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To cite this article: Bernadette M. Baker & Antti Saari (2018) 'The anatomy of our discontent': from braining the mind to mindfulness for teachers, *Discourse: Studies in the Cultural Politics of Education*, 39:2, 169-183, DOI: [10.1080/01596306.2018.1394425](https://doi.org/10.1080/01596306.2018.1394425)

To link to this article: <https://doi.org/10.1080/01596306.2018.1394425>



Published online: 07 Nov 2017.



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## 'The anatomy of our discontent': from braining the mind to mindfulness for teachers

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### ABSTRACT

This paper offers an overview of contemporary inscriptions of mindfulness, their conditions of possibility, and examples of the braining of mind on which contemporary neuro-meets-contemplative turns are dependent. We examine key nineteenth-century events integral to the formation of Biologies Old, in which historic debates over 'the death of God' in Western worldviews forge a space of finitude dedicated to fleshy materiality and the relocation of *bios*. We also examine what emerges in the wake of such debates, including how Biologies New and a transcendence/immanence horizon continues to reverberate through popular, contemporary recommendations for mindfulness in teaching.

### KEYWORDS

Mindfulness; neuroscience; teaching' new biology; history of science; Foucault

Because of the peculiar circumstances behind its historical emergence, therapeutic mindfulness today sits on an unstable knife edge between spirituality and secularism, therapeutics and popular culture. (Harrington & Dunne, 2015, p. 630)

Biologies Old and New in Western educational discourse are linked by a particular event that crystallized across the nineteenth-century trans-Atlantic north – the braining of mind. Today, braining the mind conjoins two seemingly unrelated turns in the educational field – *the neuro turn* of the 1800s which has been reanimated in the twenty-first century and *the contemplative turn* which is a confluence of longer and shorter traditions. This paper examines some conditions of possibility for the braining of mind in mainstream Western educational theories and considers the legacies in light of contemporary debates over mindfulness practices recommended for teachers.

In the first half, we offer an overview of contemporary inscriptions of mindfulness, some of their conditions of possibility, and examples of the braining of mind on which contemporary neuro-meets-contemplative turns are dependent. We posit nineteenth-century events as the noticeable coming-into-being of Biologies Old, in which historic debates over 'the death of God' in Western worldviews forge a space of finitude dedicated to fleshy materiality and the relocation of *bios*. In the second half, we examine what emerges in the wake of 'the death of God' debates, how Biologies New and a transcendence/immanence horizon continue to reverberate through popular recommendations for mindfulness in teaching, re-securing a central role for rationality-as-reason and as undecidable between science/religion.

In pursuing these layers, we are less interested in ‘for and against’ mentalities around new movements in education. Such reactions, while referenced here, are operationalized as ‘data’ that underscore our points. We are not calling for a return to an authentic form of spirituality beyond neuro discourses of mindfulness, nor are we seeking to reintroduce Buddhist traditions lost in translation and now associated with the term mindfulness. Instead, we are indicating flashpoints and areas of epistemic tension the resolution of which remains undecided. We take Harrington and Dunne’s (2015) encouragement seriously, which refuses the simplistic delineation of paradoxes and easy critique of contradiction and moves towards understanding ‘the anatomy of our discontent’. Discontent is not understood here as a psychological category of disgruntlement but as a genealogical event that has linked long-standing debates in Western worldviews to a modern episteme. As such, we suggest that the formation of different kinds of biology and mindfulness discourses for stressed teachers is but one site that localizes enduring and new debates over truth-production in the twenty-first-century contexts.

### **Part 1: Contemporary inscriptions of mindfulness and their conditions of possibility**

Mindfulness is most associated with the work of Kabat-Zinn and his 1979 founding of Mindfulness-Based Stress Reduction (MBSR) programmes. Offering the term as a translation of the Pali word *sati*, Kabat-Zinn recently reflected that mindfulness was a deliberate distancing of religious terminology in order to suit clinical and therapeutic settings of the late twentieth-century West (Kabat-Zinn, 2011). Today, however, the term references such a wide variety of traditions beyond an East/West dichotomy that it has been rendered somewhat generically as ‘a ... non-elaborative, nonjudgmental, present-centered awareness’ (Bishop et al., 2004, p. 232).

Specific mindfulness-based interventions vary, such as for businesses, schools, and sports, in clinical and therapeutic settings, and in a plethora of popular culture materials, indexing the conflation, confusion, and diffusion around the term. At their inception, the appropriations and cultural translations that comported Western mindfulness drew upon only some Buddhist trajectories, in particular those that seemed reform-oriented. Three major waves emerged in the twentieth century, from Zen and psychoanalysis-inspired Transcendental Meditation™ to the relaxation response of the 1980s to MBSR therapies of the 1990s (Harrington & Dunne, 2015). Today, further mindfulness studies seek to link practices such as meditation, attention-placement, deep breathing, and yoga to analysis of changes in the brain, among other markers (Davidson, 2010; Davidson et al., 2003).

Alongside such waves (and not unique to them), a series of critiques emerged, including commercialism (profiting from people’s pain, McMindfulness and packeting, and the impurity of transcultural appropriations), others which repeated already available debates within Buddhist epistemologies (the ‘dumbing down’s’ of laicization, the lack of qualification of teachers to handle scenarios that emerge, the overemphasis on the inner garden with little attention to structures, cultures, and the outer world of workloads) and others which indicated the translation problem and paradoxes that inevitably emerge across and between incommensurable epistemes (‘inauthenticity’ of different ethical frames, the problem of what is being measured in mindfulness studies and what is

causal, the reinforcement of Western notions of self that are meant to be evacuated within Buddhism, etc.) (See e.g. McMahan, 2008; Ng, 2016).

For mindfulness practices that had typically relied more heavily upon first-person phenomenological accounts to become wedded to third-person analysis of brain changes in clinical and laboratory settings, certain conditions had to be in place, towards which the polarization of reactions as either celebratory or suspicious partially point. Rose and Abi-Rached (2013) account for the formation of neuroscience in the nineteenth century by suggesting that it was the study of insanity, the nerves, and the brain – three initially separate areas of investigation – that constituted the new purview of the neuro. However, for neuroscience to enter a conversation with mindfulness studies and ‘make sense’ as a pursuit, other things must be taken for granted. A structure of (what became medical) perception needed to emerge insofar as something had to be thought to be going on inside someone in a visible and material way such that nerves or brain would be invoked as causal and inspected as such. It is here that we have to take a different detour beyond Rose and Abi-Rached’s account.

### **Technologies of self and microstrategies of conversion**

The way of mindful education takes your attention from all the ways we want to change the world and turns our gaze inward. Instead of taking on the immense and impossible task of trying to get the world around us to calm down we can notice and learn to manage the wild chatter in our own minds ... Instead of waiting for the world to be peaceful, we can simply relax and let the world find peace around us. (Rechtschaffen, 2014, p. 45)

Foucault argued that, in the West, truth effects and truth-production are not reducible to archaeologies of the academic disciplines or genealogies of power systems such as asylums, clinics, and schools but what was also required was investigation of how a being came to see themselves as human and as able to do particular kinds of work on self and others. Foucault posits different technologies of self where technology does not refer to a tool separate from humans but practices and operations within a teleological frame –

... which permit individuals to effect by their own means or with the help of others a certain number of operations on their bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection or immortality. (Foucault, 1985, p. 18)

Different technologies generate different relations between ‘truth’ and ‘the Subject’, different ‘arts of existence’. In this context, Foucault argues that in post-Cartesian epistemes, recognition of self has to now go through a construct called mind.

Prior to the proliferation of post-Cartesian epistemes, technologies of the self typically involved a perception of body as fleshy, encasing a more highly valued ontological principle – soul or its analogues. Significantly, there is an important and constant presence of *an image of return* in the soul-self that marks conversion and its relationship to truth-production. The microstrategies of conversion and this *relationship to knowing* are apparent in Hellenistic and Roman thought, while the *relation of return* is refigured in early and later Christian thought. Such strategies include how self withdraws from its surrounds (Platonic *epistrophé*), how self flees from self (medieval Christian *metanoia*), and how self splits from

self to be under its own eyes (modern *subject-as-object*). For instance, Stoic philosophy of return to self included the practice of attention (*prosokhé*) to one's interior at each instant, so as to exercise one's will and choice to the fullest (Hadot, 1995). In medieval Christian monasticism, this assumed the form of constant attention to the presence of soul and body in prayer, reading and work as a precondition of transformation (Leclercq, 1982). For the modern subject, though, one remains attentive to psychophysiological triggers in order to avoid damage or stress at work (Crary, 1990; Jackson, 2013).

While this illustrates how the soul-self that gazes back at itself is constituted of a different 'substance' in each tradition, we suggest that pivotal in this sweep of timespace, a long and slow death plays out beyond a medieval epoch. This is 'the death of God', which in *The Birth of the Clinic* Foucault links to the emergence of a space of finitude, and elsewhere the birth (and possibly the end) of the figure of Man.<sup>1</sup>

### **Histories and cultures of human dissection**

Foucault's later work was interested in technologies of self that resulted in subjectivation and the making of 'the modern individual' as one version of the figure of Man who could be incessantly studied. Descartes is posited as that pivot point when science splits from philosophy and spirituality (Foucault, 2005). In a Cartesian epistemology, one does not need to put oneself necessarily in the 'right' condition to receive truth. The search for what Descartes called clear and distinct ideas can take place instead via following appropriate methods, knowledge is believed to be produced in a site ejected from body, and through this, consciousness is standardized as access to Being.

In less glossed and more documented forms, historical scholarship has noted the implications for a very idiosyncratic pursuit – the practice of human dissection, which is not a universal ritual. It was especially within this set of rituals and practices that causality gradually moved from appeals to God or supernature to appeals to fleshy materiality. The invention of a messy and transgressive culture of dissection is today normalized or passed over as medical and forensic but it was once a site of revulsion and for centuries so (Carlino, 1999).

Within the early cultures of dissection, Sawday (1995) posits that 'body's' interior could not be thought without recourse to an analysis of soul, an essence assumed to have an animating or self-moving quality considered higher than the flesh. In the systems of exchange between soul-bodies and bodies of knowledge, the most vulnerable and available dead subjects were repetitively dissected – mainly local marginalized populations such as criminals, orphans, and occasionally prisoners taken from raids of other lands. The practice of human dissection moved observation from holism to partition to reconstruction:

... dissection or anatomization is ... an act whereby something can also be constructed, or given a concrete presence. In medicine, anatomization takes place so that, in lieu of a formerly complete 'body', a new 'body' of knowledge and understanding can be created ... As the physical body is fragmented, so the body of understanding is held to be shaped and formed. (Sawday, 1995, p. 2)

In Europe, the ban on human dissection by the Church was lifted in 1240. Even with this, the early human dissections did not illustrate much that was 'new' for at least 200 years

(Carlino, 1999; Foucault, 1963/1994; Oliver, 1997). We suggest here that in retrospect it took quite some time to move from simply illustrating what was already believed about 'God's' brilliant anatomical designs into asking questions about *how* things were so arranged – a shift now attributed to 'the death of God' in systems of analysis amid a reworking of the study of Man's life.

## Part 2: Biologies old ... relocating *bios*, forging a space of finitude

The shift in question-posing around 'dead bodies' plays out rather unevenly over a 400-year period, alongside political theology and debates over the veracity and place of monotheism. Biologies Old emerge in a post-dissection timespace in which *bios* is studied for the essences that constitute it. In Christian-inspired medieval dissection, there is automatic attribution of life to God as transcendent supernature. Several centuries later, what is searched for instead, for example, in explaining illness, are core, fixed, unchanging properties that would define living as living, reanimating older philosophies of immanence. Philosophies of immanence, from the Latin, *in manere*, to remain within, had many preceding forms, including absolute and relative (Baker, 2013). One typical form via dissection was to account for the changes and activities of the human by examining the flesh within – whatever 'body' needed, it was considered to already have. With an immanence horizon established, a space of finitude emerges in which Being is relatively confined to life on earth and analysis now means attention to multiple differences that constitute Being-as-properties-of-living. Instead of taking causal analysis in the final instance to the heavenly God, it is taken in the final instance to properties of flesh considered material.

This horizon-making puts in a chain haunted by repeated wonderings. Questions over origin and design of the 'already have' of body emerged (Baker, 2001; McSweeney, 2013; Turner, 1998). The spectre of changing Divine–Man relations had been debated for a long time, then, before Darwin's *Origin of Species* (1859), which could be seen on this account as a culmination of affirmation of positivities amid the sequencing of described differences.

The shift in logic in anatomy resonated with and was sometimes coupled to debates over a transcendence/immanence problematic in governance. Kantorowicz (1981) has noted that much occidental pre-modern politics was dedicated to theological dialectics between the mundane particular and the divine universal. The 'body natural' represented the mundane and corporeal existence of the ruler and the 'body politic' was the abstract and timeless existence that referred to the divine origin and legitimation of power. The individual monarch could make mistakes, the body would in time wither and die away, but his/her otherworldly authority would remain intact and immaculate. This incited incessant discourse about how the 'transcendent' (as 'divine') related to the fleshy and perishable.

As life becomes Life (and assimilates death), this uncanny transcendent is 'repressed' but 'returns' in the guise of that which animates and valorizes Life, and secures the continuation of Order beyond its particular manifestations (Santner, 2011). Ceaseless proliferation of discourses of Life ensued, seeking (and inevitably failing) to capture that which in Life is 'more than itself'. Here, the discontent again plays out in 'scientific' and 'political' registers: on the one hand, the problem of how the body politic governs itself and creates immanent hierarchies and divisions without any recourse to transcendence and on the other, how scientific knowledge about Life can posit itself without recourse to anything supernatural.

The crystallization of academic disciplines in the 1800s quickened such debates around Biology Old, streamlining and transforming provincial beliefs in soul–body. In the first half of the 1800s, a Christian-inspired soul–body complex was rendered more frequently in emergent Romantic literature of the trans-Atlantic north as mind and body. Mind became a normalized unit such that ‘its’ veracity as a noun was less challenged. Investigation sought instead the modalities of ‘its’ operations and ways they could be managed in schools and factories (Danziger, 1997). This signalled the messy beginnings of a wider shift where the immortality previously attributed to soul – the location of *bios* – became splintered into the ‘capacities’ of mind via technologies-as-practices or operations of different kinds. Contemporary mindfulness studies inherently rely upon this crucial shift – first, that mind exists, and second, that it and not something else has the capacity to take care of Being-as-properties-of-living-as-flesh, including ageing.

By the mid-1800s, the transformation of human ontology’s pieces and the delineation of species accompanied a redefined chain of Being. Irreducible to Darwin’s impact, vociferous debates unfolded about the nature and location of mind in emergent fields as varied as phrenology, electro-biology, animal magnetism, and statistics (Hacking, 1995; Richardson, 2005; Winter, 2010). Subtle shifts in truth-production and their links to the politics of finitude and difference-making are registered in three pivotal examples of ‘neural romanticism’ (Richardson, 2005) that repositioned a transcendence/immanence horizon in the wake of ‘the death of God’ debates.

### **Neural romanticism and the bridge to biologies new**

Using the mind to know the mind is a uniquely human capacity, as is using the mind to change the brain and thus the body ... I use the term *mind* to refer to consciousness and the term *brain* for the organ, located within the skull, that supports consciousness. This is not a strictly scientific distinction, but differentiating between the mind and brain simplifies the discussion considerably. (Schoeberlein & Seth, 2009, p. 8)

When not every culture has a word for or conceptual equivalent of mind how do such sentiments become so easily expressed as commonsensical? (Danziger, 1997; Krippner, 1994) In Gall’s (1835) organology and physiognomy, which others called phrenology, the braining of mind was pivotal but not in ways that map directly onto today’s mainstream assumptions. Whereas in much research today, the structure of an organ is thought to determine the possibilities for function and brain death equals organic death, for Gall, brain was not considered necessary for life but a series of separate organs *in which function was elevated over and perhaps determining of the structure* that carried the function out. Gall’s psychophysiological rendition of the term *function* (consonant with uses, properties, role, office, or duties) consisted of a set of primary instincts and faculties. In attempting to avoid the view that the soul-mind operates independently of the brain and its activities, and yet also avoiding holding that the brain is the primary origin and cause of activity referred to as mental, Gall offers a *psychophysiology* rather than a physiology, an intermediate realm between the mechanical aspect of body and the immateriality he attributed to soul-mind (Gall, 1835; Hoff, 1992).

In terms of behaviour, it is patho-anatomy that suggests the locus: ‘The functions of the mind are deranged by the lesion of the brain: they are not immediately deranged by the lesion of other parts of the body’ (Gall, 1798, p. 311). The brain draws its role as

intermediary and as important via the logic integral to German enlightenment theories of expression. Such theories posited that internal essences attain their manifestation as external phenomena (Hoff, 1992). This creates a sequence of *invisible essence/first cause – instinct/faculty/power/function – organ – behaviour* which is the chain through which certainty was reinscribed into judgements, linking claims about innate qualities to the ‘evidence’ of phenotype and behaviour. The analyst or researcher starts at the end of the sequence with the observations that then suggest the existence (or otherwise) of qualities and their first cause, working their way back.

In William James’ (1899) opposition to phrenology, the brain was considered involved, but not predictably so and not within a clear or certain causal sequence. James focused more on consciousness as waves that came and went than on behaviour and argued that while the brain may condition certain mental states, it could not be definitively proclaimed as the seat of consciousness. In refusing both materialist and fatalist dogma regarding states of consciousness, James recognized the extent to which behaviour operated as an empirical hook and also recognized the extent to which perception selected out only certain things *as* behaviours.

The undecidability here enabled him to leave the door open for what he considered ‘spiritual causality’, meaning he could neither confirm nor deny the exact origin of a behaviour that had accrued a status as such. Unlike Gall, the problem of transcendence/immanence for James is framed by and couched within the wider post-Darwinian challenge to Biblical origin narratives. It is never resolved, arguing that while ‘a belief in free will and purely spiritual causality is still open to us’ (James, 1899, p. 191), neither fatalism nor materialism may have the last word. Instead, the horizon is repeatedly worked to keep open space for new insights to come, and which could never be objectively proven:

Considering the inner fitness of things, one would rather think that the very first act of a will endowed with freedom should be to sustain the belief in freedom itself. I accordingly believe freely in my freedom; I do so with the best of scientific consciences, knowing that the pre-determination of the amount of my effort of attention can never receive objective proof, and hoping that, whether you follow my example in this respect or not, it will at least make you see that such psychological and psychophysical theories as I hold do not necessarily force a man to become a fatalist or a materialist. (James, 1899, pp. 191–192)

Whereas for the OECD (2007) in the twenty-first century, there is pure certainty that brain research produces facts and that after the facts, politics enters in terms of what to do about them. Accordingly, high-resolution spatial information and high-resolution temporal information reveal truths about the operation of the brain, but schools have to make decisions that consider more than that:

Accommodating how the brain functions is only one of many factors that must be taken into account when constructing educational programmes and teaching. Neuroscience is a tool with specific strengths and weaknesses which is extremely useful for tackling certain questions as to when foreign language can be learned most easily but it is less useful for answering which foreign languages should be taught. (OECD, 2007, p. 148)

Here, the reality of brain science operates as a biomedical given while community contexts do not, the latter driven by value systems which give the biomedical the appearance of disinterest. Despite the cautious language of strengths and weakness, the report asserts a division between neuromyths and neurofacts that accords biology a foundational reality



around which learning communities work. The door for spiritual causality is not overtly referenced here per Jamesian theories, yet the transcendence/immanence horizon is still in operation, albeit differently, as the effort to wed what was initially aligned and then opposed – positivism and phenomenology – in other words, *Biologies New*.

### Part 3: *Biologies new ... the neuro meets the contemplative turn*

Contemporary high school students learn that the connections among the 100+ billion neurons in the brain are ‘plastic’, and can change throughout a lifetime. Today’s students might take this information for granted, but knowing it’s not all downhill after age 21 helps motivate me to make the effort required to train my mind during adulthood. (Schoeberlein & Seth, 2009, p. 8)

*Biologies New* points to a fundamental shift in the architecture of perception along at least three lines: (1) the narration of ‘experience’ radically alters to enable both the medical gaze and phenomenology; (2) death is relocated in binary opposition to Life (and incrementally advancing within it); and (3) changeability is the key organic quality of the brain.

In the quote above, with the distinct lack of evidence provided aside, the positivism of neuroscience and the phenomenological response to it occupy and reinforce a space of finitude in which ‘the new master’ through which selfhood travels is not a Christocentric God but laws of change and promises of greater control. For Foucault, this is to be expected, for in the ‘void’ left by the gods, death is relocated and language about life unfolds endlessly (Foucault, 2002, p. 198). In this case, it is lifelong plasticity and accounts of the continuous labour it enables and encourages. The relocation of death as finality rather than as birth into an afterlife helps turn life into Life. By 1900, the study of corpses is no longer transgressive or necessarily repulsive. Life, a repetitive object of analysis, is underscored by the direct opposition that death now represents and that pathology is thought to reveal. *Biologies New* thus references the shift that accompanies modern medical perception, which unites the older clinical gaze (symptoms-based classificatory regime, holistic, history-oriented, and verbalist) with the newer patho-anatomical gaze (tissue-oriented, dissective, geography-based, organological, and localized) and expands that range with the fascination for changeability.

Theoretically, much of the conceptual and disciplinary apparatus was there for neurally inspired mindfulness research to flourish by the late 1800s, including the idea that the mind could be used to self-heal; yet, this is not when mindfulness as *sati* popped and connected overtly to the neuro. Instead, the entry of mindfulness discourse into Western educational settings in the 2000s is in part dependent on making *uncertain or undecidable* particular divisions, including behaviourist/humanist and science/religion lines of the twentieth century – an undecidability that messy school life and programmatic literature for teachers can easily house.

#### ***Mindfulness for teachers***

The literature on mindfulness and teaching has already engaged and mapped problems with trying to pin down, measure, and quantify a construct that derives from conceptual, empirical, and historical differences (Chiesa, 2013; Ergas, 2016; Grossman, 2008). Alongside definitional issues, this includes the problem of self-reporting in surveys, questionnaires,

and interviews, the reliability of attention scales, the validity of attributing physiological changes to mindfulness practices alone, definitions of resilience and differences between non-meditators and meditators, to name a few (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013; Mansfield, Beltman, Broadley, & Weatherby-Fell, 2016). Our goal is not to rehearse that literature here. We suggest rather that a transcendence/immanence problematic plays out across three key loci in literature for teachers that operate as instances of *Biologies New*: (1) reworked technologies of self-other; (2) concepts of attention; and (3) circumscription of experience.

### ***Technologies of self-other***

Mindfulness literature for teachers, a genre formed and expanded since the turn of the millennium, introduces mindfulness practices derived mostly from Kabat-Zinnian MBSR. In this, it inserts the aforementioned micropractices of conversion that frame awareness-development along the lines of a return to a subject's own interiority seeking an intimate connection with its 'self' (Rechtschaffen, 2014, pp. 24, 122–123; Schoeberlein & Seth, 2009, pp. 8, 56). Yet these are not reducible to the typology of Hellenistic, Christian, and Cartesian hermeneutics of the subject. Instead, they assume their form in the tensions between the immanence of Life and spiritual transformation so that they cancel out or challenge each other's excesses – the threat of positivist reductionism on the one hand, and the postulation of entities beyond the purview of Being-as-properties-of-living, on the other.

Programmes targeting teachers assume that anxiety, stress, fear, and depression are, at one level, pathologies that can be identified with psy and neuro discourses, and, at another, varieties of alienation from a holistic, intuitive, and immediate relationship with one's self and the world. In the more commercialized literature, studies that offer causal proof of these linkages are generally not cited, leaving claims at a universal, rhetorical, and vague level. This includes the claim that observation of one's own thoughts and emotions enables healing of the mind–body, while cultivating personal autonomy and authenticity.

Such claims assume a conversion process, where a subject renounces everyday habits and trains of thought while re-embedding Westernized versions of selfhood rather than evacuating attachment to an entified or discrete 'self' as Buddhist approaches might encourage (through different scholar-mediator traditions). Mindfulness programmes urge the teacher to '(t)ransform yourself to be a greater conduit to the learning of the youth', positing that this 'is where maturity, morality and wisdom come from' (Rechtschaffen, 2014, p. 44). This re-establishes a relationship between self and other as discrete nodal points, where a care and transformation of self is set as a precondition for governing others, and it sets up an obvious paradox, where the teacher must go through a new master in order to 'know Thyself', internalizing the discourse of 'experts' in the name of greater self-knowledge (Foucault, 1994).

In addition to conversion governed by experts, there is a notable temporality at play, that of a radical rupture in relation to future and to focus. In mindfulness practices, there is a trace of the initial stage of purification where the subject renounces former aspirations and decides to pursue a radically new kind of life, integrated within old structures, like (mindful) eating, (mindful) walking, and (mindful) ways of addressing pupils

(Schoeberlein & Seth, 2009). Through diligent practice of the mind–body, there is a (partial) ‘metanoia’, emptying or silencing of the former self, directed towards a future transcendence called being present or in the Now. This version of conversion does not require monastic seclusion, but innerworldly asceticism where only certain aspects of world are renounced while others still play an active part (see e.g. Rechtschaffen, 2014, p. 45). The focus is not directed at challenging discriminatory structures but one’s reactions to them, meaning that energy and time are given to an interiority that leaves structural triggers of stress in place, like leaving unaddressed the expectation of doing three people’s jobs instead of one so that employers can save on salaries (cf. Ng, 2016).

### ***Fact or bias? Flesh or culture? Concepts of attention***

The above points to the issue of attention-placement and whether Biologies Old and New can rely upon claims to objectivity and consensus around value-neutrality in research. Practising mindfulness as a technology of self-other consists of an accepting, non-judgemental attitude, and *attention* to the present moment. A teacher must ‘let go’ of her darting thoughts and plans, as well as her profound fears or doubts over whether she is a good or bad teacher or whether she has a horrible class (Schoeberlein & Seth, 2009). Practising attention this way is presented as having positive effects on one’s attunement to the world and of building resilience (Mansfield et al., 2016; Rechtschaffen, 2014).

Who or what defines world, present moment and resilience and what becomes an acceptable object for attention amid manifold possibilities is rarely discussed in any depth, however. The paradox, well mobilized within medieval Christianity, remains – that judgement has already been made if change is a goal and judgement will continue to be mobilized to assess if self and aim align, that is, something has to be judged as wrong or not as good, as it could be or in need of healing or reshaping to undertake new practices and something else has to be judged as worthy of one’s attention and time. This was the case in monastic traditions, in which practices of constant attention (prayer, reading, meditation) were embedded in a decision to devote one’s whole life to serving God, as well as addressing the cycle of sin, repentance and purification (Leclercq, 1982). Amid this paradox of the judgements that are already made in order to recommend non-judgemental attention, there is typically little acknowledgement of cultural differences in how suffering, resilience, and attention might differentially arise as such, making mindfulness advice for teachers read like ‘whitewashing’. Suffering based on centuries of racialized mistreatment, family stories of the violence it continues to encourage and well-founded fear of police is different from suffering based on an overcrowded classroom, alleviated by deep breathing or shifting attentional energy.

This points to fundamental – and unresolved – disconnects that were overtly debated amid the emergence of ‘the modern fact’ and prior to that within the Reformation and Counter-Reformation. Transcendence/immanence debates play out differently around perceived notions of objectivity (materiality and flesh as value-neutral) versus theories of power and cultural differences (there is no such thing as value-neutral). Poovey (1998) demonstrates, for instance, that at the point of emergence of *factum* into English, the debate over whether facts or ‘deracinated particulars’ were *prior to theory* or *proved and grounded theory* erupted and continued in different forms. One site of such continuation is the emergence of attention as a research category. Mindfulness

ties together the historical trajectories of attention as a psychological subject of study and efforts towards more efficient governance of 'the masses' (Crary, 1999). In advice for teachers, attention operates as a gateway for personal transformation, thereby highlighting the undecidability of the area in which biology and psychology intersect and diverge around claims to flesh-as-neutral and cognitive-as-worldview.

We suggest here, then, that depicting mindfulness-as-neutral-attention-placement, as a common-sense practice of bare attention without particular dogma or creed, (without references to *dharma* or *sati*, for instance) aids in deracinating mindfulness from an overt religious imaginary but not from 'reason'. Stress, in particular, is a concept that overcodes various symptoms among teachers, from sleep deprivation to questioning the existential meaning of their work, while re-securing the circular play of reason in upholding Being-as-properties-of-living-as-flesh. Stress symptoms, for instance, are addressed through a repeated return to self in the form of non-judgemental attention to the present moment. The aim of mental stability that results from diligent mindfulness practice is meant to be witnessed, then, in the results of neuroscientific and endocrine research and not in the afterlife of salvation.

### ***Circumscription of experience***

This points to a final nodal point. Within education's obsession with transformation, Biologies New serve a promissory function: as you give up your old conceptions of good and bad, you have to trust that something, and not just anything will happen – and this something can be captured in immanent discourses of organic localization and changeability. Under this logic, meditation will always require a site that can be named and controlled. It becomes territorialized in the 'experience' of the individual 'mind' which is brained as having identifiable neural correlates (Schoeberlein & Seth, 2009).

Here, transcendence is both disavowed and retained at another level. Since the late nineteenth century, concepts of religious or mystical experience have been coined to represent what is seemingly universal in all religions (Sharf, 1995). Yet, such apparently universal traits can be traced back especially to a Protestant Christian onto-theo-political imagery of communities consisting of individuals who are moved by and experience fulfilment through a personal 'calling' that emanates from an 'inside' and points towards a divine realm. These tendencies were secularized in glossing experience with an air of deep personal truth that is indubitable and irreducible to any context outside itself. In other words, 'experience' has 'truth' irrespective of what it is true 'about' (Jay, 2005; Williams, 1983). The notion of experience was reinserted into the psy sciences after being marginalized in the early twentieth century, in the form of phenomenology. In consciousness studies, for instance, the 'hard problem' of the relationship between experience and its neural constituents was approached through rigorous phenomenological methods, supplemented with Buddhist meditation practice (Varela, 1996).

Today, the undecidability of the locus of powers considered mental and the problem of identifying discrete causes of behaviour and thought still resonates beyond Gall, James and the OECD's struggles in new double positions vis-à-vis experience and mindfulness. On the one hand, mindfulness literature informs teachers that their endocrine and nervous systems are imbued with the way they think and feel, yet on the other, the nature of the relation between experience nested in the mind and the brain is

conspicuously vague (cf. De Vos, 2016). What gets to arise, be noted and labelled as an experience, then, remains undertheorized, yet putatively tied to biophysiological markers that could be made visible to another.

Popular programmatic mindfulness literature taps into the notion of brain plasticity and informs teachers that decreased grey matter density in the amygdala is 'associated' with stress and anxiety, or that temporal–parietal junction is 'responsible for' self-awareness. In the reverse, as people practise mindfulness for a considerable period of time, increased activity in the left prefrontal cortex 'responsible for' self-awareness and compassion is claimed (Rechtschaffen, 2014, pp. 25–34).

Again, as for the other two nodal points above, we are not positioning this as 'good' or 'bad' but as an event that marks an historic or genealogical discontent. The accounts reflect the aforementioned given reality of brain science as the truth of truth that orders what can be really known about mindfulness-as-meditation. Yet, the vague expressions of 'associated with' and 'responsible for' are indices of the problematic division between brain and mind, and the undecided nature of any causal relation between two 'things' that are not considered universal in the first place. This means that mindfulness discourses are not reducible to positivistic discourses of mind equals brain, nor to brain-as-mind's-instrument of self-improvement (cf. Rose & Abi-Rached, 2013, pp. 221, 226–227).

Instead, we suggest here that neuroscientific accounts and predictable critiques of them emerge in the wake of an unresolved tension between immanence and transcendence in *Biologies New* in which the teacher assumes the double position of an 'enslaved sovereign' (Foucault, 2002, p. 340), resonating in scientific and political registers of education (Saari, 2016). The teacher subject is both the knower and the known: having first-person 'experiences' (of e.g. stress) and being a third-person object of knowledge (the neuroscientific data of stress). She is both ruler and the ruled: through mindfulness practice, she exercises control over her own brain and body, yet at the same time, she is governed, not just by outside political structures nor divine rule, but also by the immanent forces of Life that delimit the space of her free will and autonomy. In this tension, neither side assumes a dominant position. Instead, they are mutually encroached, both reinforcing each other, precluding each other's excessive forms.

## Conclusion

Today, widely adopted mindfulness discourses in education rest upon certain truths that locate mindfulness practice in the experience of the mind, which has neural correlates that testify as to how it works. These truths stand at the crux of heterogeneous developments that enabled particular technologies of self, microstrategies of conversion, forms of rationality, the neuro turn, and the contemplative turn to meet. Making mind the object of analysis and brain its home was not an inevitable or natural event. The meeting of neuro and contemplative turns in the twenty-first century especially required not just shifts in technologies of self out of ancient 'pagan' and Christian heritages into post-Cartesian scientific ones, but a culture of human dissection, the formation of a medical gaze, a problematization of teachers as stressed and education as broken.

*Biologies Old* took shape as part of this broader horizon-making, helping to forge a space of finitude that emerges beyond 'the death of God'. The rapid spread of mindfulness discourses coincides with *Biologies New*, however, which have been dependent on

unstable and undecided divisions between science/religion and transcendence/immanence. This helps to explain why mindfulness seems to have its cake and eat it, too, and why polarizing reactions seem to form around mention of mindfulness: there is a language of spirituality and conversion, coexisting with a proliferation of health discourses; this cancels out the possibility of ultimate transcendence except as immanent-transcendence of flesh within a self-knowledge-reality triad; and encourages the new master as scientific law, over and above a phenomenology required, but subjugated. This strange composition emerged in the long (and still ongoing) shadow of 'the death of God' as an index of belief in a single transcendental principle of reality and origin (whether named God, Biology, Culture, etc.).

At least two trajectories of future developments in Biologies New arise out of this strange composition. One is a resuscitation of a 'return of God' – spirituality, however defined, through a backdoor, relabelled (e.g. SBNR: spiritual but not religious). Another is a more sceptical and critical orientation (which was also historically part of religious reason), in which change is greeted by the charge that it is a dressed up re-entry, an instance of 'the new gods but same gods' (McSweeney, 2013).

In the twenty-first century, the practices and operations recommended for teachers constitute an important, unique and specific instance of Biologies New in which *bios* is relocated in lifelong changeability tied to expert-governed self-responsibilization, surveillance of student others, attention-placement and withholding, and the resultant circumscription of experience. We submit, then, that the continuous reworking of a transcendence/immanence horizon in recommendations for teachers 'less reflects resonance with aspects of a religious worldview' than 'they stage and clarify the challenge of thinking otherwise immanently after the death of God' (McSweeney, 2013, p. 72).

## Note

1. 'Man is an invention of recent date. And one perhaps nearing its end. If those arrangements were to disappear [that enabled man's appearance] ... then one can certainly wager that man would be erased, like a face drawn in the sand at the edge of the sea' (Foucault, 1970, p. 422). Man is the term of the time which Foucault was discussing, which included and exceeded its gendering.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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