

Understanding mindfulness: Current epistemological, methodological, and ethical issues

Achtsamkeit verstehen: Gegenwärtige epistemologische, methodologische und ethische Probleme

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Abstract

This paper reflects on current discussions about the meeting of Buddhism and Western psychology in the field of mindfulness from the perspective of Buddhist psychology (BP). The epistemology and methodology of BP and Western clinical psychology differ significantly. The first-person Buddhist and the third-person scientific approaches to understanding and evidencing mindfulness appear to be irreconcilable. However, BP and Buddhist ethics provide frameworks with which contemporary scientific research can be scrutinised. Such scrutiny can provide new perspectives on psychological and ethical shortcomings of modern Western scientific epistemology and methodology. BP is the foundation for the Western science of mindfulness. It is argued that BP could play a more important role in the training of scientists in mindfulness. By bridging Buddhist and Western psychology in the science of mindfulness, it appears to be possible to initiate critical psychological and ethical reflection of how modern Western science approaches, constructs, and conditions the world and its inhabitants. Such reflection, and consequent mindful scientific changes, could be of invaluable use in reducing the suffering of sentient beings in this world.

Keywords

Mindfulness; Buddhist psychology; science; epistemology; methodology; ethics; *Abhidhamma*, *sutta*, process; Indian psychology; loving kindness; compassion; Christianity

Kurzzusammenfassung

In diesem Artikel werden gegenwärtige Diskurse in der Begegnung zwischen Buddhismus und westlicher Psychologie im Feld der Achtsamkeit aus der Perspektive der buddhistischen Psychologie (BP) reflektiert. Die Epistemologie und Methodologie von BP und westlicher klinischer Psychologie unterscheiden sich signifikant. Der erste-Person buddhistische und der dritte-Person wissenschaftliche Zugang zum Verständnis und zur Evidenz der Achtsamkeit erscheint unvereinbar. BP und buddhistische Ethik stellen jedoch einen Rahmen zur Verfügung, in dem man gegenwärtige

wissenschaftliche Forschung hinterfragen kann. Eine solche Herangehensweise kann neue Perspektiven zu psychologischen und ethischen Defiziten der modernen westlich wissenschaftlichen Epistemologie und Methodologie bereitstellen. BP ist die Grundlage für die westliche Wissenschaft der Achtsamkeit und könnte eine entscheidendere Rolle in der Ausbildung von WissenschaftlerInnen im Feld der Achtsamkeit spielen. Durch die Verbindung von buddhistischer und westlicher Psychologie in der Wissenschaft der Achtsamkeit könnten kritische psychologische und ethische Reflexionen initiiert werden – betreffend des Zuganges zur, der Konstruktion und der Konditionierung der Welt und ihrer BewohnerInnen durch die moderne westliche Wissenschaft. Solche Reflexionen und darauf folgende achtsame wissenschaftliche Veränderungen könnten von unschätzbarem Wert für die Linderung von Leiden von fühlenden Wesen in dieser Welt sein.

Schlüsselwörter

Achtsamkeit; Buddhistische Psychologie; Wissenschaft; Epistemologie; Methodologie; Ethik; *Abhidhamma*, *sutta*, Prozess; Indische Psychologie; Freundlichkeit, Mitgefühl; Christentum

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This paper is a contribution to recent discussions about the meeting of Buddhism and Western psychology in the field of mindfulness (Amaro, 2015; Baer, 2015; Bodhi, 2011; Davis, 2015; Gethin, 2011; Greenberg & Mitra, 2015; Grossman, 2015; Kabat-Zinn, 2011; Kuan, 2008, 2011; Kwee, 2010; Kwee, Gergen, & Koshikawa, 2006; Levine, 2009; Lindahl, 2015; Lopez, 2012; Mathers, Miller, & Ando, 2009; Mikulas, 2015; Monteiro, Musten, & Compson, 2015; Nauriyal, Drummond, & Lal, 2006; Pickering, 1997; Purser, 2015; Rao, Paranjpe, & Dalal, 2008; Sharf, 2015; Van Gordon, Shonin, Griffiths, & Singh, 2015; Watson, 2008; Wegela, 2009; Williams & Kabat-Zinn, 2011). We are concerned with epistemological dimensions underlying the dialogue and integration of traditional (Pāli) Buddhist and contemporary clinical mindfulness from the perspective of Buddhist psychology (BP), a field that belongs to applied Buddhist studies and cross-cultural psychology, more precisely to the field of (non-Western) indigenous psychologies. One of the most important indigenous psychologies that have been studied in cross-cultural psychology in recent years is Indian psychology (IP), of which BP is a part (Berry, Poortinga, Breugelmans, Chasiotis, & Sam, 2011; Rao, Paranjpe, & Dalal, 2008).

We argue that the epistemology underpinning contemporary modern Western science shows significant points of difference from the epistemology underpinning Buddhism and BP. We clarify epistemological issues and consider possibilities of integration of Buddhist ethics and psychology into Western science. The Western science of mindfulness may facilitate such integration by bridging East and West. This work is inevitably exploratory, but we argue that despite some real differences of approach and intention, BP could play a more significant role in the field of Western contemporary clinical mindfulness and the training of scientists.

BP is concerned with the parts in the system of Buddhism that elaborate questions of consciousness, experience, and behaviour. In this commentary BP refers to the early Buddhist psychological teachings in the Pāli literature, especially the Buddha's "psychology" that is recorded in the Pāli canon. We use three main textual sources. These are the historically oldest treatises of the *Sutta-piṭaka* (Pāli, "the basket of the discourses"), which describes situations in which the Buddha taught and practised in dialogue and narrative form; the *Abhidhamma*, the canonical "higher teaching", that elaborates mental states, mental factors, and their relationship to the body on a moment by moment basis, often in tabular form; and the "commentaries", a collection of literature finally committed to writing in the 5th to 6th century CE that represents elements that would have accumulated in the centuries before, while the tradition was still primarily oral. The *Sutta-piṭaka* and the *Abhidhamma* date from the period of oral transmission, from around 400 BCE. The understanding of the mind and its relationship to the world described in this paper as BP cannot be defined or regarded as a static system, though this paper is mostly concerned with the earliest strata of texts, which maintain within the different collections a consistent and self-conscious coherence of approach. BP may be considered a philosophical, a phenomenological psychological, or a religious psychology (De Silva, 2014; Ghose, 2004; Kalupahana, 1987; Olendzki, 2010; Pickering, 2006; Virtbauer, 2014), that evolved over centuries through original text, practice, and evolutionary development. As it is still a

living tradition of practice and theory, we also cite modern teachings to demonstrate the way that some terms and mental states are taught in modern South and Southeast Asian contexts. What is referred to in this paper as BP is the psychology that underpins the qualitative and intuitive way of doing psychological research by the means of mindfulness and meditation: mindfulness is just one, if crucial, element in arousing, accompanying, and even defining the awakened mind. In addition, ethics and psychology are indivisibly connected in Buddhism. So BP could also be referred to as “Buddhist psychological ethics” (Rhys Davids, 1900/1974, 1936; Virtbauer, 2012).

1 *Buddhist Psychology*

1.1 *Key Features of Importance in the Dialogue with Western Psychology*

It is not possible to explore all the implications of the Buddhist psychological understanding here, but some key features are critical in connection to transcultural epistemological, methodological, and ethical issues. This list is not intended to be exhaustive, but rather to demonstrate some crucially distinct features of Buddhist systems of understanding the mind:

1. The intention of the Buddhist textual material is not “scientific” in the modern sense. It describes, albeit in the third person and in neutral, etc terms the nature of the mind when it is skilful, or wholesome, and the nature of the mind when it is troubled, disturbed or distorted in some way. This is examined too from an experiential, emic point of view, as part of an ongoing path to awakening. According to the *Abhidhamma* method consciousness arises within a succession of thought-moments, in changing forms, and according to certain patterns that maintain its continuity over any given lifespan. The skilful mind, according to the *Abhidhamma*, may arise for only a few thought moments in the continuum of consciousness; but when it does, it is accompanied by other factors that may be promoted and sustained by the practitioner.
2. BP has a clear intention, which involves assumptions that may not be shared by modern Western psychological systems:
 - a. That although the Buddha describes all of us as “ill”, for the Buddha the cure is the path that leads to freedom, and activity within that path (AN V 218–219; MN I 501–524).
 - b. That ethical behaviour is itself “happy”, productive of good result, and a necessary concomitant to mental culture and cure, though not a source of freedom in itself (Harvey, 2013, pp. 264–286; MN I 76, 483; MN III 170–178).
 - c. That the seat of consciousness is the heart (*hadaya*), not the head (the brain), a feature apparently shared by many cultures, for whom the privileging of the “head” over the heart seems curious and experientially inaccurate, wherever the still debated locus of consciousness may reside from a physiological, clinical, and legal point of view (As 140 [trans. Rhys Davids & Tin, 1920/1958, Vol. I, pp. 185–186, from the Pāli]; Nārada, 1987, pp. 212, 223–225; Olivelle, 1996, p. 216 [*Kauṣītaki Upaniṣad* 3.2]; Rhys Davids, 1900/1974, p. lxxxvi).

- d. That mindfulness (*sati*) is just one factor in a path of mental development which is eightfold, and that while it is one defining characteristic of skilful or “healthy” consciousness, it is, when correctly aroused, always accompanied by other factors that promote well-being (*Dhs* 1–57; Harvey, 2013, pp. 81–87; Saddhatissa, 1971, pp. 45–57; Shaw, 2014, pp. 27–36, 139–156).
- e. Perhaps most crucially to this adaptation is the assumption within all forms of Buddhism, that there is an essential radiance proper to the mind itself (Gethin, 1998, pp. 202–218; Harvey, 2013, p. 247; Shaw, 2006a, pp. 31–32): “This mind, monks, is radiant, but is freed from impurities which come as visitors from outside” (*AN* I 10; trans. Shaw, 2014, p. 139, from the *Pāli*).

While the three “unskilful” roots (*akusala mūla*) of greed (*lobha*), hatred (*dosa*), and delusion (*moha*) are endemic to human existence, according to the *Abhidhamma* material, there are, in all humans, two other roots, which produced rebirth in a human body. These are present in the underlying continuum of mind that is involved in deep sleep, and at the end of any thought process, according to the *Abhidhamma* method. They are also linked to the notion of an inherent radiance in the human mind, characterised by non-greed (*alobha*) or generosity (*cāga* or *dāna*) and non-hatred (*adosa*) or loving kindness (*mettā*). A third “skilful” root (*kusala mūla*), wisdom (*paññā*), is also present in most humans (*As* 76–81, 127–130, 149–150, 159–162 [trans. Rhys Davids, 1920/1958, Vol. I, pp. 101–106, 167–171, 198–199, 212–215, from the *Pāli*]). From the doctrinal point of view there are certainly powerful, “unskilful” factors that govern our “unconscious” and conscious behaviour. The notion of an “unconscious” mind is not apparent in early Buddhism (cf. Virtbauer, 2014), except possibly inasmuch as it could refer to the *bhavaṅga* (“life-continuum”) consciousness, “skilful” in most humans. The mind returns to the *bhavaṅga* at rest, in states of deep sleep, or at the culmination of the sense door and mind-door process by which the mind relates and responds to objects that arise from within the mind or from the sensory perception of the outside world.

The notion of the radiant mind (*pabhassara citta*), articulated in various ways in different forms of Buddhism, is too complex to consider fully here, but should be explained a little more for these purposes. Within the framework of Southern Buddhism, the notion of luminosity, or radiance, is thought by some of the commentaries to apply to the *bhavaṅga*, a rather late *Abhidhamma* concept, referring to our state of mind when in deep, untroubled sleep. Other commentaries say it refers to the radiant mind that emerges in actively skilful (*javana*) states in the daily thought process, and in meditation. For our purposes here we take it as including all of these, but much more, in what we feel seems the most likely *Sutta* interpretation. Bodhi (2012) notes that what he terms “the natural luminosity of the mind” is, as he argues, “intrinsic to the mind itself, not to a particular kind of mental event”: it is just what consciousness itself is like (pp. 1597–1598, n. 46). The *sutta* on this radiance of mind (*AN* I 10) is far earlier than any *Abhidhamma* formulations, and while the reference to loving-kindness in daily life or meditation a few lines later suggests some active meaning, including the development of the meditations, it seems far more likely that the passage, while including these particular contexts, offers simply a basic description of “mind” or

“consciousness”, when it is without encumbrance or defilement at all. The notion of an underlying luminosity is developed in other forms of Buddhism to encompass the idea of the *tathāgatagarbha*, the “embryonic” Buddha nature in all beings, and certain aspects of the *dhammadhātu* in the Yogacāra system; such discussion, though rewarding in itself, however, is beyond the scope of the argument here (Buswell, 1981; Harvey, 2013, pp. 27–9, 68, 92, 138–45, 330).

So, despite “unskilful” factors, there are “skilful” and healthy ones too. A child is as likely to suffer from, say, a repressed desire to be generous, or a feeling of love or joy that may be thwarted, as he/she is to suffer from a repressed desire or aversion. Indeed this supposition is starting to be vindicated in Western psychological study: recent research suggests that, contrary to much popular opinion, concern for the well-being of others is key to moral decision-making (Crockett et al., 2014).

There are, however, some points that BP shares with modern Western psychology:

1. That, as with modern psychology or therapy, the role of discussion, a guide and guidance is considered essential; teachers need to have themselves undergone training. The nature of this, however, perhaps needs some investigation (*AN* III 182–184; *Nidd* I 359–60; Shaw, 2014, pp. 12–21; *Ud* 34–37).
2. That the teaching is, however, to be realized “each for him or herself”, not through an external agency, physical or human (Harvey, 2013, p. 245; Shaw, 2006b, pp. 119–121).
3. That techniques associated with mindfulness are conducive to “health” of mind, whether this is framed within Buddhist terms or not.
4. In a potential alignment with modern Western psychology, that advice and guidance should be appropriate to the needs of the individual, so that their requirements rather than doctrine or a preconceived pattern of recovery are paramount (*AN* I 206–211; *AN* III 316; *AN* IV 30; Shaw, 2006a, pp. 53–56, 129–134, 194–198; *Ud* 34–37).

A number of factors may make much of this accompanying psychology in Buddhism in need of re-interpretation and re-articulation within a secular Western therapeutic context. It would not be appropriate, for instance, for the UK’s National Institute for Health and Care Excellence (NICE, 2016) to promote the teachings and practices of a non-secular tradition. Many people are attracted to various therapies associated with mindfulness precisely because it is taught apart from what are often termed the “trappings” of Buddhism; these would need to be presented fairly, and with a sense that it is a system of psychological analysis that suggests how other supports may arise from the practice of “mindfulness” as it is practiced in modern secular settings. The mindfulness movement itself has an ambivalent relationship with its Buddhist roots, and wishes to work within mainstream Western psychological theory and clinical practice. The textual, practice-based, and traditional background, however, provides insights into how mindfulness is seen and interpreted in its own setting, and suggests some ways in which it could usefully be seen within the framework of modern Western psychological systems.

1.2 Western Reception

Western clinical mindfulness has been based on BP from its beginning. However, the grounds on which the reception of Buddhism in Western medicine and psychology has taken place can themselves be questioned (cf. Lopez, 2012; Virtbauer, 2012). According to Kabat-Zinn (2013), mindfulness-based stress reduction (MBSR) is “deeply rooted in dharma” (p. 602). The four formal MBSR methods Kabat-Zinn introduces in *Full catastrophe living*, namely sitting meditation, body scan, yoga, and walking meditation, are methods rooted in IP. However, until recently the indigenous Buddhist psychological perspective has hardly played any role at all in the development and discussions of clinical mindfulness. To discuss this matter means not only to question how Buddhist and clinical mindfulness can or cannot be integrated but also to reflect on what the meeting of Buddhist and Western psychology implies epistemologically and methodologically. What does authoritative knowledge mean from the perspective of BP and Western psychology? What are appropriate methods to generate valid knowledge?

Doing IP means to research and understand psychological phenomena from an indigenous, emic (in this case Indian psychological), perspective (Bhawuk, 2010; Bhawuk & Srinivas, 2010; Rao et al., 2008; Sinha, 1958/2008, 1961/2008, 1969/2008). In mindfulness meditation the meditator applies the most important Buddhist psychological research method of investigating the functioning of the human mind-and-body (*nāma-rūpa*), namely *satī*, which is now commonly though not necessarily most fortunately, rendered as “mindfulness” (Bodhi, 2011; Gethin, 2011; Gombrich, 2009). Usually indigenous psychologies based on first-person research, as in the case of IP, challenge the mainstream Western scientific approaches to human experience and behaviour, for these are firmly based on third-person research that is based on the Western scientific methodology that validates psychological knowledge (Rao, 2008; Wallace, 2007).

The link between first and third person in research requires greater investigation (e.g., Pickering, 2006; Roth, 2006). To a limited degree the tension between first- and third-person approaches to mindfulness has been reflected in the field of Western clinical mindfulness. For example, the developers of the Freiburg Mindfulness Inventory refer to the problem of researching the phenomenon of mindfulness with the mainstream quantitative means of psychology. They ask for cautiousness and suggest that it is not feasible “simply to instrumentalise and integrate mindfulness into a scientific operational world view” (Walach et al., 2009, p. 758, trans. from the German). The Mind & Life Institute (2016) emphasises the need for first-person research in mindfulness. However, though there have been a limited number of qualitative, phenomenological, and dialogical designs (e.g., Full, Walach, & Trautwein, 2013; Kudesia & Nyima, 2015; Shonin & Van Gordon, 2015) there are few examples of real methodological innovations arising from the meeting of BP and clinical psychology.

Generally, Western psychology conducts research in its usual way, with mindfulness as its new object. Clinical evidence in mindfulness is mainly based on psychometrics and neuroscience. Evidence refers to quantitative and material correlates of mindfulness. Correlates are objectified and made independent of the experiencer. Buddhist mindfulness (*satī*) has not been able to shake up mainstream Western scientific epistemology. It has not been able to change how psychological

objectivity is methodologically approached. However, from the perspective of BP, *sati* is meant to do exactly this. Engaging in this question requires the reflection of all things through mindfulness including one's conditioned ways of researching it.

The term "evidence", in Buddhist mindfulness practice, does not mean establishing that mindfulness really works by means of objectifying (scientific) methods. Rather, it is to learn intuitively to "see" how things really are including the scientific methods that are employed to research human nature and mindfulness. This "seeing" needs to be experientially tested and refined against one's qualities of perception and cognition to develop increasingly clear understanding of the characteristics of phenomena. Only a highly trained mind – from the perspective of BP mainly (but not only) by the means of *sati* – can learn to "see" in this way.

1.3 Mindfulness in BP

If we look at the textual, historical, and practice-based accounts of mindfulness within the Buddhist tradition, and consider this contextual background, in terms of practice and theory, we find out that mindfulness is considered just one, though crucially important, element in a path of practice which is eightfold, and which also includes right view (*sammā-diṭṭhi*), right intention (*sammā-saṅkappa*), right speech (*sammā-vācā*), right action (*sammā-kammanta*), right livelihood (*sammā-ājīva*), right effort (*sammā-vāyāma*), (right mindfulness [*sammā-sati*],) and right concentration (*sammā-samādhi*). It should be mentioned at this point that the *Suttas* do also record a "wrong mindfulness" (*micchāsati*), just as the other factors of the eightfold path may on occasion be "wrong" or "false" (*DN* III 214; *DN* III 274); this application is found occasionally, though rarely, in more *Abhidhamma* based analysis (*Dhs* 1349). The fairly frequent *Sutta* references warn against "wrong" factors of the eightfold path, with some intimation that they actively militate against their opposites. Presumably when it is "wrong" or "false", mindfulness arises in a distorted form, as the alertness present when there is desire to harm or steal from another, or as a kind of ingrained negligence "to be thrown away as dregs" (*Paṭis* II 86). The Buddha, for instance, on one occasion notes that a deeply corrupt and vicious monk defiles the assembly and has "wrong mindfulness" (*micchāsati*; *AN* IV 205). There is also the much milder and not so reprehensible *mutṭhasati*[no], "forgetful in mindfulness" (*Vbh* 351), which appears to refer to a lack of decorum or care. While the commentaries do not appear to explain the term, it is used in one example to describe slightly unruly and lax monks, for instance (*S* I 61)! The word *asati*, "unmindful", like this term, seems also mild, largely applicable to normal, occasional lapses of attention and carelessness rather than the directed commitment to a "wrong" or "false" path of *micchāsati* (*Ja* III 486, VI 77). When skilful, however, its far more usual *Sutta* and *Abhidhamma* usage, *sati* is accompanied, whenever it arises, with other mental states that support it and shape its presence in the healthy or "skilful" mind. These place it as influencing, and influenced by, other factors of the eightfold path.

Indeed such mindfulness is seen as one of the distinguishing features of the skilful mind. Textual references identify a number of features of the mental state (*cetasika*) of mindfulness, making it a central element of skilful consciousness. In *Milindapañha* (*Mil*), a second century BCE work regarded as canonical by the Burmese, the quality is said to have two characteristics: "Not drifting away

(*apilāpana*) is a distinguishing mark of mindfulness [see *Dhs* 14; Shaw, 2014, pp. 221–224; mindfulness is not allowing things to float away when at sea, or, be forgotten – ‘not wobbling’, as Horner, 1963, p. 50, puts it; see also Rhys Davids 1890/1925, p. 58, n. 2], and taking up (*upagaṇhanā*) is a distinguishing mark of mindfulness” (*Mil* 37–39; for *upagaṇhanā*, see *DP* I 441: “seizing, drawing to oneself, becoming master of”, or *CPD* II 436: “taking up”; see also Horner, 1963, p. 50, n. 6, and *MA* I 82–3; Rhys Davids, 1890/1925, p. 58, n. 2, gives “keeping up”). Mindfulness,

... when it arises (the verb *apilāpati* “to remind, enumerate”, here in the causative, is of a different root from “not drifting away” [*apilāpana*; see above], so a pun is intended), keeps the measure of skilful and unskilful states, blameworthy and irreproachable states, inferior and superior states, dark, bright and evenly mixed states, ... and in this way the practitioner then practises the things that should be practised, and does not practise the things that should not be practised. He follows things that should be followed and does not follow things that should not be followed. In this way, great king, not drifting away is a distinguishing mark of mindfulness. (*Mil* 37; trans. Shaw, 2014, p. 220, from the Pāli)

A simile is made in this work with the treasurer of a great king, that can inform the monarch, the mind, of all his resources, at any time. A second function is that when mindfulness arises, it

... examines the course of mental states that are of benefit and not of benefit, thinking: ‘These mental states are of benefit, these are not of benefit, these mental states are helpful [*upakāra*], these mental states are not helpful.’ And then the practitioner removes mental states that are not of benefit and takes up mental states that are of benefit, and removes mental states that are not helpful and takes up mental states that are helpful. (*Mil* 37–38; trans. Shaw, 2014, p. 221, from the Pāli)

Mindfulness exercises a kind of intuitive discrimination, guiding the mind towards what is good for it, and taking it away from what is not (cf. Soma, 1981/2003, pp. xv–xxvii). The doctrine of an innate health or radiance to the mind reinforces this sense of mindfulness as having an instinctively ethical, and even common-sense apprehension of wholesomeness and the means of sustaining psychological health. A third element to its function, as Harvey (2015) and Kuan (2008) point out, is that it turns the mind to “certain salutary things”, such as the ten recollections, meditations within Buddhism, that are usually taught alongside other techniques, to support, encourage, and ensure a sustained and even development of the mind to health. They involve a sustained and conscious application of mindfulness: to the qualities of the Buddha and the awakened mind, the teaching that is to be realized “each for himself”, the community of monks and those that have attained path, one’s own generosity, one’s own morality, beings of higher realms, the body, death, the breath, and the peace of attaining an end to suffering. Some of these *anussatis* – a word which means “repeated mindfulness” or “bringing to mind again and again” (*anu*, “repeatedly” + *sati*) – are constantly encouraged by the Buddha when dealing with people who have many lay commitments, with houses full of children, or who are involved in busy work (*AN* V 332–334, 336; Shaw, 2006a, pp. 123–134). They are central to understanding the Buddhist approach to health of mind, within a lay and active working life. The first three are always taught to those practicing meditation; many of the others are too. The *anussatis* are also consciously practised in Southern Buddhist contexts at, say, the approach

to death. At that time the dying person is reminded of earlier acts of generosity or kindness as a meditation to help bring peace for death, a time considered to be of great importance as the one at which the nature of the future rebirth is decided: it is a simple “mindfulness” exercise, which could be valuable during terminal care in secular contexts. In the *Mettā-sutta* (*Sn* 25–26), perhaps the most famous Southern Buddhist text of all, the practice of loving kindness (*mettā*) towards all beings is also described as a “mindfulness”. In modern practice, meditation teachers in Southeast Asia and elsewhere also stress this guiding, intuitive aspect to mindfulness.

Mindfulness in these terms is perceived somewhat differently within the Buddhist tradition from the way it is described in modern mindfulness movements. An innate sense of the ethical, a balancing property of the mind that allows its health to be maintained, a sense of flexibility and a willingness to work under new conditions, a discriminatory quality that avoids action that could be harmful to self or others, and a sense that the practice of loving kindness is a domain of mindfulness, all support the commentarial point that mindfulness is just one aspect of the awake and “skilful” mind, and that this mind is capable of finding peace and, in Buddhist terms, awakening (*bodhi*). It is a means of steering the mind to an active (*kamma*) state that reflects the radiance of the mind said to be present in the underlying substratum of consciousness (*bhavaṅga*), to which the mind returns when at rest (Gethin, 1998, pp. 215–217; Shaw, 2014, pp. 141–146). Others that also feature in the skilful mind of the *Abhidhamma* system are the qualities of “self-respect” (*hiri*) and “regard for consequences” (*ottappa*: these two are regarded as the “guardians of the world” that prevent people from acting in ways that could harm themselves or others), confidence (*saddhā*), and the attributes of tranquillity, softness, lightness, workability, health and straightness of mind and body (*citta/kāya*). These supporting factors prevent views from becoming rigid, stray thoughts from becoming obsessive, and the natural ups and downs of the mind from becoming depression or excitement. Equipoise also maintains this balance (*tatramajjhattatā*: literally, “being right there in the middle”, synonymous to *upekkhā*, “equanimity”, as a mental quality of balance). Mindfulness, working with these factors, is known as the doorkeeper to the mind, guarding what goes in and what goes out (*AN* IV 106–113); it is also the “salt” to the food of the other aspects of the mind, enhancing the flavour of the others, and, indeed, when it arises, these other qualities do too (*As* 121–122). Within the *Abhidhamma* system, mindfulness is a distinguishing feature of the healthy and skilful mind. Most people, most of the time, do not feel that their behaviour is mindful or “healthy”. But even if the notion of an underlying radiance may be alien to some, moments during the day when it does arise are considered greatly restorative and health-giving and worthy of remembrance.

Mindfulness is essentially an embodied practice (Virtbauer, 2016b). Ven. Saddhatissa, a prominent meditation practitioner and scholar of the 20th century writes:

Care must be taken to be neither too objective nor too subjective; we are not being asked to look at our bodies as “things” moving puppet-like before the watching mind; nor are we asked to “feel” very acutely every movement and gesture. What is required is that we try to live here and now “in our bodies”. This might seem a bizarre request, but once we try and experience this state we realize how rarely in fact we are “living in our bodies”, how rarely we are aware of the movements of our limbs and the interplay of our muscles. Mindfulness of the body can be practised too by watching the breath flowing in and out of the nostrils, by

listening to sounds impinging on the ear, not pausing to name or judge them, but just noting their arising and passing away. We can learn to become aware of the taste and texture of food, not after the manner of a gourmet or a connoisseur, ... but simply in order to intensify awareness, noting the order and intensity of sensations, the varieties of flavour, temperatures, colours etc. (Saddhatissa, 1971, pp. 54–55)

Operating with other factors, mindfulness is considered within the Buddhist tradition as providing an appreciation and contentment in basic daily activities, which ensure the mind is strong and not easily unbalanced. As Dhammasāmi writes:

Not excitement but an ordinariness is a challenge to the human mind. It is difficult to grasp and penetrate. There are enormous beauties in such ordinary activity we repeat every day of our life. Take for example, walking, eating, washing, speaking, sleeping and so on. If we discover their beauties and enjoy them, we will then start living every moment of our life, no more feeling bored.

There is no pressure in enjoying the beauties of ordinariness. You only need constant awareness, which is two fold; first the kind of awareness we try to develop through intensive practice of meditation, and general awareness, that we should have in daily life. Walking simply gives you a lot of joy. Going to work, driving back home, meeting the same people in your life, doing the same job, eating almost the same things, taking your children to school, earning and spending – they do not make you bored any more. You just enjoy every moment of doing your routine. This is the secret of happiness. (Dhammasāmi, 2000, pp. 54–55)

This context provides us important background. Both *Abhidhamma* and *Sutta*, from which this material derives, are hugely popular in Southeast Asia, in Burma and Thailand in particular, and would be regarded by most Southern Buddhist practitioners as providing their underlying psychological system and theoretical base for self development; they offer a doctrinal underpinning to a still living tradition of practice and mental development. Mindfulness is one, but just one, factor in this.

At this point, we make some reference to Western counterparts, where the presence of practices that could in some degree be related to “mindfulness” practice is ancient. The subject of “religious” uses of analogous practices has remained largely unexplored, but offers useful perspectives for those who are practicing in other traditions. It would be disingenuous for any good clinical practitioner to claim that no underlying model of the mind and its workings is operating when techniques are suggested as part of a systematic therapeutic exercise. Because of this it may also be helpful and even crucial for the long-term success of any therapy to have some knowledge of the native tradition of the patient/client. The remembering the presence of God in all activities is described from early times and enjoined by St Augustine (*The Nature of Memory*, Book X; Pusey, 1909–1914). Early texts and Christians may not have used any term that has been recently translated as “mindfulness”, but their encouragement of this ever-present awareness suggests that is exactly what they are describing, and more. At that time, and in Christian contexts, this would inevitably have included a kind of mindfulness of God: of one’s part of a larger universe and one’s participation in something

greater than oneself. By restricting the term to its precise linguistic history, one can miss the application of qualities in these early traditions that are not so far in some ways from modern mindfulness methods. St Augustine's observations on memory and the recollection (Latin *recognescere*; *cogenda*; *colligenda*) show how words very kin are used from the outset of the tradition, involving the bringing to mind this remembered presence (O'Donnell, 1992; Pusey, 1909–1914). We should say more than this: that a sense of the constant presence of God involved, or indeed involves, a “mindfulness” of fields and domains that are simply not included in modern secular mindfulness discourse. For some clients/practitioners in modern settings such a path may, however, be very important in their recovery of health. The Jesus prayer, that links mantra and breath recollection, offers another good example of such a “mindfulness”. It should be stressed, however, as in so many of such traditions, careful guidance with a longstanding practitioner is strongly emphasised for this recollection (Palmer & Kallistos Ware, 2014; Kallistos Ware, 2016). In this regard, Christianity offers a distinguished counterpart to the Buddhist teachings, for practices which are enjoined in BP for four domains or fields: that of body (Pāli *kāya*), feeling (*vedanā*), mind (*citta*) and an untranslatable term, *dhammas*, or things as they are (*MN* I 55–63 [*Satipaṭṭhāna-sutta*]). Practically speaking, although the Western materialist scientific world view may make reference to another system difficult, good therapists/practitioners may see, occasionally, that referral may be necessary and a useful concomitant of therapy. We need to bear in mind that the Western scientific viewpoint itself sometimes rests on world views that can render it an “implicit religion”. It takes for granted assumptions, such as the privileging of the materialist world view, or a notion of non-continuity after death, which would be termed “annihilationist” in Buddhism, and thus not representative of the middle way. Such modern Western “beliefs” may not be shared by many clients/patients in other traditions (Bailey, 1999). So a necessarily secular point of view may then nonetheless accommodate a suggestion that a client/patient also find contact with his/her own practice tradition, or articulate his/her return to health in those terms. The Buddha geared his teachings carefully to the imagery, language, and predisposition of those he taught and had interactions (*AN* IV 84–88; *SN* III 106–109; *Ud* 34–37). As was noted earlier, many cultures and psychological systems have historically taken the heart, rather than the head, as their underlying basis. A system that is open to such an experiential supposition, and which is flexible and open with regard to the underlying religious orientation of the practitioner, could offer a more suitable and adaptive vocabulary of transformation for some clients/patients than the model provided by what is essentially, in the terms of these traditions, a “new” discipline, that has its own beliefs and tenets, however useful and indeed complementary they may be in aiding the recovery of the client/patient.

2 Epistemology, Methodology, and Ethics

In BP, applied mindfulness is the method to validate mindfulness itself, as well as its effects. Referring to the four noble truths, if one can sense that all conditioned things ultimately are suffering, transient, and without an inherent enduring quality of self (i.e., one can reflect oneself, one's self, and one's self- and world-view and the factors that have produced it) one will become interested in intuitively understanding the origin, the cessation, and the way to the cessation of this suffering, or “stress”, as the word *dukkha* is sometimes translated today (Thanissaro, 1993). Through

intuitive insight the suffering caused by discursive knowledge can be understood but without this suffering intuitive insight cannot occur. Put differently, one first needs to learn and reflect conditioned things and the suffering caused by them. Then one may move on and find the source of suffering within oneself. The Buddha's life story in the Pāli canon follows this pattern (Ñāṇamoli, 1992; cf. Shaw, 2010). If this source is found it becomes clear why there is (and has to be) suffering in oneself and the world, but also how it may be alleviated. In Buddhism the ability to reflect in this way distinguishes humans from other sentient beings. It is the reason why humans may attain awakening and deliverance (from suffering and continuous existence).

Within a materialist scientific world view, Buddhist mindfulness certainly cannot replace Western scientific methods. However, from the strictly experiential perspective of BP and other indigenous (including Western) phenomenological systems, Western scientific methods can neither capture nor explain the phenomenon of mindfulness itself. It is potentially a clash of fundamentally different epistemologies. However, Buddhism has always adapted to change, and reframed many of its basic tenets according to local beliefs, customs and doctrine (Cousins, 1997; Harvey, 2013, pp. 1–7; Shaw, 2009, pp. 27–34). Western doctrines are those of the pre-eminence of the scientific world view and a start has been made on introducing techniques from elsewhere. This paper suggests that the process could be helped by some basic introduction to the theory of the mind too. Certain features of the understanding of mind that characterize the *Abhidhamma* schools and their method would need to be highlighted at the outset of any such introduction. The first is the assumption, that has already been mentioned, throughout all forms of Buddhism that there is an inherent radiance, or health to the mind itself, in itself a potentially helpful notion in the path to a recovery of health, for some, if not all. This means that some words, like “individuation” or “a sense of self”, with positive connotations, are appropriate and could indeed start to be used in such contexts. Key to our understanding is to see the implication of one crucial term in Buddhist theory: *ekaggatā*, which means, literally “gone to oneness”, or “unification”. Present in all consciousness, and so there in what are termed unskillful, unwholesome or unhealthy states as well as positive or wholesome states, it is deepened, with positive implications, in states of meditation or happiness. In such states *ekaggatā* is always accompanied by mindfulness, and, in *jhāna* (deeper states of meditation), by wisdom, if the states are healthy. “Wrong concentration” is mentioned, and is associated with wrong courses of the mind, when it becomes focused and obsessive, or practices a meditation that is unskillful and which closes the mind. It is characterized by the absence of mindfulness (*Dhs* 375). As so often with popularisations of ideas, which are changed as they become current amongst the general populace, the notion of an “absence of self” can be a very harmful teaching, whether in a Buddhist context or any other, if it is not understood correctly (Hamilton, 2000). Some populist understandings of Buddhism, that one somehow has “to get rid of the self” could, of course, damage the emergent sense of confidence and identity a therapy may be encouraging. But they do not represent Buddhist teaching on what could more properly be termed the “selflessness” and “unification” of the mind that is awake. It should be stressed, incidentally, that this paper is not dealing with the important area of Buddhist meditative development, itself requiring a separate study (see Harvey, 2015; Shaw, 2014). The sense of “selflessness” and “unification” are in part aroused by the simple presence of “skillful consciousness”, but also by the practice of calm or *samatha* meditation. States of ever increasing calm, in development of the meditations (*jhānas*),

allow for the fullest development of “unification”. These meditations are traditionally regarded in Southern Buddhism as essential also for the full development of insight (*vipassanā*), which will not be complete and balanced without the peace and contentment they provide. Indeed, the “salutary” mindfulnesses (*anussatis*) are considered ten of the forty calm meditation objects described by Buddhaghosa, and comprise a key part in the healthy development of meditative practice, including some activities in daily life. Such recollections come under the broad category of *bhāvanā*, a term for activities that include investigation, devotional practices, discussion, and sitting meditation too (Shaw, 2014, pp. 12–57).

What may be a solution to the “problem” of mindfulness in Western psychological science (cf. Miller & Sivvy, 2014)? If mindfulness is “reduced” to fit into the current Western psychological epistemological mainstream it loses its context, traditional support systems, and the means whereby it is part of a path that leads, in graduated stages, “onwards” (*opanāyiko*). It works as a stress reduction method but it is not meant to be (only) this. The clinical mindfulness classic itself may be quoted to support this argument:

Awareness itself is not highly valued [in modern education], nor are we taught the richness of it and how to nurture, use, and inhabit it—how it can round out the limitations and sometimes the tyranny of thinking, and provide a counterbalance to our thinking and our emotions, serving as the independent dimension of intelligence that it actually is. (Kabat-Zinn, 2013, p. 593)

Throughout the book Kabat-Zinn (2013) deals with important themes of BP, which are critical for the understanding of mindfulness (cf. Kabat-Zinn, 2013, pp. 602–603; 2005; 2011). However, in *Full catastrophe living* (Kabat-Zinn, 2013) he addresses these themes primarily from the perspective of Western scientific developments and findings that support or rather evidence them, based on the scientific epistemology underpinning the modern Western education in schools and universities that, as he points out, does not value awareness.

What happens experientially in the mindful mind-and-body? How can the direct experience of mindfulness be described “as the independent dimension of intelligence that it actually is” (Kabat-Zinn, 2013, p. 593)? *Full catastrophe living* (Kabat-Zinn, 2013) is interesting to be read together with works of BP (e.g., the two important commentarial meditation manuals of Theravāda Buddhism [*Vism*; Ehara, Soma, & Kheminda, 1961/1995]). BP provides the psychology that describes in depth how mindful processes experientially manifest in the mind-and-body. Describing mindfulness phenomenologically and developing a contemporary structural psychology of mindfulness is different to evidencing mindfulness by materialist scientific means. Western psychological approaches to and definitions of mindfulness (for a review see Baer, 2015) are often not based on a solid Buddhist psychological foundation of mindfulness in theory and practice. From the perspective of BP, such a foundation is essential for describing mindfulness in experientially precise details. Precise descriptions of experiential details of mindfulness can be found in the original Buddhist literature, such as the *Sutta* and *Abhidhamma*, as well as the later exegetical Pāli literature and accounts from some modern practitioners and teachers cited in this paper. The “intelligence” involved here is not cleverness or a high IQ. A famous *Dhammapada* commentarial story describes a monk attaining

awakening on a simple meditation object, after appearing a failure to others through his complete inability to remember the verses he is supposed to learn (*DhpA* I 239–255; Shaw, 2014, pp. 185–186). Many schools of Buddhism stress this intuitive rather than intellectual wisdom, that contributes to what the Thais call *jai yen*, a coolness of heart and tranquillity in the presence of change (Cassaniti, 2015). The development of a contemporary BP would need to be based on this literature and body of experience (Virtbauer, 2016b). It would need, perhaps, to be a little more open in understanding exactly what mindfulness is. Also the Western science of mindfulness could start its investigations of mindfulness based on this literature and body of experience (Virtbauer, 2013, 2015).

The health- and clinical-psychological aspects of mindfulness may be developed more efficiently if mindfulness is also understood and applied from the broader perspective of the indigenous psychology in which it has been developed and experientially tested over more than two millennia. BP provides a comprehensive and consistent theory on the phenomenon of mindfulness and its influence on the mind-and-body. A similar theoretical clarity and comprehensiveness on experiential dimensions of mindfulness cannot be found in the Western mindfulness-based interventions. Hence, Buddhist mindfulness could play a key role in contemporary mindfulness.

A science of mindfulness “deeply rooted in dharma” (Kabat-Zinn, 2013, p. 602) would be based on the study of mindfulness’s roots. This study is difficult, requires extensive training in Buddhist thought, and at least one Buddhist language; it cannot really be understood in its context by studying secondary literature alone. It also needs a considerable amount of straightforward practice experience. The Buddhist psychological theory of mindfulness ideally should be understood in its original scriptural context, though some if not most Buddhist schools teach this as part of a more experiential development. It is quite unrealistic that, for example, a neuroscientist that researches mindfulness also trains as a Buddhist scholar, or vice versa, given the intensity of training required for the disciplines that contribute to the Western science of mindfulness. Mindfulness requires interdisciplinary collaboration – one could even say it needs some gentle mindfulness of other approaches, in other fields. However, there may be a Buddhist basic training agreed by researchers in this field in the future: the study of *Abhidhamma*, for instance, to this day a largely popular psychological system, would help to give some background to the supporting factors traditionally considered to arouse, sustain, and protect the mind in mindfulness training. Contact and interchange with longstanding lay and monastic practitioners in Southeast Asia and the West could also help this from becoming too “cerebral”. Intellectuals do not have any greater likelihood of finding mindfulness, and the teaching is intended to be intuitively, not just rationally grasped. BP could play a more important role in mindfulness training than it currently does. BP facilitates the understanding of the roots of the science of mindfulness. Most importantly, BP provides an idiom that can capture (or at least comprehensively point out) the experiential understanding of the phenomenon of mindfulness itself. Such an idiom is currently missing in Western scientific mindfulness.

Western scientific epistemology and methodology can be critically reflected and enriched through Buddhist ethical and psychological considerations, thus developing experiential understanding through both the first and the third person (e.g., Pickering, 2006; Roth, 2006; Virtbauer, 2016b). Two such Buddhist considerations may help to clarify how such reflection and enrichment may take place.

2.1 Intentionality

The intentional quality (Pāli *cetanā*, *chanda*) in a state of consciousness determines “one’s” *kamma* (Sanskrit *karma*). In the words of the Buddha: “I say that intention is [the source of] *kamma*; for having intended one [consequently] acts through [one’s] body, speech, or mind (Pāli *cetanā ’haṃ ... kammaṃ vadami; cetayitvā kammaṃ karoti kāyena vācāya manasā*)” (AN IV 415). This is one of the most important ideas of Buddhist psychological ethics.

It is difficult to translate *kamma* satisfactorily. In Buddhism it does not mean the observable or objective result of “action”. Rather, it is a psychological quality that determines the state of being of the doer. Buddhism postulates that it is the psychological quality underpinning the deed that determines the future of the doer. One will “feel” or “be” in the future what one psychologically cultivates in the present – either wholesome or unwholesome. This refers to the bearer of the *kamma* him-/herself.

However, one’s *kamma* always manifests in a relational network. Hence, it has direct and indirect influences on the outside world. This may be very clear in simple everyday experience: For example, if one does something “good” for someone but with aversion, the doer probably will not feel “good” in the process of the action and afterwards: that is, he/she bears the fruits of his/her *kamma* in his/her (future) states of consciousness. In this case the connection between cause and effect may seem obvious for the bearer of *kamma*, in others it is much more subtle. In this case, also the “receiver” of the deed may feel the negative impact of aversion despite the “good” result. On the other hand, if someone with “good” intentions affects someone negatively in the process of an action, he/she may be able to cope with it well (or at least better than if the process is underpinned by “bad” intentions).

The key point here is to understand that intentional qualities of consciousness create one’s sense of self and condition one’s senses of future selves. One will be in the future what one cultivates in one’s “inner” world now. One’s sense of self manifests in a relational network. It is not divided from the “outside” world. To understand what happens in the world refers to one’s ability to critically reflect one’s own intentions and the quality of consciousness underpinning one’s actions. From this perspective, it becomes clear why the cultivation of an ethical way of perceiving and apperceiving that qualifies self-centredness and puts one’s sense of self in a relational context is of utmost importance in the Buddhist system. This cultivation refers to both discursive ethical reflection and intuitive meditative insight.

This is a pragmatic psychological description of *kamma*. Ultimately, “the doer”, “the deed”, and “the doer’s *kamma*” are all based on cause and effect. *Kamma* cannot be psychologically analysed from the perspective of a single life. *Kamma* is the force that creates and recreates the world. Hence, it is intention that creates and recreates the world humans construct and inhabit. Nevertheless, within this causal Buddhist theory there is a potential for freedom and active change of “one’s” *kamma* to the better. Mindfulness is one method in discovering and cultivating this potential.

2.2 Process-Centred Ethics

Western secular scientific ethics, such as ethics in psychology, mainly focus on the past and future. Based on past procedures and results future benefits of a certain procedure or study are inferred. These benefits are weighed against ethical considerations and legal requirements. Research designs and goals are justified based on discursive and analytical inference. How scientists experience the research process itself often will not be of relevance if the process ethically has been justified and approved. Unfortunately, this also counts for the science of experience and behaviour (i.e., psychology) itself.

One may say that BP does not know this kind of ethics. There are moral obligations in the Buddha's *dhamma* ("teachings"), which Buddhists are to follow (or to train in – *sikkhāpadāni*, "steps in the [Buddhist] training"). However, Buddhism emphasises that the usefulness and, indeed, necessity of these guidelines are to be realised in one's experience, from one conscious moment to the next. Buddhist ethics (*sīla*), as part of the noble eightfold path and the four noble truths, refers to behaviour that is concerned with and addresses one's own and others' suffering (or, positively put, one's own and others' well-being), the origin of suffering, the cessation of suffering, and the way to the cessation of suffering in the present process of one's experience.

What does this practically mean? The Buddhist psychologist is concerned with the situation at hand – one may say in a spontaneous response to how he/she experiences him-/herself and his/her world in the present moment. The present situation counts for one's mental development. The present situation is the only situation with which ethically can be dealt. This process-centred ethics approach does not deny the practical necessity to plan for the future. However, ethics has to manifest and is shaped directly in the process of one's present experience. The mental qualities underpinning and shaping behaviour in this process are reflected – from moment to moment.

For an experienced meditator this reflection refers to intuitive awareness of one's mental states and to calm and insight based on mindfulness. Behaviour should lead to less suffering, or positively put, to greater happiness. Genuine well-being and happiness depends on wholesome states of consciousness. Mindfulness is a tool to realise how states of consciousness (either wholesome or unwholesome) and behaviour interact. If one's behaviour is motivated by conscious qualities such as compassion or generosity suffering will decrease and one's present quality of life will increase. If qualities such as aversion or greed are dominant the opposite will happen. The simplicity of this understanding is of course complex in its application. According to the psychology of the *Abhidhamma* (cf. *Abhidh-s; Dhs*), as we have explored above, mindfulness (*sati*) can only be present in wholesome states of consciousness, which are characterised by wholesome qualities such as loving kindness or compassion (non-hatred), or generosity (non-greed).

Process-centered ethics is the reason why it is impossible to have a state of consciousness that is based on and "includes" the mental quality of Buddhist mindfulness (*sati*) and, referring to the sniper, an example given in the contemporary mindfulness discourses (cf. Monteiro et al., 2015), at the same time intentionally to hurt or kill another being (cf. Olendzki, 2010). Another example more directly relating to scientific methodology is the scientist that is engaged in animal research and kills

an animal in a study. According to BP, one cannot be mindful while performing such actions. What the sniper and the scientist may have in common is a strong and focussed attention (in Pāli *manasikāra* refers to “attention”, an ethically indeterminate quality that is present in all states of consciousness). However, *sati* proper (i.e., skilful mindfulness), can only be present in states of consciousness that are skilful or wholesome, which cannot include mental qualities that may lead to intentional killing of a living being. What this means for the psychological application of mindfulness in systems such as the military, is a difficult question (cf. Mikulas, 2015). From the Buddhist perspective, activities that are termed “mindful” may not include the actual mental quality of mindfulness. There cannot be mindful animal research (paradoxically, also in mindfulness research animal research occurs) that includes intentionally harming and killing animals. The starting point to discuss such points within the Western science of mindfulness would have to acknowledge the difficulties in understanding the nature of *sati* in its many applications.

It is also interesting to reflect on contemporary psychological research methodology in mindfulness from the perspective of Buddhist process-centred ethics. The probably most important large-scale mindfulness study starts in 2016 assessing the effectiveness of mindfulness programmes in schools in the UK over 7 years. The biggest part of the project compares mindfulness training (MT) with “teaching as usual” in 76 schools involving around 6,000 students aged 11 to 14. This first large randomised control trial (RCT) on MT employs the classical intervention–control group design. Students in 38 schools receive MT over 10 lessons in a standard school term, whereas students in 38 schools act as controls receiving standard personal, health, and social education lessons. The RCT runs over 5 years including follow-up periods of 2 years for each student. The outcomes researchers investigate include risk of depression, social and behavioural skills, and well-being, as well as secondary outcomes. The outcomes may have a significant influence on further policies in schools and other public sectors (Ryan, 2015; cf. Mindfulness All-Party Parliamentary Group, 2015).

The Buddhist psychologist may not mainly (or maybe not at all) be focussing on third-person evidence (i.e., the evidence one currently needs to change policies). He/she may, for example, ask how the researchers in this trial (themselves experienced meditators) experience the process of doing research in which some thousand students receive MT, whereas others are not introduced into the practice for 2 years but act as controls to enable research that investigates if their MT peers significantly score better in areas such as depression. Does it feel “mindful” to do this? Why is mindfulness not immediately introduced to all? Such a question may seem naïve from a scientific perspective. Pragmatically, it is not a question that may be considered helpful towards the goal of changing policies. However, for the Buddhist psychologist there may be no reason why for 2 years thousands of students aged 11 to 14 – a critical and often difficult time in their lives – should act as controls and be deprived of the benefits of a practice whose benefits are evident to him/her – in this case, qualitative evidence based on his/her own first-person experience and his/her experience of the benefits of mindfulness for others, including children and teenagers. The clinical psychologist may say that this design is the direct or only way to realise evidence.

Scientists discussing mindfulness usually emphasise the evidence (or lack thereof) on mindfulness, based on scientific research. Mindfulness, both Buddhist and clinical, “involves moving from a focus on content to a focus on process ... toward [from the perspective of BP, the word “ethically” may be

added for clarity] attending to the way all experience is processed" (Segal, Williams, & Teasdale, 2013, p. 74). Hence, scientific research and the process of doing it may not be evidenced by mindfulness.

2.3 Mindful Science

Science is a part of and in the world, whereas Buddhism – not as an institution but as a personal practice – is rooted in the intuitive understanding of being in the world. Ultimately, this understanding is beyond words, as words (apperception based on language) are a conditioned part of the world. These two dimensions can never entirely go together.

The world is conditioned. Hence, it is the source and the result of suffering. The solution the Buddha suggests is psychological (Gombrich, 2009). It is an inner solution that helps one intuitively to understand the world and finally entirely to leave the world, in case one can reach the final goal of the Buddhist path. In this case, one has stopped creating new (positive or negative) *kamma* that leads to continuous rebirth. However, this solution and the way to it determine, and are based on, how one approaches the world.

According to the Buddhist tradition, one can only finally leave the world based on psychological qualities such as generosity, compassion, and insight. As long as there are self-centred intentions one will be firmly fixed in the world, and crave continuous existence. Put differently, as long as one wants to be in the world (even for ethically profound reasons), one will be a part of it. If one can stop wanting, one will be able to engage in a way of living that causes least suffering to oneself and other beings, which produces mindfulness, and happiness too (Dhammasāmi, 2000, pp. 54–55; Virtbauer, 2016a). Paradoxically, one enjoys the world more, as the delighted poems of early Buddhist monks and nuns, commenting on the world around them, attest (Rahula, 1974, p. 28; Shaw, 2006a, pp. 21–22). One will stop approaching oneself and the world from a self-centred perspective. In the event of the Buddha's words proving vindicated, one may then enter the happiness and contentment of *nibbāna*, leaving the world and its suffering altogether at death. Traditionally, this is where mindfulness may lead one, or, if the vow has been taken to become a bodhisatt(v)a, a being "attached to awakening", a commitment to help others in future lifetimes too (Shaw, 2006b, pp. 1–6). Lopez (2012) suggests that the Buddha may be regarded "as a counter-evolutionary, actively seeking the extinction of the human race, and indeed of all species, through the eradication of the selfish gene" (p. 80). From the perspective of Buddhist psychological ethics, it appears more accurate to say that the Buddha has clearly realised the cost of all life (i.e., all life depends – directly and indirectly – on the exploitation and destruction of other life). This realisation is accompanied by genuine loving kindness (*mettā*) and compassion (*karuṇā*) for the world and for all life (cf. *DN* I 235–253; Gombrich, 2009; *Sn* 25–26). Based on this compassion, selfishness and craving for the continuation of life and its cost (and in this way of suffering) comes to an end. But in Buddhist terms, if the Bodhisatt(v)a vow has been taken, it may lead to a further and willing continuation of life, as a means to help other sentient beings too. Whether this vow is taken or not, the texts indicate that life itself is always appreciated, at each stage of the Buddhist path: the practice of mindfulness, rightly

undertaken, is said to lead naturally to joy, the central factor of awakening, and then to equanimity (Rahula, 1974, pp. 28, 67–75).

From the perspective of early Buddhism, based on the early textual Pāli sources, complete “inner” letting-go is accompanied by and needs to be based on “outer” letting-go. This means that one can only go the middle path to its end if one adopts the ethics the Buddha suggests. The world (and the selves inhabiting it) cannot be re-created without craving and self-centred intentions. This is one of the main Buddhist insights. The world needs to be constantly created and re-created.

Today, systematic scientific research and development and the structures underpinning it may be regarded the most important creators of the world. Science is to find out and apply one thing and then the next – an “endless” cycle creating and constructing the world (and the selves inhabiting it) and mirroring the intentions of the selves involved in the cycle. As long as there is a human world this cycle continues. Its intentional quality determines the world science creates. Understanding one’s intentions and reducing self-centredness by fostering wholesome psychological qualities will result in *kamma* that is conducive to creating a world that mirrors such wholesome qualities and a less egoistic and self-centred approach to the limitations and potentials of human life.

Though suffering cannot be overcome through science a Buddhist-ethics-based science could be a system of intelligently, realistically, and profoundly ethically reducing suffering. The main question underlying all endeavours of such a science, as well as the practical considerations of scientists, may be formulated: What needs to be researched and what is to be done that is most conducive to reducing the suffering and enhancing the well-being of all beings?

A Buddhist-ethics-based mindful science is in stark contrast to the Cartesian dualism of mind (Latin *res cogitans*, “cognising thing”) and matter (*res extensa*, “extended thing”), which has shaped much of modern Western scientific epistemology and methodology and has conditioned how the modern Western self approaches and understands his/her lifeworld (cf. Descartes, 1642/1698, pp. 35–46; Husserl, 1934–1937/1954; Virtbauer, 2016a). The mindful science cannot be reconciled with scientific “materialist monism” (Wallace, 2007). The mindful scientist finds him-/herself “in a buzzing world, amid a democracy of fellow creatures” (Whitehead, 1978, p. 50; cf. Dombrowski, 2014; Shaw, 2006b, pp. lix–lxi). Non-human sentient beings are not considered and treated as insentient sophisticated machines in the Cartesian sense. The mindful science focuses on reducing the suffering of all beings and on mental and physical interdependence. It stresses that genuine human mental health depends on such a relational approach to nature and reality.

3 Conclusion

In this paper we have not considered the issue of meditation within a practice tradition, which would involve further investigation beyond the scope of this study. We suggest that Buddhist ethics and an understanding of the subtle system of psychology and the balanced way it is enacted, however, in theory and in practice, could underpin the Western science of mindfulness. Contemporary Western mindfulness’s roots are in the ancient Eastern tradition of Buddhism. The concept of mindfulness and

possibilities of its Western reception can be most comprehensively and efficiently reflected if one's investigations start at its Buddhist roots. Though a critical epistemology has not yet played a visible role in its discourses, a science of mindfulness may start to reflect on its own scientific history and foundations from a more mindful perspective. Contemporary Western clinical mindfulness has naïvely assumed that the concept and practice of traditional Buddhist mindfulness can be received without questioning the mindfulness of the receiver (i.e., Western science).

BP could play a more important role in the current clinical mindfulness discourses, the training of scientists in this field, and the employed research designs and instruments in contemporary mindfulness. Generally, Buddhist psychological ethics may provide an intelligent framework for Western secular scientific ethics. From the perspective of BP presented in this paper, the current second-generation mindfulness-based interventions (SG-MBIs) are not yet the answer to the need of an in-depth dialogue focusing on the underpinning epistemologies of Buddhist and clinical mindfulness. SG-MBIs may be an important step in this direction (cf. Shonin, Van Gordon, & Griffiths, 2015).

The Western science of mindfulness has revolutionised psychotherapeutic and psychiatric care. This paper suggests the psychology from which it is derived could also do so, and could initiate broader critical epistemological reflection in Western science, so building new bridges between Eastern and Western thought. A shift of focus from supposedly objective and neutral scientific evidence independent of human intentions, to an ethical relational understanding of intentions and outcomes appears to be imperative to approach and alleviate the suffering of today's scientifically constructed world (and the selves inhabiting it).

In sum, a future discipline focusing on mindfulness could include: A more closely investigated dialogue between Buddhist studies and psychological science with a particular focus on epistemology and ethics; an understanding of mindfulness based on its roots (ideally involving Buddhist languages too); a practical training that is diverse, including many different perspectives (both Buddhist and clinical); and, methodologically, much more openness to exploring how one can really find out things "mindfully" outside the accepted verities of mainstream Western scientific psychological thinking. Some consideration of meditation, an area so rich it is not considered fully here, could be included. The Western study of mindfulness has taken first hesitant steps in this direction. From the perspective of BP, many more steps are to follow.

4 Abbreviations

References to [volume and] page[s] of the Pali Text Society ed.

Abhidh-s	<i>Abhidhammatthasaṅgaha</i>
AN	<i>Aṅguttara-nikāya</i>
As	<i>Atthasālinī (Dhammasaṅgaṇī-aṭṭhakathā)</i>
CPD	<i>A Critical Pāli Dictionary</i> (also see http://pali.hum.ku.dk/cpd)
DhpA	<i>Dhammapada-aṭṭhakathā</i>

Dhs	<i>Dhammasaṅgaṇī</i>
DP	<i>A Dictionary of Pāli</i> (M. Cone)
DN	<i>Dīgha-nikāya</i>
Ja	<i>Jātakatthavaṇṇanā</i>
MA	<i>Majjhima-nikāya-aṭṭhakathā (Papañcasūdanī)</i>
Mil	<i>Milindapañha</i>
MN	<i>Majjhima-nikāya</i>
Nidd	<i>Niddesa</i> (I Mahāniddesa)
Paṭis	<i>Paṭisambhidāmagga</i>
Sn	<i>Sutta-nipāta</i>
Ud	<i>Udāna</i>
Vbh	<i>Vibhaṅga</i>
Vism	<i>Visuddhimagga</i>

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