two kinds of insight typically

³ For the claim that factive mental states are instances of knowledge, see Williamson (2000).

⁴ The distinction between falsity and irrationality is standard in epistemology. For a recent statement and discussion, see e.g. Cohen & Comesana (forthc.).

go together does not mean that they ascribe the same property to the target state, which is all that is needed for the puzzle to arise.

Given these two kinds of insight, the puzzle arises when we try to characterize the firstorder obsessive thoughts that the two kinds of insight take as their objects. As Taylor shows, it seems that none of the most obvious characterizations of them can accommodate both world-directed and self-directed insight. The candidate characterizations can be divided into two groups: as beliefs or belief-like states; and as non-belief-like states.

3.1 Obsessive thoughts as beliefs or belief-like states

Consider the thesis that obsessive thoughts are simply beliefs.⁵ For example, the obsessive thoughts that *my hands are contaminated* or that *the house might burn down unless I flick the light switch exactly 30 times* should be characterized as straightforward *beliefs* with those contents. This is in many ways a natural characterization. It fits with the description of insight in the DSM-5 as a matter of recognizing that one's "OCD beliefs" are definitely or probably false. And identifying obsessive thoughts with beliefs would go some way towards making sense of the behavior associated with OCD. For example, if a subject continually *believes* that her hands are contaminated, that would certainly make sense of her engaging in excessive hand washing. The characterization of obsessive thoughts as beliefs also seems to accommodate the possibility of self-directed insight, since it is possible for beliefs to be irrational and hence objects of self-directed insight. And if obsessive thoughts were beliefs, they often *would* be irrational in the sense of lacking appropriate evidential grounding.

The trouble with the belief interpretation begins when we consider how obsessive thoughts, thus understood, could be the objects of world-directed insight. World-directed insight, recall, consists in knowing that the content of one's obsessive thought is false. But, as Taylor points out, if obsessive thoughts are beliefs that some content p is true, the possession of such beliefs would make it impossible to know that p is false. One cannot know a content to be false, that one, at the same time, believes to be true. Hence, insofar as world-directed insight is possible, obsessive thoughts cannot be beliefs.

There are other problems with construing obsessive thoughts as beliefs. As Noggle (2016) points out, while obsessive thoughts seem to have *some* of the functional properties characteristic of beliefs, they lack or are severely deficient in others such as *affirmation* and *evidential responsiveness*.

Affirmation is the property that disposes believers of a proposition to assert that proposition when conversationally appropriate, and to rely on that proposition in practical and

⁵ Although the exact nature of belief is contested, and we wish here to remain uncommitted to any particular account, by "belief" we shall refer to something like the attitude to holding some propositional content to be true, with rationality conditions determined at least in part by the evidence bearing on the truth of the content, and with functional properties such as "affirmation" and "evidential responsiveness" (for more on these properties, see below). For an account along these lines defended by one of the authors, see Steglich-Petersen (2006; 2009).

theoretical reasoning. Noggle notes that OCD sufferers are typically not disposed to assert their obsessive thoughts, and although obsessive thoughts to some extent seem to dispose OCD sufferers to reason and act in ways that would make sense if the thoughts were beliefs (e.g., by washing hands in response to an obsessive thought that they are contaminated), there are also considerable limitations to this disposition. For example, someone who genuinely believed that the house might burn down unless the light switch were flicked 30 times would presumably call an electrician or warn her family, but we would not expect an obsessive thought with that content to motivate such behavior.

Evidential responsiveness is the property that disposes believers of a proposition to revise the belief in the face of sufficiently strong and obvious evidence speaking against their contents. Noggle points out that obsessive thoughts do not share this property, or only to a considerably limited extent. That is to say, obsessive thoughts are likely to persist, even when the evidence is understood to clearly indicate that they are false. Adam is fully aware that his evidence strongly indicates that he cannot contract AIDS from a used towel or by sharing a drink, yet he continues to obsess that he might.

These differences lead Noggle to interpret obsessive thoughts as "quasi-beliefs," which he characterizes negatively, as states that are like beliefs except lacking the properties of affirmation and evidential responsiveness. In particular, just like beliefs, quasi-beliefs still involve some commitment to the truth of their contents. But Taylor argues that this interpretation falls prey to the same problem as the belief interpretation. While quasi-beliefs might be capable of being irrational and thus figure as objects of self-directed insight, they cannot be the objects of world-directed insight, since they, like beliefs, involve some commitment to the truth of their contents: I cannot know that p is false, while quasi-believing that p is true.⁶ In fact, as Taylor points out, this point applies not only to belief and belief-like states, but to any doxastic attitude towards p that might be considered inconsistent with knowing that not-p. For example, if we understand obsessive thoughts as a matter of *doubting*, *suspending judgment*, or harboring *significant uncertainty* about their contents, that, too, would make world-directed insight impossible, since one cannot know a proposition while holding such attitudes towards it.⁷

⁶ An anonymous reviewer raised the question of why this would not simply amount to a case of cognitive dissonance. But whereas cognitive dissonance is a matter of holding conflicting beliefs or opinions, which is clearly possible, what we are here considering is the possibility of being in the *epistemic* state of *knowing* some content to be false, while believing or quasibelieving it to be true.

⁷ For a recent account identifying obsessive thoughts with doxastic attitudes, see Kampa (2020). Relatedly, while Cochrane & Heaton (2017) and Vazard (2021) don't *identify* obsessive thoughts with such doxastic attitudes, they claim that OCD is essentially associated with doubt or significant uncertainty as to whether the obsessive thoughts are false. This would also make world-directed insight impossible, since one cannot at once know and doubt that a thought is false.

3.2 Obsessive thoughts as non-belief-like states

What if we instead interpret obsessive thoughts as something that is not belief-like? Taylor considers two such interpretations: aliefs and imaginations. Without going into detail, it is easy to see what the problem with these proposals is. Both proposals allow for world-directed insight. Aliefs are a type of mental states postulated by Tamar Gendler (2008a) to account for cases where one is disposed to think, feel and act in ways that are contrary to one's beliefs. For example, when stepping on to the glass-covered walkway over the Grand Canyon, I might be disposed to think of falling, to feel afraid of falling, and to find myself clinging to the railings, even if I believe that the walkway is safe, in which case I can be said to alieve that it is not safe. As Taylor points out, this seems compatible with knowing that the walkway is safe. And if imagining is simply understood as a matter of conjuring up a mental image or representation of some scenario or proposition, imagining *p* is likewise clearly compatible with knowing that *p* is false. For example, imagining that I have won the lottery is clearly compatible with knowing that I have not. So, if obsessive thoughts are aliefs or mere imaginings, it is possible to have world-directed insight into their falsity. The trouble, now, is the reverse from before: it is not possible to have self-directed insight into the irrationality of obsessive thoughts if they are understood as aliefs or imaginings. Why? Because these states cannot be irrational. Aliefs are explicitly defined as *arational* states.⁸ And while mere imaginings may be unpleasant or irrelevant, they can hardly be irrational per se.9

Taylor briefly presents a proposal of his own, namely that obsessive thoughts should be identified as *question-directed attitudes* with contents of the form "what if p?". For example, someone obsessed with the cleanliness of her hands might be understood as wondering "what if my hands are contaminated?". At first sight, this proposal appears compatible with both self-directed and world-directed insight. In general, it seems possible for question-directed attitudes to be irrational. For example, wondering "is p true?" seems irrational if one already knows that p is false (Friedman, 2013). And according to Taylor, the same might be said for wondering "what if p?": adopting this question-directed attitude while knowing that p is false is irrational, in which case self-directed insight is possible. At the same time, having that question-directed attitude might seem compatible with knowing that p is false, in a way that, e.g., believing p is not. For example, entertaining the question "what if my hands are contaminated?" might appear compatible with knowing that one's hands are clean, even if knowing so renders the questioning attitude irrational. So, has Taylor found an attitude that allows for both kinds of insight?

We don't think so. We agree that there is an interpretation of the attitude expressed by "what if *p*?" that is compatible with knowing that *p* is false, namely, if we understand "what if

⁸ As Gendler (2008b, p. 557) puts it, "Though aliefs may be useful or detrimental, laudable or contemptible, they are neither rational or irrational."

 $^{^9}$ For further details, we refer to Taylor's discussion in §4.2.

p?" in a way that is unconcerned with the actual truth of *p*, but merely asks what *would* be the case if *p were* true. For example, when fixing my roof, I might wonder what would be the case if it were raining, while knowing that it isn't in fact raining. But if that is the way that we should interpret Taylor's proposed attitude, it would clearly not be irrational to wonder "what if *p*?" merely because one knows *p* to be false. In order for the questioning attitude to be rendered irrational by the knowledge that *p* is false, we have to understand the questioning attitude in a way that involves some doubt as to whether *p* is false. But if we do so, it is no longer obvious that the attitude is compatible with knowledge that *p* is false, and hence with world-directed insight, since knowing that *p* is false is incompatible with doubt as to whether *p* is false.

It might be objected that knowing that p is false is compatible with being less than certain that p is false, and thus compatible with having some very weak degree of doubt that pis false. We agree. But for the attitude expressed by "what if p?" to be rendered irrational by knowing that p is false, the attitude must be understood in a way that involves more than a very weak degree of doubt that p is false. If the attitude merely involved some minimal degree of doubt that p is false, it would indeed be compatible with knowing that p false. But in that case, it would also not be rendered irrational by knowing that p is false. For this reason, we don't think that Taylor has found the attitude that solves the puzzle.

3.3 A diagnosis

This leads us to our diagnosis. The puzzle stems from the assumption that both kinds of insight are supposed to take the same object, namely obsessive thoughts. But it seems that no understanding of the nature of obsessive thoughts allows for the possibility of both kinds of insight. If we understand the obsessive thoughts as beliefs or belief-like states, they can be irrational and thus figure as objects of self-directed insight. However, such understanding of obsessive thoughts undermines the possibility of world-directed insight. If we understand obsessive thoughts in a way that is *not* belief-like, for example as aliefs or imaginations, they will be compatible with world-directed insight, but not with self-directed insight, since they cannot be irrational.

A potential key to solving the puzzle, then, is to reject the assumption that the two kinds of insight take the same object. If world-directed and self-directed insight took different states as their objects, we would not have to construe the relevant states in a way that could be the object of both kinds of insight. We think that it is fairly obvious that world-directed insight takes obsessive thoughts as its object. And if we are not tied to making self-directed insight take the same object, we no longer have to construe obsessive thoughts in a way that allows them to be irrational. This means that we can understand obsessive thoughts as just that—*thoughts*—e.g., in the form of inner voices, images, ideas or imaginations. Even if these kinds of states are incapable of being irrational, they are clearly capable of being false, or otherwise fail to represent reality (as images might do). They can thus be the object of world-

directed insight, that is, of knowledge that the obsessive thoughts are false. And they can play this role without undermining that knowledge, since they do not involve assent to their contents. It is clearly possible to *entertain the thought* that the house might burn down unless I flick the switch 30 times, while *knowing* that it won't.

This leaves us with the question of where we should locate the object of self-directed insight—the insight that some OCD sufferers have into their own irrationality. In other words: Where should the irrationality of OCD sufferers be located, if not in their obsessive thoughts? This is the question we take up in the next section.

4. Relocating the seat of irrationality

Think back to David Adam's description of his experience as an OCD sufferer, obsessing about ways that he could catch AIDS. At the end of the passage, he notes: "My rational self knows that these fears are ridiculous. I know that I can't catch AIDS in those situations. But still the thoughts and the anxiety come." Adam would count as a highly insightful OCD sufferer—after all, he has written an influential book on his own condition, yet continues to be plagued by his obsession. Perhaps unwittingly, in these three sentences, Adam gives expression to both kinds of insight described above. His world-directed insight gets expressed in his acknowledgement that he knows the contents of his obsessive thoughts to be false: *I know that I can't catch AIDS in those situations*. And his self-directed insight into his own irrationality gets expressed in his acknowledgement that he is being "ridiculous."

What is particularly interesting for our purposes is the state he singles out as ridiculous, namely his *fear*. Not his obsessive thoughts, but his *emotional reaction* to those thoughts. We think that these comments point towards a solution to the insight puzzle, namely, that the object of self-directed insight should be identified with the *emotions* that OCD sufferers experience in response to their obsessive thoughts. Before describing the role of emotions in OCD in more detail, we will note how this proposal solves the puzzle.

First, emotions are clearly capable of being rational and irrational.¹⁰ What this means, exactly, is a question that we discuss below. But the fact that emotions are capable of having these properties seems beyond doubt and is clearly reflected by how natural it is to speak of, e.g., fears or bouts of jealousy as "irrational" or "unreasonable." This means that emotions, as opposed to the other non-belief-like states considered by Taylor, are capable of being objects of self-directed insight.

¹⁰ This is a standard view in the philosophical literature on emotions. At least since Ronald de Sousa's *The Rationality of Emotions* (1991) it has become widely accepted that emotions can be subject to assessments of rationality. De Sousa's account of emotional rationality builds on a set of principles that are both applicable to emotions and standard objects of rationality assessments (e.g. beliefs and desires). Since then, philosophers have begun developing further distinctions between the *cognitive* and the *strategic* rationality of emotions (for a review, see Scarantino and de Sousa 2018), but the general view that emotions can be subject to assessments of rationality is widely accepted and we will not attempt to defend it here.

What about world-directed insight? We have already noted that world-directed insight takes the form of knowing that one's obsessive *thoughts* are false, so our account does not need emotions to be capable of falsity. What we are committed to, however, is the possibility of knowing these thoughts to be false, while at the same time experiencing certain characteristic emotions, such as anxiety and fear, directed at those thoughts. For example, it must be possible to know that one cannot catch AIDS from a towel, while at the same time fearing or feeling anxious that one might catch AIDS from a towel.

We think that this clearly is possible, both psychologically and epistemically. Indeed, it is this combination of states that Adam claims he is in. Psychologically, it is common to experience emotions that are in conflict with one's beliefs. For example, I might fear flying even though I believe flying to be safe—we discuss such "recalcitrant" emotions below. And epistemically, emotions of this kind do not seem to defeat the fact that one's belief constitutes knowledge. For example, fear of flying does not seem to defeat knowledge that flying is safe—I can fear what I know to be safe. Some might resist this idea on the grounds that emotions such as anxiety and fear at least require that one regards the feared scenario as less than *fully certain* not to obtain. Perhaps it is impossible to fear flying while being *certain* that flying is safe. But, as mentioned above, knowing p is compatible with being less than fully certain that p, so this should not be an obstacle for the present view.¹¹

Taken together, locating the irrationality involved with OCD in its characteristic emotional states thus seems to make room for both self- and world-directed insight. We should note at this stage that our proposal is compatible with there being further irrational aspects of OCD.¹² We think that the insight puzzle can be solved by postulating emotions as the seat of irrationality, and that this proposal has a number of further advantages, but we are open to the idea of there might be multiple irrational aspects. We will not explore this idea further here.

Having outlined our main proposal and shown how it solves the insight puzzle, we now go on to develop it in more detail, and explore several questions raised by it.

4.1 The irrationality of recalcitrant emotions

The main distinguishing feature of recalcitrant emotions is that they endure in spite of standing in a tension or conflict with considered judgments (D'Arms and Jacobson, 2003). An agent's fear of flying may endure even if she deems flying entirely safe, and so may her anger toward her spouse after dreaming that he wronged her, even if she competently judges that no wrongdoing actually occurred. Experiencing such recalcitrant emotions is relatively common (Helm, 2001; Döring, 2015), but they raise serious questions about the *normative* principles that

¹¹ While we recognize that anxiety and fear do not have the same appropriateness conditions, what is important for our context is that both can be recalcitrant along the lines described in §4.1.

¹² We thank an anonymous reviewer for raising this question.

govern the relation between emotions and judgments. In particular, while there is broad agreement that recalcitrant emotions are *irrational*, the explanation for this is debated.

On the *judgmentalist* account of emotions (e.g. Solomon, 1977; Lyons, 1980; Nussbaum 2001), the irrationality of recalcitrant emotions is a matter of straightforward inconsistency. On this account, emotions should, at least in part, be identified with evaluative judgments or beliefs. For example, fearing x is, in part, a matter of judging or believing x to be dangerous. This means that when we harbor recalcitrant emotions, we are irrational by virtue of harboring inconsistent beliefs. Fear of flying while judging flying to be safe amounts to believing flying to be dangerous and believing flying to be safe at the same time. This account is widely criticized, however, for attributing too much irrationality to those harboring recalcitrant emotions, especially given how common it is to experience recalcitrant emotion (Helm, 2001), and, relatedly, for requiring a particularly stark violation of the principle of charity in attributions of mental states (Greenspan, 1988; for a discussion, see D'Arms and Jacobson, 2003, 129-130). This is even clearer when considering self-attribution of recalcitrant emotions. On the judgmentalist account that would amount to simultaneously self-attributing belief and disbelief in the very same proposition – a self-attribution so starkly irrational that it is difficult to even make sense of.¹³

The *neojudgmentalist* account seeks to remedy these issues with accommodating recalcitrant emotions by associating emotions with a cognitive aspect that is weaker than judgment or belief (e.g. de Sousa, 1991; Roberts, 2003; Brady, 2009; 2013).¹⁴ According to this account, rather than involving the judgment or belief that x is dangerous, fearing x involves this weaker-than-belief "construal" of x as dangerous, often termed an "evaluative" construal because of its value-laden nature. Here, the challenge becomes to explain the nature of such evaluative construals in a way that imputes *enough* irrationality to recalcitrant emotion. To highlight this challenge, Helm (2001) draws an analogy between recalcitrant emotions and

¹³ The self-ascription of thoughts, beliefs, or emotions linked to the disorder raises interesting questions with respect to the "self-illness ambiguity" phenomenon (see Sadler 2007; Dings and de Bruin 2022). One might think that it matters for questions about irrationality whether a person ascribes a particular thought, emotion, etc. to herself (for instance to some of her personality traits) or to the disorder. However, while can imagine that a person with OCD who thinks "it's not me, but the illness" that is responsible for the relevant thought, belief, or emotion will assess its occurrence as less disquieting. However, this issue is not decisive for assessments of (ir)rationality, as not being responsible for x is consistent with thinking that it is irrational to have x. For example, I do not think that I'm responsible for my fear of flying (I do not ascribe it to myself but perhaps to the functioning of subpersonal mechanisms), and yet I can still think that such an emotion is irrational to have without violating norms of consistently. Similarly, while personality traits like perfectionism, indecisiveness, and impulsivity are associated with OCD (Philips et al 2010), whether or not an individual with OCD understands her symptoms as stemming from her personality traits or completely disowns them ("it's not me, but the illness") does not change the fact that she can assess her symptoms as irrational. Also, the issue will not be decisive for questions about the locus of irrationality. Thanks to an anonymous reviewer for pressing us to consider this issue.

¹⁴ While we cannot offer a detailed discussion of specific accounts of evaluative construals here, one common feature is that they link emotions to a cognitive state that is weaker than judgment or belief. For example, on Roberts' original formulation, a construal is a perception-like state. Highlighting the difference to cognitive states, Roberts (1988, 188-189) maintains that a construal is neither truth-asserting nor inferred from some other datum. This allows accommodating recalcitrant emotions: in order to be afraid, one does not need to believe that the situation is dangerous. Instead, what is required is a construal of the situation as dangerous.

recalcitrant perceptions in visual illusions, such as the Muller–Lyer illusion. These appear analogous in that they both involve a certain "construal" of a situation, which persists in spite of a conflicting considered judgment. But Helm points out that while recalcitrant emotions are irrational, recalcitrant perceptions are clearly not. For example, it is not irrational to "have a stick half-submerged in water look bent even after one has judged that it is straight" (Helm 2001, 42). So whatever makes recalcitrant emotions irrational cannot be understood by analogy to illusory perceptual "construals."

In the following, we adopt Michael Brady's (2009; 2013) version of neojudgmentalism to account for the irrationality of recalcitrant emotion.¹⁵ Brady begins from the uncontroversial understanding of emotions as responses to states of affairs that are of significance to us, and as involving a number of bodily (e.g., visceral, cardiovascular) changes that help mobilize motivational and cognitive resources. For example, anxiety triggers bodily changes (e.g., rapid respiration and elevated heart rate) that help prepare for dealing with dangerous situations. And prior to their assistance in preparing suitable behavioral reactions, emotions contribute to filtering information and to tackling large amounts of competing environmental stimuli with limited processing capacity (Jenkins & Oatley, 1996). When emotions direct our attention to parts of our environment, they fine-tune attentional mechanisms that evolved to enable the selective detection and processing of the most relevant stimuli. Supporting this view, studies have shown that emotions direct attention to emotionally valenced stimuli and that these stimuli are processed more efficiently than neutral ones.¹⁶ Emotions thus serve to enhance stimulus detection and processing, but they also keep attention focused on the relevant emotionally valanced stimuli and increase sensitivity to them. For example, fear constricts the focus of attention on threatening stimuli, renders it demanding to disengage from them, and assigns a lower priority to the processing of neutral information (Najmi et al., 2012).¹⁷

Taking such findings into consideration, Brady (2009) argues that we should understand emotions as involving *inclinations* to assent to and act on evaluative construals. The mobilization of motivational resources constitutes an inclination to act in light of the relevant evaluative construal. And the mobilization of cognitive resources constitutes an inclination to assent to it. For example, the activation of cognitive resources in anxiety leads to increased attentional focus on signs that support an evaluative construal of the situation as dangerous, inclining the subject to assent to the situation being dangerous and to acting accordingly.

¹⁵ Note that while the details of Brady's account are well suited for our purposes, they are not necessary for the tenability of our overall proposal of identifying the irrationality of OCD with emotional irrationality. All that our proposal requires is that (i) recalcitrant emotion is possible, (ii) irrational, and (iii) psychologically and epistemically compatible with conflicting judgment qualifying as knowledge. These conditions are arguably satisfied by a range of particular accounts. For a recent discussion lending support to this contention, see Grzankowski (2020).

¹⁶ Although this effect may be absent in some emotions, such as disgust, it is particularly strong in emotions characteristic of OCD, such as fear and anxiety. For a review, see Lundqvist & Ohman, (2005).

¹⁷ For a recent account of OCD assigning a prominent role to attention, see Levy (2018).

Crucially, even if the activation of cognitive and motivational resources inclines a subject in this manner, it is possible for her to resist assenting and acting in ways that the particular construal would dictate. For Brady, this is exactly what characterizes recalcitrant emotional experience: while the subject is *inclined* to act on and assent to an evaluative construal, she does not act on it and assents instead an opposing construal of her situation.

This allows Brady to explain the irrationality of recalcitrant emotion without ascribing inconsistent beliefs or judgments. On Brady's view, recalcitrant emotions are irrational in virtue of involving (i) significant *practical and cognitive costs*, and (ii) the *violation of a substantive epistemic norm* (Brady, 2009, pp. 426–29).

As to (i), recalcitrant emotion involves considerable effort in activating motivational resources to prepare for action that would conflict with what her own evaluative judgement of the situation commands. For example, being primed for fight-or-flight conduct in a situation that the subject does not believe demands it is not only a waste of motivational assets, but it potentially distracts her from preparing to act in ways that would help pursue other goals. Moreover, recalcitrant emotion has a noteworthy cognitive cost: while believing that the environment is perfectly safe, the subject wastes resources by remaining increasingly attentive to signs of danger. In addition, aware that the focus and increased sensitivity is inappropriate in light of her judgment of the situation, in order to pursue her goals unobstructed by the recalcitrant emotion, she needs to mobilize additional resources to counteract the attentional bias and the inclination to believe.

As to (ii), being inclined to assent to a construal in light of a conflicting evaluative belief is epistemically irrational in three ways. First, it is epistemically irrational in virtue of *what* construal it inclines the subject to assent to, namely one that she regards as false. Second, it is epistemically irrational in virtue of *how* it inclines her to assent, namely without being based on what she regards as good reasons, since she will take these reasons to support her considered judgment that conflicts with the emotion. And third, it is epistemically irrational in that it inclines her to seek out and even "invent" reasons which would justify her emotional construal.

If Brady is right, this account steers clear of the problems facing both judgmentalist and alternative neojudgmentalist accounts by avoiding attributing contradictory beliefs while nevertheless locating a clear sense in which recalcitrant emotions are irrational. The account is also well suited for our purposes of accounting for the irrationality involved with OCD. Recall that, on our proposal, the irrationality characteristic of OCD is that of recalcitrant emotion. But for this to be compatible with world-directed insight, recalcitrant emotion must be compatible with knowledge that the evaluative construal is false. For example, it must be possible to fear x while knowing that x is not dangerous. On the judgmentalist account of emotion, this is not possible, since, according to the judgmentalist account, emotion is construed as involving belief. But on Brady's account, this is clearly possible, since it is possible to be *inclined* to assent to x being dangerous, while knowing that x is not dangerous.

4.2 Irrationality in OCD without insight

The above account might appear to imply a somewhat paradoxical result, namely, that OCD *without* world-directed insight is not irrational in the way characteristic of OCD. Not having world-directed insight amounts to not being aware that the contents of one's obsessive thoughts are false, but instead falsely believing that they are true. So, if recalcitrance is a matter of there being a conflict between one's emotions and beliefs, the emotions of non-insightful OCD sufferers would not count as recalcitrant, and hence not as irrational in the way we claim is characteristic of OCD.

It seems to us, however, that this apparent consequence depends on an overly simple understanding of emotional recalcitrance. We said above that the main distinguishing feature of recalcitrant emotions is that they endure in spite of standing in tension or conflict with considered beliefs or judgments. What is important to note, however, is that emotions can be recalcitrant without standing in *actual* conflict with one's beliefs. What is essential to recalcitrant emotions is that they are *insensitive* to one's considered judgments or beliefs, but such insensitivity can obtain without actual conflict.

To illustrate this possibility, imagine an OCD sufferer who fears catching AIDS from a towel, despite her considered judgment that this is not possible. This makes her fear straightforwardly recalcitrant, since it obtains in spite of her judgment. But imagine, now, that the cognitive resources mobilized by her fear cause her to change her mind, such that she comes to believe that catching AIDS from a towel *is* in fact a real possibility.¹⁸ This change of mind resolves the tension between her emotion and her beliefs. But it would be odd to conclude from this that her emotion is no longer recalcitrant, since the emotion is what caused the belief, and it may, and most likely will, remain insensitive to her beliefs. We can understand this in terms of counterfactual dependence: if the fear of catching AIDS from a towel would persist even if she were to believe that it is *not* possible to catch AIDS from a towel, her fear is insensitive to her belief, and should thus be considered recalcitrant.

If recalcitrance is a matter of insensitivity to beliefs, and not merely a matter of actual conflict, OCD without insight can involve recalcitrant emotion and, hence, the characteristic kind of irrationality. In this case, even if there is no actual conflict of attitudes, the OCD sufferer is still inclined to assent to what she regards as false, and to do so in a way that she doesn't regard as supported by good reasons, in the sense of this inclination being *insensitive* to what she regards as false, or as supported by good reasons.

4.3 Recalcitrant emotion and compulsive behavior

In this section, we provide some considerations in favor of the view that recalcitrant emotions are well placed to explain the second of the main aspects of OCD, namely, compulsive

¹⁸ For an interesting discussion of how anxiety causes belief changes in OCD, see Vazard (2021).

behavior. In particular, we argue that they can explain two important features of compulsive behavior, recently pointed out by several authors.

As to the first feature, recall Noggle's (2016) observation that compulsive behavior in OCD typically involves some severely limited version of how we would expect someone to act if they *believed* the contents of their obsessive thoughts. For example, someone who believed that the house might burn down unless the light switch is flicked exactly 30 times would presumably call an electrician or warn her family, but an OCD sufferer with that obsessive thought is more likely to simply flick the switch 30 times. As mentioned, Noggle takes this to suggest that obsessions are *quasi-beliefs*, which he defines as states that involve a limited version of the motivational profile of beliefs. As noted, this explanation falls prey to the insight puzzle, and it also seems unsatisfyingly *ad hoc* to simply postulate a new state with the right limitations in its behavioral profile.

We think that associating OCD with recalcitrant emotion enables a more satisfying explanation. Recalcitrant emotion involves an *inclination* to act in accordance with the relevant evaluative construal. For example, if a person comprehends a situation or possibility as dangerous, she will be inclined to act in ways that are in accordance with her comprehension of the situation. This inclination is typically suppressed by the OCD sufferer's considered judgment that the situation is *not* dangerous. But when this suppression fails, the inclination will result in behavior. However, there is no reason why this suppression should be an all-ornothing matter. That is, there is no reason to suppose that OCD sufferers will not typically be able to uphold *some degree* of suppression of the behavior that the recalcitrant emotion inclines one towards. Explaining compulsive behavior in terms of recalcitrant emotion thus explains why compulsions often appear as "half-way" expressions of beliefs.

In a footnote, Noggle (2016, p. 666) considers but rejects an explanation in terms of recalcitrant emotion. He accepts that anxiety in OCD qualifies as a recalcitrant emotion, but points out that the compulsive behavior in OCD is typically much more complex than the simple avoidance behavior caused by recalcitrant emotion in, e.g., phobias—so much so, he claims, that it is not plausible to regard compulsive behavior in OCD as generated mainly by recalcitrant emotion. But we see no reason why recalcitrant emotion should be unable to incline one towards complex behavior like that seen in OCD. After all, anxiety and fear, like other emotions, can have complex objects, in the sense that they can incline one towards accepting and acting on complex evaluative construals. For example, fear that the house might burn down unless the switch is flicked 30 times inclines one towards assenting to an evaluative construal of that complex possibility as dangerous, with a correspondingly complex behavioral inclination. For this reason, we don't think this objection is compelling.

The second important feature of compulsive behavior that recalcitrant emotion is well placed to explain is the experience of compulsive behavior as something that is engaged in to achieve relief from a buildup of tension that "wears down" one's ability to suppress the behavior (Zaragoza, 2006). Compulsive behavior in OCD shares this feature with compulsions in a range of other psychological disorders like kleptomania (compulsive stealing) and trichotillomania (compulsive pulling of hair), where a similar tension-relief pattern is found: a rapidly swelling sense of anxious tension immediately before stealing or pulling hair is followed by a sense of temporary relief once the compulsive act has been completed (Zaragoza, 2006). In a similar way, patients with OCD speak of anxious tension building up, which is reduced through behaviors that bring a temporary relief (Ferrão et al. 2012).¹⁹

While compulsions in OCD are widely understood as maladaptive coping mechanisms that aim to deal with emotional distress (Gillan & Sahakian, 2015), the literature conceives of the link between compulsive behaviors and anxiety as *indirect*: compulsive behaviors are deployed to neutralize obsessive thoughts, which then reduce anxiety (e.g., Jacob et al., 2014). But there are at least two issues with this widely accepted model when it comes to explaining the above tension. First, it fails to account for the *similarity* of the tension-relief pattern found across disorders involving compulsions, since most of these disorders do not involve responding to obsessions. If compulsions in OCD are primarily responses to obsessions, then the model requires that they be understood in a way that is very different from compulsions in other disorders, despite their apparent similarity. We think that this is an undesirable consequence. Second, it is unclear why obsessions should give rise to a buildup of *tension*, from which compulsive behavior might give relief.

Again, we think that associating OCD with recalcitrant emotion enables a more satisfying explanation. First of all, it is easy to see how recalcitrant emotion, and especially recalcitrant fear and anxiety, could lead to a buildup of tension. After all, these emotions prime and incline the subjects undergoing them to think and act as if they are in danger against their better judgment, which means that it will require effort to suppress these inclinations, until the subjects eventually give in to the inclinations in order to relieve the tension. This also means that we can account for the similarity of how compulsions are experienced across compulsive disorders. We don't want to commit to the view that *all* compulsive disorders involve recalcitrant emotion (although we don't find that idea implausible). But even so, associating OCD with recalcitrant emotion points to an important common factor between OCD and other compulsive disorders: a strong motivational inclination or impulse (which may or may not be constituted by recalcitrant emotion) that the subject attempts to suppress, which in turn leads to a buildup of tension that is only relieved when the subject gives in to the inclination or impulse. OCD differs from other compulsive disorders in that obsessions are part of what

¹⁹ It is worth emphasizing that underlining this similarity does not mean denying important differences between OCD and "impulse-control disorders" (kleptomania, pyromania, intermittent explosive disorder, pathological gambling, and trichotillomania). While it has been suggested that OCD and impulse-control disorders lie along an impulsive/compulsive spectrum (with OCD closer to the more compulsive end and impulse-control disorders closer to the impulsive end) (Hollander and Wong, 1995), resemblances in many domains coexist with substantial differences (for a review see, Potenza et al 2009).

causes the motivational state. But that does not change the fact that in our model, OCD compulsions have a proximate cause that is similar to the causes at work in other compulsive disorders.

5. Implications for therapy

In this final section, we explore some further theoretical and therapeutic implications of our account of the irrationality involved in OCD. The currently most common psychotherapeutic approaches to treating OCD are Exposure and Response Prevention (ERP) and Cognitive Therapy (CT). Although both are considered to fall within the broader realm of Cognitive Behavioral Therapy (CBT), they build on two distinct psychological models of OCD. We cannot offer a comprehensive discussion, but will focus on a key difference that we illuminate drawing on Adam's account. While the themes of OCD symptoms are varied (e.g., violence, contamination, responsibility for harm, sex, symmetry) (McKay et al., 2004), Adam's case is illustrative because the obsession with contamination is very common (Rasmussen & Eisen, 1992). Based on the view proposed in this paper, it seems that therapeutic approaches focusing on emotional change like ERP will offer a more direct way to deal with the irrational elements that propel the main symptoms than approaches that focus on affecting changes in dysfunctional beliefs.

ERP is considered to be the first-line psychotherapy for OCD (Ost et al., 2015; Skapinakis et al., 2016). It is based on theories of conditioning, according to which obsessional fears acquired by classical conditioning (which links a stimulus and an involuntary response) are maintained by operant conditioning (which links a voluntary behavior and an outcome). On this view, Adam's obsessional fear of acquiring AIDS is preserved because the compulsive behavior is negatively reinforced by reducing distress and the perceived likelihood of the dreaded outcome. While this general model serves as the basis of ERP, the intervention involves detecting the stimuli that activate obsessive thinking patterns and emotional reactions, classifying the content of obsessions and compulsions, identifying the feared outcome, and establishing a "fear hierarchy" that orders the stimuli in terms of how much distress they cause. Under the supervision of the therapist, patients then confront increasingly distressing stimuli, gradually work their way up the fear hierarchy, and habituate to the stimuli while neutralizing compulsive responses. The gradual exposure to fear-eliciting stimuli is thus combined with instructing patients to delay or abstain from performing the compulsive behavior (Abramowitz, 2006).

To illustrate how ERP works, consider Adam's description of a situation in which rubbing his eyes in a hospital setting has triggered a number of intrusive thoughts: "What if there was blood on my fingers? Who had sat here before me? What were they in here for? Was it AIDS? Had they left traces of blood?" Instead of reacting in his usual manner—engaging in checking behaviors and seeking reassurance to decrease the anxiety—ERP encouraged him to rub his eyes again, or at least abstain from his usual behavioral response (checking his hands for blood, etc.). While Adam notes that it took three days for his anxiety to recede, ERP predicts that he would eventually be able to tolerate uncertainty and emotional distress without engaging in compulsive behavior. Importantly, the idea with the exposure is not so much to gather evidence against a belief that the feared consequences can occur, but to learn to abstain from the routine behavioral response that helps maintain the condition and exacerbate the symptoms.

CT is based on cognitive theory (Rachman, 1998; Salkovskis, 1996) and takes as its point of departure evidence that unwanted intrusive thoughts are common in the general population (e.g., Freeston et al., 1991). CT posits a continuity between intrusive thoughts in the general population and clinical obsessions, maintaining that the distinguishing feature of OCD is that the intrusive thoughts are misinterpreted in light of dysfunctional or irrational beliefs about their significance and implications. Obsessions arise when these intrusive thoughts are misinterpreted and lead to emotional distress and compulsive behaviors for averting harm. So while irrational beliefs are seen as the most important predisposing factors and largely responsible for the symptomatology of OCD, compulsions are understood as maladaptive coping mechanisms that aim to neutralize the emotional distress triggered by those beliefs (Gillan & Sahakian, 2015). Typical beliefs include the overestimation of threats, increased personal responsibility, and forms of "thought-action fusion" (e.g., the belief that thinking about action x is equivalent to actually carrying out x) (Gillan et al., 2014).

According to CT, in Adam's case, what might otherwise be perceived as unwanted but harmless intrusive thoughts about AIDS lead to severe emotional distress, because they are interpreted in light of irrational beliefs about the probability of disease transmission. Correspondingly, the main target of psychological interventions in CT are dysfunctional beliefs. The idea is that once Adam's irrational beliefs about disease transmission are identified, the therapist proceeds by soliciting Adam to interrogate their rationality, drawing his attention to disconfirming evidence, and helping clarify why the evidence should defeat the beliefs. This is sometimes combined with behavioral experiments in which patients are prompted to develop a quasi-scientific approach to testing the relevant beliefs on empirical grounds (Steketee, 1999). The idea is that once these beliefs are corrected, the unwanted intrusive thoughts will no longer be perceived as menacing, and the patient will be able to control the obsessive-compulsive patterns, which will lead to the reduction of the emotional distress (Clark, 2004; Abramowitz, 2006).

In clinical guidelines, ERP is the frontline treatment for OCD (Katzman et al., 2014; APA, 2007) and remains the most empirically supported psychotherapeutic intervention for the condition (Rector et al., 2019). CT is less empirically established, but it has been found effective in altering appraisals and beliefs implicated in the development and maintenance of obsessions and compulsions (e.g., Whittal et al., 2010). Of course, OCD is a disorder with a

range of phenotypic expressions, and besides the current state of evidence, a range of factors will contribute to decisions about the choice of treatment between CT and ERP (e.g., the nature of the clinical setting, adherence assessment, clinician skills, symptoms subtypes and severity).

In Adam's case (and cases that are sufficiently similar) the view proposed in this paper favors ERP over CT because it seems that ERP's focus on emotional change constitutes a more direct way to dealing with the irrational elements that propel the main symptoms. That said, it is, of course, correct that the type of cognitive change that CT aims to achieve can lead to behavioral improvement, while the type of exposure-induced emotional change offered in ERP can lead to cognitive change. In fact, some researchers argue that "there is sufficient evidence that the bidirectional relationship between the two interventions (cognitive change leads to behavioral improvement; exposure leads to cognitive change) makes the distinction unnecessary" (McKay et al., 2015, p. 243). Nonetheless, when it comes to cases of insightful OCD like Adam's, it seems less suitable to focus on gathering evidence to effectuate belief change—his beliefs are already accurate and still unable to neutralize the emotional reaction. This is not to deny that focusing on beliefs as CT does may contribute to better control of his emotional reaction and support behavioral improvement, perhaps by increasing the salience of the relevant beliefs. But as far as we can see, clinical research has not yet provided firm evidence of a mechanism that would give us reasons to think that focusing on belief change in Adam's case will be the more efficient alternative.

6. Conclusion

A pervasive assumption in both the psychiatric and philosophical literature is that the seat of irrationality is located in the obsessive thoughts characteristic of OCD. Building on a puzzle about insight into OCD, we challenged this assumption, and argued that the irrationality of OCD should instead be located in the *emotions* that are characteristic of OCD, such as anxiety or fear. In particular, we proposed to understand the irrationality of OCD as a matter of harboring *recalcitrant* emotions. We argued that this account not only solves the puzzle about insight, but also explains some otherwise puzzling features of compulsive behavior. As a final point, we showed how the proposal gives reason to prefer therapeutic interventions focusing on emotional regulation rather than belief change.

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