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# Transparency and the Mindfulness Opacity Hypothesis

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## Abstract

Many philosophers endorse the Transparency Thesis, the claim that by introspection one cannot become aware of one's experience. Recently, some authors have suggested that the Transparency Thesis is challenged by introspective states reached under mindfulness. We label this the Mindfulness Opacity Hypothesis. The present paper develops the hypothesis in important new ways. First, we motivate the hypothesis by drawing on recent clinical psychology and cognitive science of mindfulness. Second, we develop the hypothesis by describing the implied shift in experiential perspective, the scope of introspectable qualities, and the level of skill. Third, we defend the hypothesis against various philosophical arguments. We conclude that the Mindfulness Opacity Hypothesis is empirically and theoretically well motivated and supported.

## Keywords:

Transparency, introspection, mindfulness, pain, Representationalism, experimental philosophy

## 1. Introduction

The Transparency Thesis (TT) is widely endorsed by philosophers. Following the philosophical mainstream, we can state TT as a phenomenological thesis:

*TT.* When an individual is introspecting their experience, only objects and properties of the objects of their experience can appear to them.<sup>1</sup>

TT claims that individuals cannot be directly introspectively aware of their experiences or properties of their experiences (Harman 1990). If one tries to gain introspective awareness of one's experience, one always 'looks right through' one's experience to the object of one's

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<sup>1</sup> See for example Kind (2003), Nicholson (2014), and Mitchell (2020).

experience. Phenomenal properties always appear as properties of the objects represented or as objects represented by one's experience. This means that TT disallows that subjects can become introspectively aware of phenomenal properties that appear as non-object properties, where non-object properties are phenomenological properties that do not appear as representational objects or as properties of these. Although TT is a phenomenological thesis, the thesis is often used as a crucial piece of evidence for prominent metaphysical theories of consciousness and perception, such as strong Representationalism (Dretske 1997; Tye 1995, 2000: 46-49; Byrne 2005, 2011; Harman 1990).

In this paper, we argue that certain forms of mindfulness practise enable a kind of introspective awareness that is in conflict with TT. Other philosophers have suggested that particular forms of attentive awareness trained in some forms of mindfulness practice are best understood as forms of introspection that violate TT (Metzinger 2013; see also Davis 2018). We call this the *Mindfulness Opacity Hypothesis* (MOH). Yet, MOH has remained underdeveloped in two important respects. First, it remains unclear exactly how introspective awareness under mindfulness is supposed to be in conflict with TT. TT allows that individuals can attend to their experiences and describe them on the basis of their properties. The thesis even allows that subjects can *think* of phenomenological properties as non-object properties when they are engaged in introspection. It is not clear how MOH opposes TT on these matters. Second, it remains unclear what would motivate the claim that mindfulness practice can involve a form of introspection that is in conflict with TT. What kind of evidence could support such a claim? We address these two questions.

The paper is structured as follows. In Section 2, we provide the necessary background for understanding TT. Section 3 motivates MOH by drawing on statements by clinical psychologists and cognitive scientists about the special features of mindfulness introspection. These statements are evidence for our claim that mindfulness researchers generally endorse MOH. In Section 4, we examine what MOH implies about transparency and opacity. We argue that MOH could involve shift in experiential perspective, varying degrees of scope, and various levels of skill. In Sections 5 and 6, we examine whether there are any objections open for a TT-supporter that could hinder MOH from getting off the ground.

## **2. Transparency Thesis**

To understand the argument of this paper, it is important to be clear about basic aspects of TT. The central claim of TT is often explained by the analogy with a painting (Harman 1990). Imagine perceiving Delacroix' famous *Liberty Leading the People*. You can perceptually experience or be aware of the properties of the painting in two ways. You might experience the colours and forms as properties of the represented objects in the represented scene. You might perceive the red colour as a part of the French flag and yellow folding structure as the texture of the dress of the woman holding the flag. However, you might also perceive the colours and forms as non-object properties of the painting itself. You might look at the painting in such a way that the red colour and folding lines now genuinely and perceptually appear as properties of the painting. TT claims that introspecting one's experience is different from perceiving a painting in the following sense. When we introspect our experience, no properties can genuinely appear to us as non-object properties.

The painting analogy necessitates two clarificatory remarks. First, TT is a broad thesis about all kinds of phenomenal states and experiences. Philosophers have often introduced TT as a thesis about introspection of perceptual experience (Tye 2002; Harman 1990). TT-supporters have argued that the introspection of such experiences, like that of vision, does not reveal any ‘mental paint’ or qualia. But a more general claim is typically implied. If TT is to count as evidence for metaphysical positions like strong Representationalism, it must cover all kinds of phenomenological characters, including pain experiences and more cognitive states like conscious thinking. We shall approach TT as this broader thesis (Aydede 2019; Kind 2003).

Second, the painting metaphor can also help us understand what kinds of introspective awareness TT allows and disallows. Philosophers endorsing TT often consider introspection to be of a rather simple nature. To use the example of pain in the knee, introspecting one’s experience is in some sense simply to prefix the pain experience with ‘I am aware that \_\_\_’ (Tye 2002: 138; for a related view of introspection, see Evans 1982: 227). TT allows that individuals can in some sense be aware of their own experiences. It permits that individuals can acquire an increased awareness of the fact that they have this experience of pain in their knee. This would allow that individuals can *think* about the phenomenal properties of their experience as non-object properties. For example, an individual undergoing pain might think to herself that the involved phenomenal properties (e.g. the stingingness, bodily location, etc.) are not properties of her bodily damage, but instead non-object properties. Of course, TT-supporters like strong Representationalists would claim this kind of thinking to be erroneous, since there are no non-object properties metaphysically speaking.

In contrast to the subject’s cognitive classification of her own experiences, TT is incompatible with a kind of introspective awareness where some phenomenological properties genuinely *appear* to the subject as non-object properties. We might draw on the painting analogy again to flesh out this difference. You can think about the paint of a painting as a non-object property without this genuinely appearing to you as such (the painting might be a perfectly deceiving *trompe l’oeil*). When the paint genuinely appears to you as non-object property, the paint property has an experiential nature: you experience the paint and its properties. TT denies that subjects could have an experience in which phenomenological properties genuinely appear as non-object properties in an experiential sense.

The dispute over TT is then the question of whether phenomenal properties can genuinely appear to us in our introspective awareness as properties of the relevant experience. If mindfulness introspection is to constitute a problem case for TT, it is not sufficient that mindfulness introspection involves *thinking* of properties as non-object properties. Mindfulness introspection must involve a qualitative dimension where phenomenal properties are experienced as non-object properties. Multiple philosophers have already argued that TT is implausible. Our argument is in line with arguments according to which special forms of introspective practice are in conflict with TT. Philosophers have pointed to possible conflicts between TT and oblique reflection (Loar 2002), certain kinds of conscious meta-representation (Nicholson 2014), an inward focus (Kind 2003), or the phenomenology of active attention (Watzl 2018). We point to special forms of introspection in some mindfulness practices.

We can frame the challenge posed by certain mindfulness practices by drawing on a common conception of opacity. Opacity and transparency are mutually exclusive in the

following way: An experience is opaque under introspection to an individual if and only if when the individual is introspecting their experience, some properties appear to them as non-object properties. This is the conception of opacity implied by the *Mindfulness Opacity Hypothesis* (MOH). We shall not offer conclusive evidence for MOH. Our main purpose is to clarify and motivate the conditional: If MOH is true, then TT is false. We offer initial provisory evidence for MOH and sketch the kind of future work that would be needed to establish it in a more conclusive manner.

### 3. Mindfulness introspection

Mindfulness has its roots in Buddhist practice (Shonin *et al.* 2015). This paper focuses on mindfulness as understood and applied in contemporary Western research and psychotherapy (for discussions of the Buddhist sources and background, see Repetti 2022). Clinical psychologists and cognitive scientists often understand mindfulness as a metacognitive operation in which individuals intentionally increase their attention to their own present state of experience, throughout extended periods, without evaluating or affectively reacting to it (Jankowski & Holas 2014; Bishop *et al.* 2004; Dorjee 2016; Wielgosz *et al.* 2019). Due to its positive effects on mental health, mindfulness is today a core element in contemporary clinical psychology and widely researched. Long-term mindfulness practice also seems to exhibit certain biomarkers involving morphology, connectivity, and functionality of the brain (Goleman & Davidson 2017; although, see Vago 2022 for a critical assessment of this literature).

Many clinical psychologists have made statements that seem to strongly support MOH. They often stress the crucial difference between cognitively categorising and introspectively experiencing a mental state as a mental state:

‘The former [i.e. the metacognitive operation of introspectively *judging* a thought to be a mental state], even if frequently repeated, can remain isolated “cold” information, whereas the latter [i.e. the metacognitive operation of *experiencing* conscious mental states as mental states], is likely to have profound effects on our views of everything, and can radically affect the way we live from moment to moment. Applied to our introductory example, this contrast highlights the difference between, on the one hand, actually experiencing thoughts as thoughts (that is, as events in the mind, rather than as direct readouts on reality) in the moment that they occur, and, on the other hand, simply thinking about thoughts as “other than facts”.’ (Teasdale 1999: 147)

Clinical psychologists frequently emphasise the unique therapeutic gains of such an experiential insight (Shapiro *et al.* 2006).

Philosophical readers might stress that the above quote only concerns cognitive states—it refers to experiencing *thoughts* as mental states. By contrast, TT is often phrased as a thesis about perceptual experience, as highlighted in Section 2. This raises important questions about how to understand MOH. Do researchers think that only cognitive states can be opaque under mindfulness introspection, whereas perceptual states might remain transparent? Or maybe, could researchers understand the opacity of thoughts to be different from the opacity of perceptual states?

One way to think of the opaqueness of cognitive states would be to draw on the idea of cognitive phenomenology. This is the idea that cognitive states, for example conscious thoughts, have phenomenal character that cannot exhaustively be accounted for as sensory phenomenal character (Chudnoff 2015). If one endorses this idea, one could understand mindfulness as involving introspective awareness of cognitive phenomenological properties appearing as non-object properties. If a TT-supporter is committed to strong Representationalism, they are most likely deniers of proprietary cognitive phenomenology (Tye & Wright 2011).

MOH is not committed to the existence of a proprietary cognitive phenomenology. Assume that you deny cognitive phenomenology. Thoughts could still be introspected as opaque, namely by their involvement of sensory phenomenological properties. Take the depressive thought of ‘my life is hopeless’. This thought involves multiple sensory qualities like inner speech, mental imagery, or some kind of bodily-affective feeling. Introspecting this thought as opaque would then involve that these sensory qualities genuinely appeared to the subject as non-object properties. That is, the properties would not appear as properties of the objects represented by these sensory states. Hence, the conflict between MOH and TT does not presuppose that MOH accepts cognitive phenomenology. MOH is consistent with the phenomenology of thought being explained both by a proprietary cognitive phenomenology or by sensory phenomenology, as long as the phenomenal properties of the cognitive process can appear as non-object properties.

Mindfulness researchers do not only focus on mindfulness introspection of cognitive states and processes. Independently of the philosophical issues concerning cognitive phenomenology, mindfulness researchers often describe the mindfulness introspection of perceptual states (see also the discussion of pain in Section 4). An example would be the influential metacognitive model of mindfulness proposed by Jankowski and Holas (2014: 67). The authors state that the metacognition involved in mindfulness ‘imposes at least two levels of cognition: (1) the lower level which refers to the qualia (basic qualities of experience such as perceptions) occurring in the present, and (2) the higher level constituted by awareness of the flowing qualia.’ (Jankowski & Holas 2014: 68)

Jankowski and Holas (2014: 68) go on to stress that mindfulness can be seen as involving a form of meta-awareness, or meta-level, at which ‘qualia are re-represented in the context of related meta-knowledge and form meta-experiences’. Meta-experiences are here experiences of experiences and appear ‘when a person not only thinks about the content of experience as events in the mind, but when he/she sees them as such’ (Jankowski & Holas 2014: 70). These authors include perceptual states as targets of this meta-awareness.

Another example is the idea of so-called dereification from the cognitive science of mindfulness (Lutz *et al.* 2015; Dunne, Thompson & Schooler 2019). Dereification concerns the state in which individuals come to experience their mental states less as a manifestation of reality and more as mental states. Dereification is described as ‘experiencing thoughts as mental events, and not as the things that they seem to represent’ (Dunne, Thompson & Schooler 2019: 307), and as the process where ‘thoughts lose their representational integrity and are experienced simply as mental events’ (Lutz *et al.* 2015: 644). Although thoughts are again the chosen example, it is clear from the context that these authors are committed to dereification covering also perceptual states. They describe dereification as a phenomenon applying to all



kinds of mental states in which ‘phenomenal content is experienced as just a mental process’ (Lutz *et al.* 2015: 644).

In general, mindfulness researchers seem to think that most, if not all, kinds of perceptual states can appear as opaque (see Jankowski & Holas 2014; Dunne, Thompson & Schooler 2019). However, it should be acknowledged that, as practiced in contemporary Western contexts, mindfulness often involves subjects sitting down with closed eyes and turning their attention away from the external environment to their internal states. Consequently, bodily sensations are commonly stressed as the type of perceptual states that are opaque under mindfulness (Lutz *et al.* 2015).

This view of mindfulness as involving a higher-level awareness of one’s own experiences as experiences—whether cognitive or perceptual in nature—is adopted by a number of psychologists and cognitive scientists studying mindfulness (e.g. Shapiro *et al.* 2006; Lutz *et al.* 2008; Segal, Williams and Teasdale 2002; Hayes *et al.* 1999; Hayes *et al.* 2011; Dahl *et al.* 2015; Greeson and Brantley 2009; Mogi 2013). Throughout this literature, we find researchers pointing to the difference between a form of metacognitive introspection where an individual relates merely cognitively to their first level experience and a form of introspection where an individual relates in a form of new experience to their first-level experience. The latter form of introspection is often supposed to be a special form of awareness of one’s ongoing flow of consciousness.

It is also worth stressing that a number of different notions of opacity seem to be operative in the scientific literature on mindfulness. We can capture some of this variation by distinguishing between *opacity as non-object awareness* (where individuals have introspective awareness of phenomenal properties that appear as non-object properties) and *opacity as construction* (where the content of one’s experience appear as a construction of one’s own mind). This latter notion of opacity is common in the mindfulness literature, also among philosophers (Metzinger 2003; Letheby 2021). For example, cognitive scientists Lutz, Mattout, and Pagnoni (2019: 169-70) write:

‘As the meditator becomes more acquainted with the practice, he/she may acquire the skill to remain dynamically poised between the subtle anchoring to the prescribed attentional target and the increasing pull of the spontaneously arising mental content. It is tempting to see this condition as a kind of “lucid daydreaming”, optimally suited for the phenomenal “opacification” of mental processes. A mental event is said to be transparent when we have conscious access to its content, but not to its non-intentional structure or construction process. Crucially, transparency provides the phenomenal quality of being directly “in touch” with the represented entity, and is, therefore, linked to our subjective confidence in its “reality”. The opacification of mental events during meditative practice is thus equivalent to fostering their dereification, so that their provisional, constructed, dependent and ultimately impermanent nature begins to be intimately realized.’

It remains an open question how opacity as non-object awareness and opacity as construction relate to each other (do they imply each other in some way or are they identical?). A TT-supporter might respond that opacity as construction seems fully compatible with TT.

Introspecting one's experience as having the properties of being 'provisional, constructed, dependent and ultimately impermanent' does not have to involve that these properties appear as non-object properties. One can gain these insights through more indirect means. Subjects might simply notice the shifting content of their experience through mindfulness, and through this they might inferentially realise that their mental states are provisional, constructed, dependent and ultimately impermanent. TT would only disallow are more direct and immediate awareness of appearing non-object properties. This reply stresses a general issue. The psychologists and cognitive scientists quoted above have probably not developed their views of mindfulness on the background of the precise philosophical distinctions and discussions of TT. The above statements by Teasdale (1999), Jankowski and Holas (2014), and Dunne, Thompson, and Schooler (2019) might therefore be too ambiguous to justify interpreting them as committing the authors to the idea of mindfulness involving opacity as non-object awareness.

We return to this issue in Section 5, where we discuss the relevance of experimental philosophy. For now, let us stress that although these interpretative issues do obtain, the above statements warrant acceptance of the claim that many mindfulness researchers endorse MOH. Concerning the two different notions of opacity, we interpret the relevant psychologists and cognitive scientists as stating that opacity as construction is sufficient for opacity as non-object awareness. We think this is reasonable given the general argumentation among authors like Lutz, Mattout & Pagnoni (2019). These interpretations also seem to align with how other philosophers have interpreted the relevant literature (Metzinger 2013; Letheby 2021).

#### **4. Elaboration: perspective shifting, scope, and skill**

In Sections 2 and 3, we argued for the following conditional: if the Mindfulness Opacity Hypothesis (MOH) is true, then the Transparency Thesis (TT) is false. In Section 3, we provided evidence in favour of the antecedent. We now proceed by providing a line of philosophical interpretations of MOH. These interpretations explicate MOH philosophically in terms of perspective shifting, introspective scope, and skill. To be sure, our interpretations do not exhaust all the possibilities by which one could interpret or elaborate MOH. Future work on MOH might explore alternative routes.

We might initially ask, if experience can be opaque under mindfulness introspection, what kind of change in consciousness does mindfulness introspection involve? One answer would be that mindfulness involves a change in perspective such that (some) phenomenological properties that prior to mindfulness introspection appeared as properties of the objects represented now appear as properties of the experience—that is, properties that appeared as object-properties transform into appearing as non-object properties. Notice that most mindfulness researchers and practitioners view mindfulness as an introspective skill (Wielgosz *et al.* 2019). We expect that this transformation of the appearance of properties would demand practice and sufficient skill level in mindfulness.

What would be an example of this shift in perspective and its involved transformation? Reading the mindfulness literature, a paradigmatic example could be that of affective properties in pain experience. These properties have to do with the qualities of badness, hurtfulness, or displeasure typically involved in pain experience (Corns 2014). The mindfulness literature contains multiple descriptions of mindfulness meditators going through a shift of perspective



by which the affective properties of their pain experience transform from appearing as object-properties of the involved extramental representational object (i.e. their bodily damage) to appearing as non-object properties of their own mental states. Consider the following reports by high-level mindfulness meditators:

‘Pain becomes unbearable when the mind takes over saying “it is unbearable, it shouldn't happen to me, it's horrible”. Meditation [or mindfulness] showed me that the agent that distinguishes pleasant and unpleasant physical sensations, painful or not, is a mental agent, not a physical one.’ (Poletti *et al.* 2021: 1591)

‘[Mindfulness or meditation is] an opportunity... to see clearly how the mind reacts to pain. Habits become very clear. Through meditation you can see what your mind does, self-pity coming out, all worries and fears, everything comes up, and you can work with it.’ (Poletti *et al.* 2021: 1592)

Such introspective reports stress that mindfulness involves introspective awareness of feelings of worry, self-pity, manifestation of habits, disappointment, emotionally laden evaluation, etc. They also stress that meditators gain the introspective awareness that the negative affective properties that manifest the badness, hurtfulness, or displeasure of their pain are not properties of their bodily state but their own mind or mental state. For example, the affective properties of one's knee pain would transform from appearing as properties of the condition of one's knee to genuinely appearing as non-object properties of one's own mental state. This interpretation aligns with the views of many researchers (see also Goleman & Davidson 2017: 147-8).

Tying back to the issues of cognitive phenomenology in Section 3, one might think that this shift in perspective is only a matter of introspecting cognitive mental states as opaque. Worry, self-pity, and evaluation are not perceptual states. Yet, this is an inadequate understanding of the present idea. The present idea is that subjects engage in mindfulness introspection of their pain experience. Pain is a complex state but it is obviously sensory or perceptual in some important sense. It is the affective properties of one's pain experience that shift from appearing as features of one's bodily damage to appearing as properties of one's own mental state. It is the pain state that becomes opaque with respect to its affective properties (again, see Poletti *et al.* 2021; Goleman & Davidson 2017).

One might ask now whether it is only affective properties that can be introspected opaquely through mindfulness. Mindfulness researchers seem to think that other types of properties can appear as non-object properties as well. To capture this conceptually, we might distinguish between global and local transformation. This distinction stresses that we can understand the transformation in mindfulness as varying in scope and as occurring on a spectrum. The larger the number of types of properties that can transform to appearing as non-object properties, the more *global* the transformation is. The more restricted the transformation is to a limited type of properties (say, limited to tactile properties), the more *local* it is. The degree to which a transformation is global versus local is determined by how many types of experiential properties are shifted to appearing as non-object properties.

We might view the above suggestion concerning pain experience as a more local transformation. Maybe only affective properties involved in the pain episode can appear as non-object properties, leaving it open that sensory properties still appear as properties of the represented object (the bodily damage). However, the statements from the previous Section 3 suggest that mindfulness researchers think that dedicated mindfulness training can enable very global transformation. For instance, Lutz and colleagues write that ‘thoughts [and other mental states and processes] lose their representational integrity and are experienced simply as mental events’ and ‘phenomenal content is experienced as just a mental process’ (Lutz *et al.* 2015: 644). These authors seem to stress that any property present in one’s awareness can appear as a non-object property (see also Dunne, Thompson & Schooler 2019; Lutz, Mattout & Pagnoni 2019: 169-70; see also Davis 2016 for a relevant philosophical discussion).

Statements from mindfulness practitioners seem to align with this. Take again the experience of pain as an example. High-level mindfulness meditators participating in pain studies make claims like ‘as, what pain finally is? It is just a mental perception’ (Poletti *et al.* 2021: 1592), and ‘pain is... the mind, it has no essence in the end. Although you [prior to the mindfulness introspection] feel it physically to a certain degree’ (Poletti *et al.* 2021: 1598). One could reasonably interpret these statements as making the claim that *all* properties of pain experience (e.g. location, itchiness, heat, etc.) can transform into appearing as non-object properties under mindfulness (see also Goleman & Davidson 2017: ch. 8).<sup>2</sup>

Mindfulness researchers and practitioners often seem to think that the more skilled a mindfulness meditator is, the broader scope of properties she can introspect as non-object properties (e.g. Lutz *et al.* 2015). Only high-level mindfulness introspectors can realise the global opacity—less skilled introspectors are restricted to more local forms. Furthermore, high-level mindfulness introspectors have greater introspective flexibility. They can fluently shift between global and local forms of opacity depending upon their goals. Consequently, opacity is an introspective accomplishment of mindfulness. This separates MOH from other challenges to TT (e.g., Loar 2002; Kind 2003), where opacity is not stressed as depending on one’s level of skill.<sup>3</sup>

One way to give a philosophical spin on the claim that under mindfulness introspection phenomenal properties can be transformed from object-properties into non-object properties of one’s experience would be by using the notion of mental paint (Block 1996). Mental paint refers to phenomenal properties that play some representational role (i.e. they enable representation of objects and their features), although these phenomenal properties are in fact non-object properties. Just like ordinary paint on a canvas enables representation of objects but is itself a non-object property of a painting, we could understand mindfulness introspection of

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<sup>2</sup> Despite the fact that pain experience is commonly used in objections against TT, independent of any consideration of mindfulness, many philosophers sympathetic to TT still support the claim that TT can account for pain experience (Cutter & Tye 2011; Simon 2019). The present idea of global or local transformation provides a novel opportunity for increasing the pressure on TT. Our version of the pain objection to TT is anchored in the scientific literature on mindfulness and the introspective reports of practitioners.

<sup>3</sup> Mitchell (2020: 583) also suggests that skill levels and goals make a difference to introspective style. He draws on Lambie and Marcel’s (2002) terminology on analytic (singling out specific properties in experience) versus synthetic (holistic attention to experience) introspective awareness. In this terminology, our suggestion is that only high-level mindfulness introspectors would be able to complete synthetic introspective awareness of experiences as opaque. However, they might apply analytic introspection in relation to certain goals.

pain as introspection of mental paint. Mindfulness meditators become introspectively aware of phenomenal properties like heat, itchiness, and negative affect that play representational roles in representing the relevant bodily damage, but under the right kind of introspection these phenomenal properties shift to appear as non-object properties. However, notice that the notion of mental paint was originally introduced to make a metaphysical argument. It was introduced to defend the claim that some phenomenal properties *are* non-object properties. We target TT as a phenomenological thesis and investigate whether some properties *appear* as non-object properties under mindfulness.

With the above in mind, future work on MOH should acknowledge the different ways in which one could philosophically elaborate MOH. Such research should also aim to compare the different elaborations. For example, Vervaeke (2022) proposes that mindfulness involves opaqueness by the breaking down of perceptual gestalts, while Letheby (2021) describes it as a matter of experiencing one's own representations as models of one's mind. It is not clear how these proposals relate to each other or to the interpretations presented in this section.

Let us recap. In Sections 2, 3, and 4, we have articulated and motivated the following *modus ponens*:

- (1) If MOH is true, then TT is false.
- (2) MOH is true.
- (3) TT is false.

## 5. Objections: introspective reports

As flagged in Section 3, our reasoning rests upon a particular way of interpreting statements in the mindfulness literature made by clinical psychologists, cognitive scientists, and mindfulness practitioners. Experimental philosophy would be relevant for investigating whether our interpretation is adequate, clarifying whether mindfulness researchers and practitioners really endorse MOH. Assume that MOH receives confirmation from experimental philosophy. In what position would this leave the TT-supporter? Is this confirmation sufficient to show that TT is false? The TT-supporter could object in several different ways.

*Objection (1).* The TT-supporter might object that no matter the result of experimental philosophy, the introspective reports of mindfulness researchers and practitioners should carry minor weight in philosophical discussions. The reason would be that these researchers and practitioners are not sufficiently trained in reflecting upon and applying the philosophical concepts. As philosophical novices, they would most likely misunderstand the concepts and misapply them to their experiences.

However, this issue of conceptual competence is exactly the kind of worry that proper work in experimental philosophy should address. Such work should handle potential cross-talk and lack of conceptual clarity, as it has attempted with other topics (Knobe *et al.* 2012). We need additional justification to accept that mindfulness researchers and practitioners, upon modest training, could not competently apply the concepts of transparency and opacity correctly. It is not obvious why we should be particularly pessimistic about this issue concerning MOH.

*Objection (2).* The TT-supporter could acknowledge that the introspective reports of mindfulness researchers and practitioners should play some role in philosophical discussions

but deny that these reports put any burden of proof on the TT-supporter. The disagreement between MOH- and TT-supporters simply constitutes a stalemate with no obvious tiebreaker in sight.

This objection is problematic for a number of reasons. First, as already stated, mindfulness and the ability to introspect one's experiences as opaque is an introspective accomplishment demanding a considerable amount of training and skill (Dunne, Thompson & Schooler 2019; Goleman & Davidson 2017: ch. 8). Rather than an equal confrontation, one might respond that the disagreement between TT and MOH proponents is characterised by an asymmetry in introspective skills. MOH is endorsed by individuals sufficiently trained in mindfulness introspection. Second, when a philosophical view is incompatible with dominant models in the empirical sciences, the expectation is normally that the proponents of the philosophical view must either explain why the scientific models are implausible or clarify how the philosophical theory is in fact compatible with them. We should expect the TT-supporter to do the same. In sum, the onus seems to be on the TT-supporter to show that MOH is implausible.

*Objection (3).* The TT-supporter could stress that since introspective reports are the central evidence source for MOH, the fate of MOH is determined by the reliability of these reports. The TT-supporter could claim that one could explain the reports as simply expressing a prior bias. The TT-supporter could stress that MOH rests on canonical Buddhist sources, such as the *Lankavatara Sutra*. Hence, one might think that mindfulness meditators endorse MOH not because it accurately describes in an unbiased way their introspective awareness but because they are driven by a prior belief that sculpts their introspective reports.

The MOH-supporter might reply that this objection only has noteworthy force if the TT-supporter can show that we have particular reason to think that mindfulness practitioners are especially biased in their introspective reports. The mere possibility of being biased applies equally well to the TT-supporter. The reports of TT-supporters (i.e. that their experiences are transparent under introspection) might equally well reflect their prior commitment to theories like strong Representationalism. Multiple philosophers have argued that background views and broader theoretical commitments influence introspection (Martin 2000: 198; Sorteriu 2013: 17). Recall also the fact that mindfulness meditators are highly trained in introspection. This group performs above average in various introspective tasks, such as accurately locating somatosensory stimuli (Fox *et al.*: 2012). The MOH-supporter might stress that expecting this group of individuals to be especially biased is unjustified.

However, the TT-supporter might respond that it is indeed reasonable to expect the MOH-supporter to be more biased. The mindfulness practitioners and researchers that support MOH have (most often) practiced mindfulness meditation for decades. They have studied Buddhist sources that would bias them to believe in introspection of opaque experiences, and they have been members of communities that promote such beliefs. TT-supporters, on the other hand, have not been exposed to such a heavy influence.<sup>4</sup>

This is not the context to determine whether it is justified to expect MOH-supporters to be more biased by background commitments than TT-supporters. This is a central question for further research and experimental philosophy on MOH. Let us just stress that this research

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<sup>4</sup> We are grateful to Rick Repetti for stressing this point.

should also acknowledge the potential biasing of TT-supporters. TT is a cornerstone of strong Representationalism. Representationalism has often been described as the most promising route for physicalism to account for consciousness (Dretske 1997). This does indeed seem like a strongly motivating background for endorsing TT.

The TT-supporter might formulate the present objection in slightly different terms. She might stress that the issue is not merely that MOH-supporters are biased by encounters with canonical texts or mindfulness communities. The issue is that the very instructions and ideology that subjects must accept to do mindfulness introspection demand that they believe that introspective awareness of opaque experience is possible. Hence, the problem is not that doing mindfulness exposes you to biasing sources. Rather, the problem is that to engage in mindfulness you need to accept certain beliefs about the nature of experiences, i.e. you need to accept MOH. This means that mindfulness introspection cannot be used as an introspective case to refute TT, since this kind of introspective practice presupposes antipathy against TT (see Struhl 2022 for related discussions on meditation and the self).

It is crucial to stress that this objection only works if it can be shown that the introspective reports favouring MOH are unreliable *because* they express a prior commitment to the falsity of TT. The simple fact (if it is a fact) that mindfulness researchers and practitioners are biased against TT is not enough. TT is a phenomenological thesis that denies that phenomenological properties can genuinely appear as non-object properties. TT excludes introspection of opaque experiences no matter the background knowledge or motivation of subjects (Harman 1990: 39; Tye 2002: 139). As a phenomenological thesis, MOH is not disqualified if mindfulness practice presupposes antipathy to TT. It is only disqualified if introspective reports of opaque experience is a pure product of this antipathy instead of accurately depicting subjects' state of introspective awareness.

## 6. Objection: introspective mechanisms

Another strategy would be for the TT-supporter to object that proponents of MOH must account for the introspective mechanisms that could enable mindfulness introspection of opaque experiences. Recall from Sections 3 and 4 that researchers often think of mindfulness as involving a form of higher-level awareness.<sup>5</sup> The challenge is then to elaborate the possible mechanisms of this higher-level awareness. The TT-supporter might claim that the MOH-supporter faces a dilemma. Either the MOH-supporter thinks that this higher-level awareness is established by a cognitive, thought-like mechanism, or she thinks that it is established by a perceptual, sensory-like mechanism. Yet, each choice has unattractive implications.

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<sup>5</sup> We only refer to contemporary, Western understandings of mindfulness. Some lines of Buddhism—like Zen and Dzogchen—often describe meditation as a non-dual state of consciousness, meaning that there is no separation or different levels of awareness. This state of consciousness is also known as pure consciousness and might involve a kind of opacity that we have not targeted directly here (Fasching 2022; Dunne, Thompson & Schooler, 2019). We do not aim to cover these traditions in our analyses. Yet, notice that in the discussion of higher-level awareness in mindfulness, we propose that the higher-level awareness of mindfulness arises by the unfolding of an immanent reflexivity in consciousness. This might align our portrayal of contemporary, Western understandings of mindfulness with these non-dual traditions, since the relevant higher-level awareness is not portrayed as strictly separate from the first-order awareness (as in a distinct monitoring mechanism), but as an awareness arising from a latent reflexivity of consciousness.



On the one hand, it is hard to see how a cognitive, thought-like introspective mechanism could yield the direct introspective awareness of experiences as opaque. Having a thought-like higher-level awareness of your own pain experiences will only allow you to *think* of this experience as an experience with non-object properties. Thinking about one's experience as an experience is fully compatible with TT. TT is only challenged by MOH if mindfulness involves a direct form of awareness of genuinely appearing non-object properties. The only way we can make sense of such direct awareness of non-object properties is to think of it as being perceptual, sensory-like in nature.

On the other hand, adopting the view that the introspective mechanism of mindfulness is structured like a perceptual, sensory-like ability is confronted with a number of philosophical and empirical problems. The only way we can make sense of a perceptual, sensory-like introspective mechanism is to understand it as kind of internal monitoring, a form of inner sensing (as in Armstrong 1968; Lycan 1996). If this is indeed an implication of MOH, the TT-supporter would have number of ways to argue against MOH. There are at least two reasons for thinking that the idea of such an internal monitoring mechanism is mistaken.

From a more empirical perspective, there is no compelling evidence or reason to believe in the existence of this perceptual, sensory-like internal monitoring mechanism. It is hard to make sense of how and why evolution should have equipped the human brain with such a system (e.g. Carruthers 2000: 210). If an internal monitoring mechanism were to be able to yield opaque introspection of first-order experiences, it would have to be able to represent the first-order experiences in all their complexity and richness. While it is easy to see the evolutionary advantage of first-order systems like the visual system with their representational and computational complexity and power, it is harder to see the advantage of a kind of internal monitoring mechanism that could match the complexity of the visual representations. While these empirical problems are important, in the present context, the philosophical issues carry more weight.

From a philosophical perspective, a number of philosophers have stressed that if we assume introspection to work by an inner sense or monitoring mechanism, this would imply that introspection involves two ontologically independent levels of states: a higher-level of states of detecting and a lower-level of detected mental states. This type of independence would allow for two possible types of radical mistakes. First, the higher-level mental state could radically misrepresent a lower-level mental state to occur when it did not (see the criticism of higher-order theory of consciousness by Neander 1998; Farrell 2018). Second, the higher-level mental state could misidentify the lower-level mental state as not belonging to the individual herself (Shoemaker 1988, 1994). Authors have found these implications implausible and incompatible with our status as rational creatures (Shoemaker 1988, 1994; Moran 2001).

To sum up, either MOH is committed to the claim that mindfulness introspection is a thought-like mechanism or MOH is committed to the claim that mindfulness introspection is sensory-like internal monitoring mechanism. Both options are problematic. This dilemma touches upon many fundamental philosophical topics. Even though we cannot provide conclusive answers, let us outline three different ways in which a MOH-supporter could navigate the dilemma.

First, the MOH-supporter might begin by downplaying the challenge. She might stress that to get MOH off the ground, it is sufficient that the hypothesis is supported by introspective



reports and researchers in the relevant fields. It is an unreasonable initial demand that MOH-supporters can provide a positive theory of the involved introspective mechanisms. This is a demand for the later stages of MOH research. Relatedly, the MOH-supporter might stress the scope of the challenge from the opacity of mindfulness introspection. The MOH-supporter is not obliged to provide or commit to any *general* theory of introspection. The task is much narrower—it only concerns providing a theory of the introspection of mindfulness. This means that the MOH-supporter can be a pluralist about introspection. She could adopt other theories for more ordinary types of introspection and claim that these cases of introspection work by other mechanisms than that of mindfulness (Schwitzgebel 2012). Rather than offering a real reply to the challenge of the dilemma, this type of response would merely deflect the challenge by downplaying its urgency and narrowing its scope.

Second, the MOH-supporter could dismiss the dilemma as resting upon the dichotomous assumption that introspective mechanisms must either be *exclusively* cognitive (thought-like) or perceptual (sensory-like). This assumption is controversial. Consider a theory like predictive coding (Clark 2015; Hohwy 2013). This theory states that the phenomenal character of any experience is created by the interaction of top-down predictive models and bottom-up sensory feedback. This also concerns introspection. The phenomenal character of introspective awareness is constituted by top-down modelling (predicting or modelling one's state of experience) and sensory feedback updating these models (Hohwy 2013: 245).

One way to elaborate MOH would be to adopt a predictive coding framework. Take the experience of pain in one's knee. According to a predictive coding framework, the first-order pain experience in one's knee occurs by the interaction of top-down modelling and sensory feedback. In terms of the higher-level awareness, one might think that the first-order pain experience transforms from being transparent to being opaque when an additional top-down model predicts or models the first-order pain experience itself as a mental state. This involves that (at least some of the) phenomenal properties of the first-order experience shift from appearing as object-properties of the extra-mental object (the bodily damage) to non-object properties (as properties of one's own intra-mental state). The phenomenal character of opaqueness is an effect of the mind's modelling of its own experience (Lutz, Mattout & Pagnoni 2019). A predictive coding framework would allow the MOH-supporter to explain opaque experiences as involving both cognitive introspective mechanisms and perceptual introspective awareness. In this framework, mindfulness would involve a higher-order modelling of one's own experience that resulted in direct awareness of sensory properties as appearing non-object properties.

The TT-supporter might object here. She might state this predictive coding inspired account only explains why some phenomenal properties can appear to the subject as non-object properties. It does not explain why and how the subject is actually aware of any non-object properties. In polemic terms, this account only explains how a subject might 'hallucinate' non-object properties; it does not show that she actually attends to or experiences such properties under introspection.

This objection highlights an issue stressed earlier on whether to understand TT as a phenomenological or metaphysical thesis. As stressed in Section 1, this paper understands TT as a phenomenological thesis according to which phenomenal properties cannot *appear* to a subject as non-object properties. One might alternatively understand TT as a metaphysical

thesis (as, for instance, Weksler, Jacobson & Bronfman 2019). As a metaphysical thesis, TT could perhaps allow that properties can appear as non-object properties to the subject, but it necessarily denies that these appearing properties are in fact non-object properties to which the subject attends. The above predictive coding inspired account is clearly relevant to the phenomenological understanding of TT. It is beyond the present scope to evaluate how it relates to the metaphysical version of TT.

A third way to respond to the dilemma would be the following. Assume for the sake of the argument that the MOH-supporter accepts the basic structure of the dilemma and chooses the second horn according to which the higher-level awareness of mindfulness introspection is enabled by a sensory-like introspective mechanism. Still, this choice might not imply commitment to the idea of an inner monitoring mechanism.

Here is an important observation about mindfulness research. The claim that introspection is an inner form of monitoring is not widespread in the mindfulness literature. Mindfulness researchers do not typically propose any mechanistic account of inner sense. They think of mindfulness more as the act in which the mind allocates its general processing resources to its own current state of awareness by entering an explicit self-reflexive mode (e.g. Dorjee 2016; Malinowski 2013).

This observation suggests a way to make sense of a sensory-like introspective mechanism without committing to an inner form of monitoring. Notice that mindfulness researchers often stress that the kind of higher-level awareness involved in mindfulness can only be established by introspectively attending to one's actually occurring first-order experience (Jankowski & Holas 2014; Dunne, Thompson & Schooler 2019). To establish the higher-level awareness of mindfulness, an individual would need to already be in a lower-level state of awareness, for instance, a lower-order state of pain. This state of awareness is subsequently targeted introspectively. When engaging in the higher-level awareness of mindfulness introspection, an individual always takes as their point of departure an actually occurring lower-level awareness.

One way to philosophically interpret descriptions like these would be to state that the higher-level awareness in mindfulness introspection is not established by the activation of a higher-level monitoring mechanism that is separate from the first-order experience. Instead, one might claim that the higher-level awareness of mindfulness exploits the general reflexive nature of conscious awareness. Numerous philosophers believe, for independent reasons, that consciousness is in general characterised by an immanent reflexivity, i.e. an inbuilt self-consciousness of one's own experiential state (e.g. Frankfurt 1988; Grünbaum 2012). The MOH-supporter might claim that mindfulness introspection enhances or makes explicit this immanent reflexivity of consciousness to such a degree that some phenomenological properties transform from appearing as object-properties to appearing as non-object properties (see also Spackman 2022). Mindfulness is not an introspective operation of a separate monitoring mechanism that tracks first-order mental states. It is the operations of enhancing or making explicit the already reflexive nature of consciousness.

This account stresses an important point about the unity of opaque experience in mindfulness introspection. The introspective awareness of opaque experiences in mindfulness is not a matter of bringing two separate levels of awareness together, as in synthesizing a separate first-order experience with a separate higher-level awareness. Since mindfulness is a matter of enhancing the already immanent reflexive feature of consciousness, there is no need

for such synthesizing. Instead of bringing two levels of awareness together, mindfulness introspection is a matter of expanding the immanent reflexivity of an already unified consciousness of a subject.

The above proposal is only a very rough sketch and should be developed further. The important thing is that the idea of mindfulness as an unfolding of immanent reflexivity offers answers to the problems of inner monitoring outlined above. First, this idea does not commit to any idea of the human mind containing an internal monitoring mechanism for detection and representation of internal states. We can therefore dodge the demand for empirical evidence and evolutionary plausibility. Second, the proposal provides answers to the problems concerning misrepresentation and misidentification. In their traditional formulations, these problems presuppose that the relation between the higher-level and lower-level mental states is that of a causal tracking relation. If higher-level awareness of mindfulness stems from an enhancement of an immanent reflexivity of consciousness, it does not involve the same ontological separation between the different levels. The higher-level awareness is ontologically dependent upon the first-order experience since they are immanent features of the same state of consciousness. The higher-level awareness cannot occur without the first-order experience.

The above arguments are not conclusive. Yet, they seem sufficient to establish that MOH should not be discarded too quickly because of its theoretical implications about the nature of introspection.

## **7. Conclusion**

We have provided a review of the relevant scientific literature on mindfulness, indicating that mindfulness researchers typically support what we labelled the *Mindfulness Opacity Hypothesis* (MOH). MOH is incompatible with the well-known philosophical Transparency Thesis (TT). We then offered a philosophical elaboration of MOH in terms of experiential shift, scope, and skill. Finally, we defended MOH against various objections. One type of objection concerned the reliability of introspective reports. We argued that the MOH-supporter is able to respond to this objection in reasonable ways, although a satisfying reply ultimately requires work in experimental philosophy. Another type of objection concerned the introspective mechanism involved in mindfulness. We argued that MOH is not committed to a functional monitoring account of introspection and leaves it open how exactly to account for the introspective mechanisms of mindfulness. Future research on MOH should develop an account of these mechanisms—we suggested some plausible directions for this work. Given the support of research on mindfulness and our theoretical considerations, we conclude that MOH is well-motivated. If MOH is true, then the Transparency Thesis is false.

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