

# Mindfulness, the Buddha, and Naturalism

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## **Abstract [wc=235]**

The success of the Buddhist-inspired concept of mindfulness and of interventions based on it, both in psychological practice and in basic research, suggests that parts of the Buddha's teaching should be compatible with the results of contemporary science. Nevertheless, there has been considerable controversy regarding both the relationship between the *Dhamma* and supernaturalism, and between mindfulness, Buddhism, and science. In this context, the present paper first argues against claims that the supernatural is inextricably interwoven with the Buddha's teaching. It then considers two recent attempts to understand the *dharma* in a contemporary framework: a brief discussion of Johannes Bronkhorst's reading of the Buddha's teaching in psychoanalytical terms is offered, and a more extended discussion of Stephen Batchelor's 'Secular Buddhism.' Concerning the latter, it is argued that, despite a number of strong points, Batchelor's use of canonical texts is incoherent, and that he makes implicit psychological claims that are reflective of a number of cognitive biases including negativity bias and cognitive dissonance, a discussion which appears also relevant to the wider mindfulness community. The paper then takes a first step towards developing an alternative naturalistic approach by showing that the *Ariyapariyesanā Sutta* (which has been argued to be the oldest account of the Buddha's enlightenment) both can coherently be read without supernatural occurrences, and presents a *dharma* free from negativity bias. Finally, the paper sketches how this reading might relate to positive psychology and contemporary psychotherapy.

Keywords: Early Buddhism; Secular Buddhism; negativity bias; Positive Psychology;

## **Compliance with Ethical Standards**

Not applicable.

## Introduction: Buddhism, Mindfulness, and Science

Interest in Buddhism has massively increased recently, not least because of the runaway success of the Buddhist-inspired notion of mindfulness and of various mindfulness-based interventions rooted in it. Beyond an undeniable contribution of hype, there is more to the mindfulness boom than fashion: robust evidence attests to the efficacy of mindfulness-based interventions (MBIs) like mindfulness-based cognitive therapy (MBCT), and suggestive scientific research takes place regarding possible mechanisms. Thus, it seems that at least some tenets of the Buddha's teaching (the *Dhamma*) are compatible with today's scientific knowledge and practically useful. On the other hand, much of ancient Buddhist texts like the Pali canon is rife with contradictions, supernatural beings, and claims about the world which may or may not have seemed plausible 2500 years ago, but which we now know to be wrong. Therefore, it is of considerable interest to many, to understand to what extent Buddhism is or can be compatible with contemporary science; in other words, 'whether for us contemporary folk there is a useful and truthful philosophy in Buddhism, among the Buddhisms, that is compatible with the rest of knowledge as it now exists.' (Flanagan (2011; xiii))

Nevertheless, there is a dispute as to whether Buddhism is or can be made compatible with science. For example, Wallace (2007) claimed that the Buddhist tradition has developed a form of science which can and should be integrated with 'Western' science, whereas Lopez (2012; 101) proclaimed 'the death of the scientific Buddha,' and Thompson (2020) disputed what he referred to as the myth of Buddhist exceptionalism, that is, 'the belief that Buddhism [is] inherently rational and empirical [...] a kind of "mind science," therapy, philosophy, or way of life based on meditation.' Other authors questioned the close relationship between mindfulness as understood in MBIs and Buddhism (e.g., Levman (2017), for replies see for example Anālayo (2018); Mattes (2019a)).

The more extreme positions in these discussions seem unconvincing. For example, reporting

the death of the scientific Buddha (Lopez, 2012) appears to be an exaggeration, given that Lopez himself acknowledges that parallels between Buddhism and science may well exist, and explicitly states, with respect to the neuroscience of meditation, that he is not suggesting in the slightest that one should abstain from research into it. (p.112) In fact:

There are so many questions to be asked and answered, questions not simply that the ancient meditation practices of Buddhism might answer for modern neurology, but questions about Buddhist meditation that might be answered by neurobiology. (Lopez, 2012; 113)

The Buddha does not need to be preserved in aspic, all of his wondrous aspects kept intact, frozen in time, the founder of a dead religion. (p.126)

Then again, scientists may be forgiven to be surprised when being told on the same page (p.126) that contemplating questions like 'What does it mean to seek the welfare of others?' and 'Is there a self?' necessitates the preservation of the mythological and the miraculous aspects of traditional Buddhism(s). On the other hand, scientists may also wonder what concept of 'science' is behind the call by Wallace (2007) for a contemplative science, given that he approvingly quoted a theologian's assertion that '[i]ntuition is without doubt the perfect form of knowing' (p.1), and decried scientists' scepticism towards unproven claims of, for example, 'limitless internal resources for various kinds of extrasensory perception and paranormal abilities [...] moving through solid objects, walking on water, mental control of fire, flying, and mentally multiplying and transforming physical objects at will,' (p.21) even though Wallace himself acknowledged that research in this direction has been 'inconclusive.' (p.22)

Furthermore, overenthusiastic claims that the Buddha *foresaw* results from contemporary science can make Buddhism indeed look incompatible with science, as deniers like Lopez (2012; 13) can ask: 'If Buddhism was compatible with the science of the nineteenth century, how can it also be compatible with the science of the twenty-first? [...] Science has obviously made huge advances over the past century and a half in every domain, yet claims for the Buddha's prescience

have remained persistent over this period.’ The answer to this question is of course simple: Science is more a method (or, maybe even more accurately, a mindset) rather than a collection of results. In the famous words of Richard Feynman<sup>1</sup> : ‘The first principle is that you must not fool yourself—and you are the easiest person to fool’(Feynman 1974, 12) Indeed, psychological research uncovered a plethora of cognitive biases and other ways in which we humans tend to fool ourselves (for a survey see Kahneman (2011); and also the discussion below). Keeping this principle in mind is arguably the essence of science (compare Mattes 2019b) I can see no reason why the Buddha should not have understood the principle and consequently refrained from religious and metaphysical speculations and other over-interpretations of his experiences. (Proving this would of course be an entirely different matter, all I do here is to suggest this as a coherent, interesting, and potentially practically useful working assumption. To what extent this assumption is compatible with ancient Buddhist texts will be discussed below.)

## ***Buddhism and the Buddha***

This leads back to the issue Thompson raised, whether Buddhism (assuming it makes sense to speak in the singular) is exceptional, in the sense that it is inherently rational? I suspect the answer is no, if Buddhism here refers to the traditions as they exist and are popularly practiced today, but in this form the question is irrelevant to the present discussion: The basic assumption of the present paper is not that *Buddhism* is exceptional, but that *the Buddha was exceptional*, that he ‘was one of the most brilliant and original thinkers of all time’ (Gombrich, 2009; vii) and that we are lucky in that the tradition preserved (and Buddhist modernism partly revived) at least some of his insights, despite Buddhist traditions—being human mass phenomena—necessarily having less original and brilliant aspects as well.<sup>2</sup> This is consistent with passages in the traditional texts that prophecised decline of the *Dhamma* over time (Nattier, 1992). As Gombrich (2006; 6) noted: ‘Buddhists readily accept, therefore, that Buddhism as we can now witness it is in decline; they might even accept

1 One of the most famous physicists of the 20th century, Nobel price winner in 1965.

2 Compare also the chapter Aftermath in Polak (2011), in particular p.223f.

such labels as ‘corrupt’ and ‘syncretistic’.’ (This decline is of course relative to the exceptionally high standard set by the Buddha, not relative to other philosophies or religions. Nor does this imply that these others are not in decline. In fact, I believe that contemporary philosophy, being engaged mostly in either lifeless theorizing, or in trying to dictate to others how they should behave (which seems to be what most contemporary moral philosophy amounts to in practice), is inferior to Hellenistic philosophies which were concerned with how to live one’s own life<sup>3</sup>, and therefore were far above ‘the myopic ways in which contemporary scholars, particularly those influenced by the global West, tend to understand “morality” as a system of obligations.’ (Lee, 2014; 3) )

This approach seems to go squarely against current fashion in Buddhist studies, which appears (for example) to find it ‘exciting’ to study Buddhist manuscript ‘in a late premodern setting [...] admittedly far removed from the early Buddhist community and, for that matter, from any original meaning of the suttas’ (Walters, 1999; 260), and therefore appears tempted to insist on exclusively traditionalist understandings of Buddhism. I certainly do not deny that there is some interest in purely historical or sociological studies of Buddhism, but what gets me really excited is the idea of understanding and furthering those aspects of the Buddha's teachings that contribute to human flourishing now and in the future; in other words, to approach the ancient texts from a positive psychology perspective.

This implies a two-way interaction between psychology and ancient texts, analogously to that between neuroscience and meditation hinted at by Lopez in the quote above, and consistent with the viewpoint advocated by Fabbro, Fabbro and Crescentini (2018), who argued that psychology (in their case, specifically neuropsychology) can enable ‘a more profound understanding of themes characterizing human experiences that ancient literature has already explored’, a similar point of view is taken in Polak (2018), This approach also has parallels with the project by Batchelor (2012) to ‘return to the roots of the tradition and rethink and rearticulate the

3 Brewer (2009) expresses similar sentiments.

dharmā anew' (p.20) out of an ultimate concern to come to terms with life and death here and now (pp.16&21). The parallels may be even closer with the attempt by Bronkhorst (2012) to understand Buddhist liberation in terms of psychoanalytic theory, starting from the working hypothesis that certain central claims of the early Buddhist texts are true and compatible with established knowledge in natural science and psychology (p.73), and who notes that the ideas, practices and beliefs of the Buddhist (monastic) community are not necessarily useful for a correct understanding of the original teachings (p.78).

### ***Canonical texts, supernaturalism, and the Buddha***

One point where I disagree with Bronkhorst is that I am much more suspicious of the early Buddhist texts than he is. Bronkhorst (2009; 7f) 'opt[s] for the general principle that the teaching that the ancient discourses ascribe to the Buddha can indeed be ascribed him. Only where there are reasons to doubt the authenticity of a certain teaching—because it contradicts other canonical statements, for example—should we deviate from this principle' Under this principle it might seem that we might have to conclude that the Buddha really believed to have seen himself(!) how the wardens of hell drove red-hot iron stakes through the middle of people's chest without killing them (*Devadūta Sutta*, [AN 3.36](#)), or that 84000 kings in succession each governed for 84000 years (which is incompatible with the age of the earth, let alone of humanity) as the *Makhādeva Sutta* ([MN 83](#)) asserted.<sup>4</sup> Analayo (2018; 2f) claimed that some of these text passages should be understood as merely symbolic use of large numbers which need not be taken literally. That may be so, but it can not apply to such assertions ascribed to the Buddha as himself having been in a certain hell and having seen specific things there; it may also be difficult to square with the eightfold path, as claiming to have seen something when you have not is ignoble (*anariya*) according to texts like [AN 4.250](#) or [AN 8.67](#), so presumably not compatible with right speech. (In fact, it seems such assertions merit suspicion, so believing them without investigating and scrutinizing them

4 For more such passages see for example Mattes (2018; 2019a).

supposedly deposits you right into hell—at least if you are a *bhikkhunī* or a resident *bhikkhu*, according to [AN5.116](#) and [AN5.236](#), respectively.)

Crucially, at this point there seem to be four possibilities: (a) These supernatural claims are true, the Buddha really did experience all these things (and all other religions as well as modern science got things badly wrong); (b) the Buddha hallucinated; (c) the Buddha made these events up; (d) these text parts do not go back to the Buddha. In the present work I am interested in exploring this last possibility, since the first one is too implausible, the second one would be hard to square with the mental health benefits of mindfulness, and the third one seems incompatible with right speech.

Nevertheless, some authors have claimed that the supernatural is inextricably interwoven with the Buddha's teaching. For example, Anālayo (2013; 20) asserted that it is 'undeniable that supernatural occurrences [...] are an integral part of the teachings of early Buddhism in the way they have been preserved in the texts.' On the other hand, he also conceded that 'the texts we have in front of us are not verbatim records of what the Buddha said' (p.16), and that at least some descriptions of supernatural events were added later (p.19). If this is so, and given that these texts were written down a considerable amount of time after the Buddha, backward extrapolation suggests that the amount of supernatural content of the Buddha's teachings was still smaller, maybe even zero. Consistent with this, Sujato and Brahmali (2015; 73) asserted that passages in the early Buddhist texts that have the Buddha display supernormal powers often have the hallmarks of being inserted later. Wynne (2019; 125) also thought that 'the early texts are especially trustworthy when they contain details that contradict later or mythic ideas.' Consequently, I agree with Gombrich (2009; 3), in that 'I strongly disagree with interpretations of his teachings [...] as being mystical in the vulgar sense of defying normal logic. [...] I find the Buddha's ideas extraordinarily powerful and intelligent, a work of genius.'

## ***The present paper***

Goal of the present paper is to contribute to the ongoing lively discussion about the nature of mindfulness and its relationship to Buddhism on the one hand, and science on the other (see, e.g., (Amaro, 2015; Anālayo, 2020b; Gethin, 2015; Grossman, 2011; Mattes, 2019a; Mikulas, 2010; Monteiro, Musten & Compson, 2015; Repetti, 2016; Repetti, 2016; Van Gordon, Shonin, Griffiths & Singh, 2015; Williams & Kabat-Zinn, 2011; Shonin, Gordon & Singh, 2015)), by providing a fresh perspective on the possibility of a naturalistic reading of the original *Dhamma* (or, maybe better, an *anti-supernaturalistic* reading, to make clear that naturalism as understood here does not preclude ‘inquiry into phenomena as the basis of wisdom development aimed at achieving liberation’ (Lin, 2020; 18), at least as long as this inquiry is based on the basic scientific principle that avoiding fooling oneself is of primary importance).

As noted above, there have been at least two similar recent projects: Bronkhorst’s attempt to relate the core of the Buddha’s teachings to psychoanalytic theory, and Batchelor’s ‘Secular Buddhism.’ The latter will be discussed in the next section, where it will be argued that despite a number of strong points Batchelor’s work is ultimately unsatisfactory. Bronkhorst’s work also seems to suffer from at least two drawbacks: One is reliance on psychoanalysis (though a discussion why this is problematic is beyond the scope of present paper), the second is what appears to be excessive credence assigned to the classical texts, essentially applying a one-step-back-from-disaster principle: all texts are innocent unless and until proven guilty (see above, and Gombrich (2009; 96), who said quite explicitly that a major reason for adopting this principle is the self-interest of the scholar<sup>5</sup>). This seems problematic if it forces one to believe that the Buddha indeed personally talked to Yama the king of hell ([AN 3.36](#)) or similar claims of supernatural occurrences.

According to Sujato and Brahmali (2015; 95f), ‘supernormal beings are no more than peripheral and mostly mentioned either in stories or in the narrative material that surrounds the core

5 ‘if we just dismiss what the texts tell us *a priori*, there is no subject. If there is no subject, no one should be employed to teach it’



doctrinal content,’ so that their apparent later addition need not imply that the core teachings have also changed during transmission of these texts. This appears problematic on several counts, including the fact that narrative material irrelevant to the *Dhamma* seems not to fit among the topics suitable for discussion among *bhikkhus* ([AN10.69](#)), that Sujato and Brahmali themselves listed *suttas* (including [MN 111](#) or [MN 52](#)) which are without supernatural content as likely later additions to the canon (p.90f), and the fact that there seem to have been early changes in important doctrine apart from the addition of supernatural elements (e.g., Wynne (2009) argued that the *anattā* ‘no self’ doctrine changed at a very early, pre-sectarian stage of Buddhism; Polak (2011) argued for early important changes in the Buddhist understanding of meditation).

Consequently, the present paper does not start from the question which canonical texts we have reason to doubt, but from the question which texts or text parts we have reason to believe to be genuine reflections of the Buddha’s *Dhamma*, thus ‘replacing the rather credulous question “Why might it be false?” by the more sceptical one: “Why should it be true?”’ as von Hinüber (2006; 208) advised to do. Of course, this only makes sense if there are such texts. Fortunately, there seems to be at least one<sup>6</sup> important example relevant to the present quest: Wynne (2007) argued that parts of the *Ariyapariyesanā Sutta* ([MN 26](#)) are historically authentic. The present paper shows that these parts are both compatible with a naturalistic interpretation of the *Dhamma*, compares this favourably to secular Buddhism, and sketches some ideas how this naturalistic *Dhamma* might be put in the context of modern psychology and psychotherapy.

## ***Texts and abbreviations***

AN = An’guttara Nikāya, translated by Bodhi (2000).

DN = Dīgha Nikāya, translated by Walshe (1995).

<sup>6</sup> Polak (2011) argued that Wynne's arguments also apply to the *Bodhirājakumāra Sutta* MN 85. This makes no important difference for the present paper, a fuller discussion of this has to wait for another occasion.

MN = Majjhima Nikāya, translated by Ñānamoli and Bodhi (1995).

SN = Saṃyutta Nikāya, translated by Bodhi (2000).

The *Ariyapariyesanā Sutta* ([MN 26](#)) will usually be abbreviated *APS*.

## Secular Buddhism

### Overview

One attempt at a ‘complete secular redefinition of Buddhism’ is mainly driven by Stephen Batchelor under the heading of ‘Secular Buddhism.’ By ‘secular’ he means non-religious and separated from religious institutions, as well as pertaining to the (present) age (*saeculum*). Batchelor sees this secular Buddhism to be in contrast to schools of traditional Buddhism, i.e., those that are based on metaphysical beliefs that underlie ‘the soteriological worldview of ancient India.’ (Batchelor, 2012; 89) His goal is to find a version of Buddhism that would

be founded upon canonical source texts, be able to offer a coherent interpretation of key practices, doctrines and ethical precepts, and provide a sufficiently rich and integrated theoretical model of the dharma to serve as the basis for a flourishing human existence.

(p.90)

The stated aim is to prevent Buddhism from becoming increasingly marginalized in today’s secular mainstream culture, which might entail the risk that the potential of the Buddha’s teachings to make positive contributions to ‘many of the pressing issues of our *saeculum*’ be lost.

Batchelor (2015; 55f,58f) recalled that Wynne (2007) argued for the *Ariyapariyesanā Sutta* (*APS*) being the earliest account of Gotama’s awakening. Based on this *sutta*, Batchelor claimed that the essence of the Buddha’s experience was ‘a radical shift in perspective,’ a ‘twofold ground’ (‘ground’ being Batchelor’s translation of *ihāna*): seeing the conditionality of events (the ‘causal unfolding of life’) and seeing liberation (‘the stilling of inclinations, the relinquishing of bases, the

fading away of reactivity [*taṇhā*], desirelessness, ceasing, nirvana’). From his translation of *thāna* as ‘ground’, and in analogy with the German word Grund, Batchelor then went on to claim that what the Buddha discovered was a ground for action based on practical reason rather than being predicated on habitual reactivity. (Batchelor, 2015; 58f)

Central to traditional Buddhism are the so-called Four Noble Truths. Batchelor started from the idea to reread these four as a Fourfold *Task* rather than Four Truths, i.e., to shift from a metaphysical to a pragmatic approach to Buddhism. This was based on what is generally assumed to be the Buddha’s first sermon after his enlightenment, as reported in the *Dhammacakkappavattana Sutta* ([SN 56.11](#)), which he nevertheless recognized to ‘bear the marks of a text worked and reworked over a long time.’ (Batchelor, 2015; 69) In particular, Norman (2003) argued that in this *sutta*, the entire first listing of the Four Noble Truths (what Norman referred to as the ‘introductory set’) is a later addition, as are all other appearances of the phrase *ariya-saccam*; hence, the earliest form of the *sutta* did not contain any reference to Noble Truth(s). In addition, Batchelor (2012, 94) argued that in this *sutta* ‘the Buddha defines what he means by *dukkha* [...] as birth, sickness, aging and death as well as the “five bundles of clinging” *themselves*’ rather than mental anguish caused by craving for these things not to be happening, and instead of *taṇhā* (craving) being the cause of *dukkha*, Batchelor posited that contact with the *dukkha* in the world leads to *taṇhā* (now translated as ‘reactivity’, and identified with *samudaya* – the latter translated as ‘arising’ rather than the more usual ‘origin’). (Batchelor, 2012; 98)

Phrased to parallel the classical ‘Noble Truths’, the fourfold task then becomes:

Suffering (*dukkha*) is to be comprehended (*pariññā*). The arising (*samudaya*) is to let go of (*pahāna*). The ceasing (*nirodha*) is to be beheld (*sacchikāta*). The path (*magga*) is to be cultivated (*bhāvanā*). (Batchelor, 2015; 69)

This shift to pragmatism in Secular Buddhism is assumed to lead to a different outlook on life, such that

One embraces dukkha, that is whatever situation life presents, lets go of the grasping that arises in reaction to it, stops reacting, so that one can act unconditioned by reactivity. This procedure is a template that can be applied across the entire spectrum of human experience, from one's ethical vision of what constitutes a "good life" to one's day-to-day interactions with colleagues at work [with] no interest in whether or not such a way of life leads to a final goal called "nibbana." (Batchelor, 2012; 101)

Beyond everyday life and well-being, this is claimed to lead to existential fulfillment:

To fully embrace suffering does not increase suffering, but paradoxically enhances your sense of astonishment at being alive. By saying "yes" to birth, sickness, aging, and death, you open your heart and mind to the sheer mystery of being here at all. (Batchelor, 2012; 105)

If 'saying yes' is augmented with letting go of attachment this can result in liberation. Batchelor approvingly paraphrased the Buddha's declaration (*Paṭhamapubbekambodha Sutta*, [SN 35.13](#)) as

the happiness and joy that arise conditioned by life, that is the delight of life; that life is impermanent, dukkha and changing, that is the tragedy of life; the removal and abandonment of grasping (*chandārāga*) for life, that is the emancipation of life. (Batchelor, 2015; 55)

Secular Buddhism develops a naturalistic image of Gotama (the Buddha) as a person concerned mostly with how to live life in *this* world, and acting in a perfectly flexible way (following a 'situational ethics'); acting spontaneously as when '[The Buddha] responds immediately and intuitively, surprising, perhaps, even himself.' (Batchelor, 2015; 221)

### ***Secular Buddhism: Māra is in the details***

Overall I agree with the direction of Batchelor's work, in particular, with the pragmatic emphasis and with the ambition to peel away later and/or unnaturalistic layers of the Buddhist scriptures.

Nevertheless, as is well known, the devil (*Māra* the Evil One) is in the details. (Batchelor, 2015; 91,45,309)

I have two objections to parts of Batchelor's development of a secular Buddhism, which I will discuss in the following: First, while I see no problem in selecting which (parts of) ancient texts to refer to *per se*, one should be consistent in it; it seems to me that Batchelor fails to be. Second, there is a considerable negativity bias in his work (and that of many others), which distorts the conclusions that he draws. This second issue seems also relevant for the mindfulness community more generally.

## **Textual basis**

I will start by discussing the texts which Batchelor mainly rests his arguments on, i.e., the *APS* ([MN 26](#)) and the *Dhammacakkappavattana Sutta* ([SN 56.11](#)). In keeping with the aim of a naturalistic account I will remove all passages that refer to encounters with supernatural beings (removing them is consistent with the view in Batchelor (2015; 261) that even though gods and demons do occasionally appear in the early canon, they merely function as supporting cast or Greek chorus for the human protagonists, and with Anālayo (2011) who argued that the supernatural encounter with Brahmā, which does not appear in the Chinese *Madhyama-āgama* parallel to the *APS* (p.28 footnote 55), may be a later addition to the *APS*) and superhuman powers ('divine eye', knowledge where one will be reborn), for more details see the section 'Naturalizing the Ariyapariyesanā Sutta' below.

Based on the work of Alexander Wynne (2007), Batchelor uses the *APS* as providing the earliest account of Gotama's awakening. Nevertheless, he thinks that only the beginning part of the *sutta* should be so used because the initial reluctance of the newly awakened Buddha to teach, that the *sutta* reports, is claimed to be contradicted by a passage in the *Mūlarsarvāstavādin Vinaya* in which the Buddha declares to *Māra* his resolve to teach the dharma (Rockhill, 2000), this passage in turn is supposed to be an early text since it is referred to in the *Mahāparinibbāna Sutta* ([DN 16](#)).

(Batchelor, 2015; 66) He discards the entire rest of the *sutta* as ‘an attempt to present the Buddha as deferring to the cultural and religious norms of Brahmanism’ (Batchelor, 2015; 68), except that the encounter with the wanderer Upaka ‘might refer to a historical event’ (p.67), even though it happens later in the *sutta*.

This way of treating the *sutta* seems problematic in several ways. For example, why would a historically plausible event that portrays the Buddha in an unfavorable way (the encounter with Upaka) that seems to serve no purpose appear in an otherwise a-historic piece of propaganda? Also, Batchelor’s shortening of this *sutta* would eliminate another episode that seems likely to be a record of historical events, namely the Buddha’s praise for his former teachers (Wynne, 2007; 20). In addition, quite contrary to Batchelor’s claim that the freshly awakened Buddha’s hesitation to teach ‘sounds a jarring note’ (Batchelor, 2015; 66), it actually fits in perfectly with the part of the *sutta* that Batchelor accepts and on which he bases one of his central assertions (that of the ‘twofold ground’): His attainment of the *Dhamma*, which was found by Gotama only after a long struggle, and which was not found even by ‘wise, intelligent, and discerning’ seekers like Ālāra Kālāma and Uddaka Rāmaputta – a *Dhamma* for which his generation (*saeculum*, which is the etymological root of *secular* in the sense in which the term is used by him as pointed out by Batchelor (2015; 16)) did not care – what could be more natural than that this was followed by the expectation that trying to teach the *Dhamma* would be ‘wearying and troublesome’ for him? It is also corroborated by the *Māgandiya Sutta* ([MN 75](#)) where the Buddha again expresses weariness about teaching: ‘Magandiya, if I were to teach you the Dhamma thus: ‘This is that health, this is that Nibbana,’ you might not know health or see Nibbana, and that would be wearisome and troublesome for me.’ (Ñanamoli & Bodhi 1995, 615) Finally, even though Batchelor correctly quotes the *Mūlarsarvāstavādin Vinaya* as the Buddha declaring to Māra that he will not pass away as long as his teaching has not been spread far and wide among the gods and men, and takes this to imply that the part of the *APS* reporting that the Buddha had doubts about teaching must be discarded as a-

historic, he neglects to mention that on the very next page(!) this *vinaya* reports the Buddha entertaining those very doubts. The same situation pertains in the *Catuṣpariṣatsutra*: in a rather implausible context full of kings, gods and *Māras* the Buddha declares that he will teach, only to express doubts soon after (Kloppenborg, 1973).

The *Dhammacakkappavattana Sutta* basically continues where the *APS* ends: With the Buddha lecturing to the five ascetics at the Deer Park near Benares. Batchelor refers to this *sutta* not only with regard to Norman's reading of what is usually called the four noble truths, but also for Koṇḍañña (one of the five) having a vision of the *Dhamma* in understanding and uttering 'Whatever is subject to origination is subject to ceasing.' (Batchelor, 2015; 125) This seems hard to square with Batchelor's denial during his discussion of the *APS* a few pages earlier (p.67) that this lectures have taken place at that location.

In view of this discussion I would tentatively suggest that secular Buddhists should accept the *APS* as the closest that we can get to the essence of early Buddhism, excepting only the parts incompatible with naturalism. The one major part where this happens is where Brahmā Sahampati supposedly talked the Buddha into teaching, which may be a later insertion when a need was felt to portray the Buddha's teaching as divinely inspired. The only other encounter with supernatural beings in this *sutta* is when deities bring to Gotama the news that his former teachers, whom he wanted to visit to start teaching the *Dhamma*, had died one day and one week before, respectively. This looks suspicious, given the strange coincidence that both supposedly died right when the Buddha wanted to teach them. Nevertheless, this need not mean that this otherwise plausibly historical episode in the *sutta* has to be completely discarded, it would have been entirely natural for Gotama to attempt to first talk to his former teachers and companions (compare (Batchelor, 2015; 69)), once he decided to try to teach despite the difficulties he expected. A plausible guess might be that he failed to convince his former teachers, later the deity-involving story was invented as cover for this, since failing to convince his 'wise, intelligent, and discerning' former teachers would likely

have been seen as much more embarrassing than not being able to persuade an Ājīvaka like Upaka.

## Implications

If we follow the above suggestion to take the (naturalized) *Ariyapariyesana Sutta* as the basis for Secular Buddhism, what if anything would have to be changed relative to ‘After Buddhism’?

Relatively little, it would seem: unlike most other accounts of Gotama’s awakening, this *sutta* does not talk of four noble truths, nor of three (supernatural) knowledges. It does report what the future Buddha *did* to achieve liberation. This is perfectly in line with the emphasis on pragmatism, on tasks rather than truth as Batchelor puts it.

Nevertheless, this *sutta* does not support Batchelor’s denigration of the *jhānas* (meditative absorptions), culminating in the claim that the Buddha himself in the *Ariyapariyesana Sutta* supposedly firmly rejected two of them (Batchelor, 2015; 160), namely those taught by Ālāra Kālāma and Uddaka Rāmaputta (note the contrast with Wynne (2007; 18) who does not see ‘a total condemnation of [those] teachers’ meditative methods’), unless one follows Batchelor in disregarding (erroneously, as I argued above) the end of the *sutta* where a *bhikkhu*’s going through the *jhānas* finally leads to him having ‘crossed beyond attachment to the world. He walks confidently, stands confidently, sits confidently, lies down confidently.’ In other words, rather than the *jhānas* being at best optional (Batchelor, 2015; 160), they lead to acting, and acting confidently.

A second point where the view elaborated in ‘After Buddhism’ is in dissonance with this earliest report of the awakening is the claim that Gotama’s resolve was primarily to change the world, rather than himself (Batchelor, 2012): As noted above, even if the reports of Gotama stating to *Māra* that he will teach had an authentic kernel (despite the supernatural context), the same reports confirm that soon thereafter he had doubts about teaching; furthermore, what Gotama declared sounds to me less like a *resolve* to teach than a *forecast* that he will teach, thus telling us nothing about his motivations. Nevertheless, related to the last point there is one more important issue with Batchelor’s version of Secular Buddhism that is actually independent of the above



discussion of the textual basis. This will be discussed next.

## **Tasks, truth, and the relationship of *dukkha* and *taṇhā***

Buddhism is a practical thing, not a form of theory-for-theories-sake, I agree with Batchelor on this.

Yet, the details seem to need more attention again:

As noted above, Batchelor understands the key term *taṇhā* (literally: ‘thirst’) as ‘reactivity’ and reverses the order of the tasks/truths, so that in contrast to standard Buddhist teaching now *dukkha* leads to the arising of *taṇhā*. The argument advanced for this is roughly that Gotama explains *dukkha* as birth, disease, old age, death, losing what is agreeable, and being stuck with what is aversive, from which Batchelor concludes both that 1) *dukkha* refers to events in the world rather than to our mental reaction to these events, and that 2) *taṇhā* can not possibly be the origin of *dukkha*, as the standard rendering of the Four Noble Truths has it. Instead, Batchelor proposes that in our contact with the world we are exposed to *dukkha* (which he here translates as ‘suffering’), once we notice this we (usually automatically) react, when we notice this automatic reactivity (his translation of *taṇhā*) we can let go of it and then react in a more reasoned manner, thereby allowing us to follow the eightfold path. This seems inadequate for a number of reasons (see also Anālayo (2013) for a critique of Batchelor’s position):

First, *pace* Batchelor, it is to a large extent our mental reaction that causes *dukkha*. This is indeed consistent with the examples of *dukkha* that Gotama lists: Most obviously, and in contrast to deeply ingrained prejudice in our society, being old *in itself* is not a form of suffering. Of course, old age often brings disease – but the suffering comes from the illness, not from old age itself. It would have been pointless for the Buddha to list both old age and disease in the explanation of *dukkha*, if only the physiological state had been meant. To this can be added the fact that old age also brings its advantages, as a recent but rapidly increasing amount of scientific literature on ‘positive aging’ proves. (Carstensen & Charles, 2003; Chang, Toh, Fan & Chen, 2015; Hill & Smith, 2015; Levy, 2018) In fact, the research showed that the low point in human well-being tends

to be in middle age rather than in old age, the development of well-being over lifetime being roughly U-shaped (Laaksonen, 2018), and in some places the canon seems to recognize that for example wisdom is more likely among elderly, as in the *Sabhiyasutta* ([SNP 3.6](#)). Overemphasis on negative consequences of aging may be a case of the widespread *negativity bias*, see below.

Similarly, there is no naturalistic reason to consider death a form of suffering, as sages like Epicur (Braddock, 2000; Sharples, 1996) and ZhuangZi (Graham, 2001) perfectly understood – though clearly, fear of death is. (Nor is disease necessarily a form of suffering, but a discussion of this would lead too far.) Last not least, not only the actual loss of something that one values can cause *dukkha*, but so can the expectation that one might do so in the future, i.e., a purely psychological event can cause *dukkha*. Quite simply (and in line with the a-metaphysical approach advocated by Batchelor), *dukkha* are human judgements about aspects of the world rather than intrinsic features in the world (while evil as a feature of the world is consonant with religions, where the Evil One, Devil, or other evil principle are ‘out there’). We should also remember Gotama’s well-known statements that ‘It is volition [...] that I call kamma.’ ([AN 6.63](#), Bodhi (2012, 963)), and that ‘I describe mental action as the most reprehensible for the performance of evil action, for the perpetration of evil action, and not so much bodily action and verbal action’ (*Upāli Sutta* [MN 56](#), Ñānamoli and Bodhi (1995, 374)), both again pointing to the prime importance of the mental.

Second, ‘reactivity’ as rendering of *taṇhā* – for this specific translation Batchelor seems to give no rationale – and the related reordering of the first two tasks look unconvincing, as well. The basic meaning of *taṇhā* is ‘thirst’, and thirst is something that primarily does *not* arise through reaction to contact with the world: thirst is caused by forces *internal* to a person. Therefore it is no surprise that the *APS* explicitly says that the ignoble search is searching for what is subject to birth, ageing etc., and

what may be said to be subject to birth? Wife and children are subject to birth, men and

women slaves, goats and sheep, fowl and pigs, elephants, cattle, horses, and mares, gold and silver are subject to birth. These acquisitions are subject to birth; and one who is tied to these things, infatuated with them, and utterly committed to them, being himself subject to birth, seeks what it also subject to birth. [and *mutatis mutandis* for the other examples of *dukkha*],

whereas in contrast, the Noble Search is for ‘supreme security from bondage, Nibbāna.’ This unambiguously says that *being tied* (attached) to acquisitions that are subject to ‘death’ (etc.) leads one to search in the wrong (ignoble) direction which does not lead to liberation. Another point confirming that words like ‘birth’ and ‘ageing’ should not be taken too literally here is that even gold and silver are said to be subject to birth and death, which of course they are at most in a metaphorical sense. Finally, the Buddha did grow old, got sick, and died; so if liberation from these (in a literal sense) had been his goal, his quest would have been an utter failure – unlike liberation from the fear of dying and irrational prejudice against growing old, for which there seems to be no naturalistic reason to discard the possibility that he might have achieved it. In fact, contemporary research suggests that the methods he used are quite appropriate in this respect. (Kiken & Shook, 2011; Mayer, Polak & Remmerswaal, 2019)

Taken all this together, we see that the usual translation of *taṇhā* as ‘craving’ seems clearly preferable to ‘reactivity,’ and *taṇhā* (thirst, craving) with the resulting clinging (mental inflexibility, the desire that things must be a certain way – ‘musturbation,’ to borrow a term used by the famous cognitive therapist Albert Ellis) is what leads to the arising (*samudaya*) of the feeling of discontent/unsatisfactoriness/suffering in us (i.e., *dukkha*).

## **Negativity bias and the Dhamma**

An overemphasis on *dukkha* comes naturally to us humans. Presumably for evolutionary reasons (i.e., survival under stone age conditions), we tend to pay more attention to negative than to positive

aspects of our situation. This tendency is called the *negativity bias*. (Baumeister, Bratslavsky, Finkenauer & Vohs, 2001; Pinker, 2018; Rozin & Royzman, 2001) It is compatible with showing bias towards the positive in a few respects, including in judging one's own abilities (overconfidence), or in autobiographic memory (evaluation of one's past experiences tends to be more favourable the more time passes since them — note that this may contribute to age bias by making old people unduly perceive their present to be worse compared to their past, i.e., to their experiences when they were younger).

Space does not allow a detailed discussion (see Pinker (2018) for a book length treatment), but as one example of how badly distorted our view of the world is, consider global share of people living in extreme poverty: Most people tend to believe this is increasing or at best stable, Figure 1 presents the result of one survey (typical for rich countries, in this case the UK): 55% believed that the share of people in extreme poverty increased in the last 30 years, 33% thought it remained more or less that same, 12% believed it decreased. The truth comes as a shock to most: The global share of people living in extreme poverty has been *falling for two centuries* and it has *fallen massively* in the last three decades. For example, the share of the world's population living on less than 1.90\$ per day (adjusted for price differences and inflation) was 43.25% in 1980 compared to 9.98% in 2015 (Figure 2), and despite a growing world population the absolute number also declined by almost two thirds, from 1,920.00 million to 733.48 million.

FIGURE 1 ABOUT HERE.

**Fig.1** Result of survey concerning opinions about global prevalence of extreme poverty. Data

source: Gapminder ignorance test for the UK. Graphics: OurWorldinData.org. Licensed under CC-

BY-SA by author Max Roser.

FIGURE 2 ABOUT HERE.

**Fig.2** Share of the world's population living in extreme poverty Source:

[OurWorldinData.org/extreme-poverty/](https://OurWorldinData.org/extreme-poverty/) CC-BY-SA

Pinker (2018) presented further voluminous evidence that the world is in much better shape than we habitually believe, and the difficulty society has taking note of this, which he summarised as follows:

And here is a shocker: *The world has made spectacular progress in every single measure of human well-being.* Here is a second shocker: *Almost no one knows about it.*  
(Pinker, 2018, emphasis in original)

The negativity bias is one of a whole range of biases affecting human judgement and decision making, which includes for example the availability bias (neglecting what is not in plain sight), the affect heuristic (undue emotional influence on risk judgements), or the sunk cost fallacy (letting irretrievable costs influence future behaviour), among many others. The success of science is arguably grounded in the fact that it tries to reduce the influence of such biases on human cognition. For example, when studying a therapeutic treatment, the availability bias might tempt to pay excessive attention to reports of healing and while neglecting unreported failures to respond to the treatment, the confirmation bias may lead to overemphasize evidence consistent with expectations of efficacy of the treatment, etc.; therefore, a scientific study pays careful attention to sample selection, comparison to control groups, etc. There is also some evidence that mindfulness can reduce at least some biases including the sunk cost fallacy (Hafenbrack, Kinias & Barsade, 2014), and also the negativity bias (Kiken & Shook, 2011); on the other hand it might conceivably tend to increase others, for example overconfidence, in at least some situations: in the study by Verhaeghen (2017; 31) ‘only the meditators with a tremendous amount of meditation experience succeeded in actually meditating with only minimal stirrings of a sense of self, although the less accomplished meditators were clearly convinced that they succeeded in doing this as well,’ and Gebauer et al. (2018) ‘found greater self-enhancement [...] even among very advanced mind-body

practitioners' (for a critique of the latter work see Lumma, Heidenreich and Michalak (2020)).

## ***Bias, myopia, and Buddhism***

Availability bias and affect heuristic lead to myopia, and myopia seems widespread. In talking to others, in reading the media, and also among Buddhist and mindfulness practitioners I keep hearing about supposedly unprecedented problems, *dukkha* being rendered more extensive than ever before (Batchelor, 2015; 305), an impending catastrophe (Anālayo, 2020b; 472), an increasingly dystopian world (as in the title of Kabat-Zinn (2017)).

I am writing this at the time of the Covid-19 pandemic, is this really an unprecedented disaster? The worst estimates for mortality rates for Covid-19 that I came across are about 5%, whereas the black Death of the European middle ages was estimated to have killed about a third of the population! Which time would you rather live in? Is our's really more dystopian? Not that viruses, climate change, and so on, do not pose problems, but these are better met with a cool head rather than with hyperbole and myopia. This by the way suggests that Buddhism *might* be helpful, given its emphasis on 'seeing things as the really are' (as long as this is understood as trying to reduce bias, rather than uncritical acceptance of the canonical writings) and equanimity (as strong emotions of either valence tend to distort judgement: negative emotions usually narrow one's view, while positive emotions encourage credulity). This leads back to the topic of secular Buddhism.

## ***Cognitive dissonance and soteriology***

Batchelor (2015; 26) wanted to 'bracket off anything attributed to Gotama that could just as well have been said by another wanderer, Jain monk, or brahmin priest of the same period' because he takes 'such utterances to be determined by the common outlook of that time rather than reflecting an intrinsic element of the dharma.' In addition, he believed that we are in a 'post-credal age' (p.28).

This latter belief in ours being a post-credal age has been forcefully questioned by Gray

(2003). According to him, we have a new de-facto religion: ‘the post-Christian faith that humans can make a world better than any in which they have lived so far.’ (p.xiii) In contrast, in pre-Christian Europe it was taken for granted that the future would be like the past. (Note that Gray does not deny scientific and technological progress, as ‘Knowledge and invention might advance, but ethics would remain much the same’ (ibid), and conversely, Pinker (2018) made clear that on his view ‘[t]he ideal of progress should not be confused with the 20th-century movement to re-engineer society for the convenience of technocrats and planners.’ Thus, there is no necessary contradiction between the view of Gray and Pinker’s examples of progress.)

It is consistent with this that Calobrisi (2018) saw ‘a moral framework that provides a narrative arch of human decline and restoration’ in contemporary mindfulness. Similarly, Mattes (2018), building on the work of Fried (2016), suggested that there

seems to be a permanent craving to “save the world” widely spread in supposedly secular mindfulness circles (and the rest of our society, including many of those who consider themselves Buddhists) likely due to Christian cognitive dissonance. (p.238)

Cognitive dissonance is a classical psychological theory (Cooper, 2007; Festinger, 1957; Festinger, Riecken & Schachter, 1964), here it refers to the mental state of early Christianity when it was realized that, in contrast to firm expectations, Judgement Day did not come soon after the crucifixion of Jesus. Rather than acknowledging the disconfirmation of their expectations, Christians preferred to believe that their own virtuous behaviour had persuaded God to postpone the end of the world. Fried (2016) narrates how the resulting permanent feeling, that we are on the brink of unprecedented disaster and our intentional action is urgently needed to save the world, was propagated through the centuries and took firm hold even in our supposedly secular times. Of course, a world view thoroughly biased towards exaggerating the negative – a tendency rooted in human nature and increasingly exacerbated by modern media – helps to reinforce this, and we are rarely mindful of all the failed past doomsday predictions (including the supposedly scientifically

proven ones — who remembers the club of Rome predictions of the 1970s, or acid rain and *waldsterben* of the 1980s?).

## ***Soteriology, bias, and mindfulness***

To me it seems that secular Buddhism has two independent parts: On the one hand, there is the project of understanding to what extent the Buddha / early Buddhism was (or at least can be read as being) naturalistic, emphasizing skeptical and pragmatic voices in the canonical texts (Batchelor, 2015; 26), which I fully agree with.

The second part is related to negativity bias and Christian heritage. One aspect is the age-bias discussed above, but in fact the negativity bias in Secular Buddhism seems to go deeper, in that according to Batchelor (2015; 125) the whole of the human existential condition is ‘suffering.’ Consistent with this and the discussion above, Batchelor uses the *Nagara Sutta*, [SN 12.65](#) (where the Buddha compares: someone finding the path to an ancient city, seeing the city, and later the city becoming again successful and prosperous; to: him finding the ancient eightfold path, directly knowing the stages of dependent origination and their origin, cessation and path to cessation, and later the holy life becoming again successful and prosperous) to claim that ‘Gotama is concerned to establish a form of society’ (p.88). This (and other hints, like Batchelor’s admiration for Richard Rorty, whom he even referred to as a Pratyeka Buddha) suggest that politics was a goal in itself for the Buddha, rather than a consequence of and/or necessity for the liberation of human beings. I see no support for this in the *Nagara Sutta* or in the reports of the Buddha’s quest (compare also below). Consistent with this, Anālayo (2020b) showed that ‘expecting mindfulness teachers to stimulate political activism is not in keeping with relevant Buddhist antecedents.’ To me, this issue is suggestive of what Gray (2003) noted: the idea that the aim of life was to see the world rightly and calmly rather than to change the world, though perfectly normal in earlier times, is today ‘a subversive truth,’ which many find unpalatable because ‘political action has become a surrogate for salvation.’ Not that there was something wrong with action per se, but experience shows that



activists frequently lacks precisely the open-mindedness and fairness that they demand from others (examples can be found, e.g., in Chagnon (2013) or Dreger (2015)). The *Dhamma*, and mindfulness practice rooted in it, may help (as noted above, there is some evidence that mindfulness practice can mitigate at least some biases somewhat), but only if dealing with one's own shortcomings is given priority over dealing with what one perceives as the failings of the others or of society, instead of demeaning inward *Dhamma* practice as narcissistic (as does for example Batchelor (2012; 94)). In my eyes this is the missing piece when Batchelor (2015; 305) asserts that secular Buddhism 'does not, however, constitute a plea for a "socially engaged" Buddhism. It is a plea to [experience] that still, clear center from which we respond to the world in ways no longer determined by self-interest alone.' The problem is that self-interest is so incredibly skilled at masquerading as morality (Batson, 2015; Ditto et al., 2019), a problem that is also highly relevant in the context of modern mindfulness (Mattes, 2018).

## **Naturalism and the *Ariyapariyesanā Sutta***

Let us therefore return to the idea that (most of) the *APS* is historically accurate. In the section entitled 'textual basis' I suggested to remove only those sections of the *APS* referring to supernatural beings (Brahmā Sahampati) or superhuman powers (divine eye, knowing where one will be reborn). Now I add a few details.

From a naturalistic point of view there seem to be two issues where there may be doubt whether they should be excluded: the appearance of *Māra* and the mentioning of rebirth. *Māra* appears in the expression 'blindfolded *Māra*, to have become invisible to the Evil One by depriving *Māra*'s eye of its opportunity' which is obviously metaphoric (you can not literally blindfold anyone by abandoning pleasure and pain etc.), so its mentioning has no anti-naturalistic implications. Given the Buddha's concern for a person's inner life (see above), it seems that in the *APS*, *Māra* stands for unwelcome forces within oneself: bias, inner compulsion, inner conflict, etc. Sujato and Brahmali (2015; 95) also stress that in early Buddhist texts *Māra* is often to be take

metaphorically as the name for a psychological state.

Rebirth appears in the APS in two ways: First, in the description of the noble search pursued by the Buddha and leading to *nibbana*, as opposed to the ignoble search in which ‘someone being himself subject to birth seeks what is also subject to birth’ (and the same with birth sequentially replaced by ageing, sickness, death, sorrow, defilement), where what is subject to birth, ageing, sickness, etc. are acquisitions like wives, children, slaves, various animals, gold and silver. Interestingly, the *Madhyama-āgama* parallel to the APS omits birth in this passage, see Anālayo (2011; 22, footnote 41), so it might be a later addition. But even if not, the passage must be meant metaphorically as already noted above: gold and silver do not literally get sick, for example. There is no reason why this should be problematic from a naturalist viewpoint.

The second way rebirth appears is in the Buddha’s declaration after his attaining the ‘Dhamma [...] namely, specific conditionality, dependent origination [and] the stilling of all formations, the relinquishing of all acquisitions, the destruction of craving, dispassion, cessation, Nibbāna’ that

having understood the danger in what is subject to birth, seeking the unborn supreme security from bondage, Nibbāna, I attained the unborn supreme security from bondage, Nibbāna; [same for aging etc.] The knowledge and vision arose in me: ‘My deliverance [*vimutti*: liberation] is unshakeable; this is my last birth; now there is no renewal of being,’ [and similarly for the five companions after having trained under the Buddha’s instruction.]

Given that there are no specifics as to how rebirth happens there is no obvious reason why it would have been unreasonable for the Buddha (who presumably knew nothing about evolution or the age of the earth) to believe in a generic form of rebirth. The Buddha’s belief in rebirth, if any, may have been as different from popular beliefs at his time as Aristotle’s prime mover was from the popular gods of ancient Greece. Consistent with this, another canonical text ([MN 38](#)) states that once ignorance ceases, one loses interest into whether and how one will be in the future. Thus, this

passage does not appear to cause problems for the assumption that the Buddha had a naturalistic-scientific mindset. Another question is whether it is still reasonable to believe in an unspecific form of rebirth, given contemporary knowledge. Nevertheless, this seems to make little difference from a practical point of view except maybe that belief in rebirth helps sustaining a very helpful attitude to practice: that it is at the same time extremely important because an infinitude of rebirth bringing *dukkha* threaten, but not at all urgent – if you are not liberated in this life, then you can be in one of the future ones. Again this does not seem to cause insurmountable problems for a naturalist.

What we are left with is a coherent narrative that has four parts: (a) The introductory story. (b) The contrasting of the noble search for the supreme security from bondage (*nibbāna*) with being tied to and infatuated with the ignoble search for acquisitions that are (at least partly metaphorically) subject to ageing, sickness, death, sorrow, defilement. (c) The Buddha's own noble search, enlightenment, and first teaching: going forth to search for *nibbāna*, 'in search of what is wholesome, seeking the supreme state of sublime peace' under Āḷāra Kālāma and Uddaka Rāmaputta, in both cases leaving since their *dharmas* did not lead far enough; attaining *nibbāna* after settling on an 'agreeable piece of ground, a delightful grove'; doubts about teaching because it is 'hard for such a generation to see [...] specific conditionality, dependent origination' so that 'others would not understand me, and that would be wearying and troublesome for me.' Then thinking about teaching his former teachers and five former companions, on the way to meet his five former companions the encounter with the Ājīvaka Upaka; the five criticizing him for having given up asceticisms that he had undertaken before and for not 'achiev[ing] any superhuman states, any distinction in knowledge and vision worthy of the noble ones' to which the Buddha only replies that he is accomplished and fully enlightened, that 'the Deathless has been attained,' and denying that he lives luxuriously (nothing about superhuman states!), ending with the five attaining *nibbāna*. (d) Finally a lecture on seclusion from sensual pleasures, the *jhānas*, destruction of the taints, and crossing beyond attachment to the world so that one 'walks confidently, stands confidently, sits

confidently, lies down confidently.’

## ***Buddhism without negativity bias***

What is not mentioned in the APS are the four noble truths (or fourfold task). In fact, experiencing *dukkha* appears only in one place in the whole *sutta* and it is balanced with *sukha* (when ‘abandoning of pleasure [*sukha*] and pain [*dukkha*], and [...] the previous disappearance of joy and grief’ happens in the fourth *jhana*). To be sure, there is talk of those who are ‘tied to [...] infatuated with [...] and utterly committed to’ sensual pleasures having met calamity and disaster because ‘the Evil One may do with them as he likes’ (i.e., they are driven by inner compulsion, compare above) — this seems to me far from claiming that all life (or the entire human existential condition) is suffering. Thus, if this *sutta* is indeed indicative of early Buddhism, then it would indicate that the latter was free from negativity bias. (It should come as no surprise if negativity later encroached when the teaching was passed on since the social transmission of information is conducive to this (Bebbington, MacLeod, Ellison & Fay, 2017).) Consistent with this, a passage in the *sutta nipata* that may be an early version of dependent origination has *dukkha* alongside *sukha*, and a version of dependent origination in [SN 12.23](#) even has *dukkha* leading to *sukha* (via some intermediate steps). (Anālayo, 2013; 31f, footnote 60)

## ***Liberation without checklists***

Checklists can be very useful. (Gawande, 2010) Nevertheless, Bronkhorst (2009; 8) warns us that ‘in cases where teachings are presented in the form of lists, the possibility of later scholastic influence has to be taken into account, given the later scholastic tendency to present all the teachings it ascribed to the Buddha in lists.’ I would suggest to be particularly suspicious when an oral tradition (like Buddhism in its first few centuries) is supposed to be based on lists that are longer than what human working memory can hold (about seven items). Hence it is remarkable that in the account of Gotama’s quest and enlightenment, even though dependent origination is called a

truth and clearly central to the *Dhamma*, the frequently used twelve item list is not mentioned. Similarly, the noble eightfold path is not mentioned (the middle way between asceticism and sensual pleasures is hinted at indirectly by the five mentioning that Gotama abandoned asceticism, and by him insisting that this does not mean him living in luxury).

It is therefore consistent with this *sutta* that dependent origination and the middle way are central to the *Dhamma*, but the specific lists (twelve step dependent origination, eight part path) are only didactic devices, initially helpful checklists for those who need concrete guidelines to hold on to while starting on the way, but not something where one should attach much attention to the details. If so, this frees naturalistic Buddhists from a number of problems, for example: explaining how *upādāna* (clinging) is supposed to lead to *bhava* (existence, becoming) and then to birth (*jāti*), compare Batchelor (2012; 96): ‘I have never understood how clinging gives rise to *becoming* which then gives rise to *birth*’ (emphasis in original); how to reconcile having to have ‘right view’ with the places in the canon which are unfavourable to views *per se* (Fuller, 2005); or why the ability to recollect and remember what has been done or said long ago (which is part of the standard definition of the seventh item on that list - mindfulness - in the canon (Anālayo, 2017; 26)) should be indispensable to one’s ability today to cross beyond attachment to the world and walk confidently.

One complication should be mentioned, but can not be discussed here in detail: Above, reference was made to the argument by Anālayo (2011) that the supernatural appearance by Brahmā Sahampati in the *APS* is later addition. This argument was based on the fact that this appearance is not reported in the *āgama* parallel *MĀ 204*, together with the claim that it is more likely an addition in the *APS* than an omission in *MĀ 204*. In fact, not only the appearance of Brahmā is missing in *MĀ 204*, but also the newly awakened Buddha’s hesitation about teaching and any mention of dependent origination. At first sight this might lend support to Batchelor’s belief that the hesitation to teach was a later addition to the *APS*. Nevertheless, Anālayo’s suggestion that the Brahmā

episode is a later addition was based on the fact that the same pattern appears in other canonical texts: the Brahmā episode is mentioned in some texts but is missing from other parallel texts; Anālayo (2011; 31f) argued that the versions omitting the Brahmā are more likely to be earlier since they come from separate transmission lines. Nevertheless, despite omitting the Brahmā episode, these passages do mention dependent origination (Anālayo, 2011; 31, footnote 55), so they do not seem to lend support to the view that the Buddha's hesitation and/or dependent origination are later additions to the narrative of the Buddha's awakening.

## **On early Buddhism, positive psychology and psychotherapy**

Space does not allow a detailed discussion, but I do not want to finish this paper without at least pointing toward some parallels between early Buddhism (if indeed correctly represented by the above thoughts regarding the *APS*) and modern science, both regarding positive (*sukha*) and negative (*dukkha*) aspects of human existence.

‘In spite of the disinclination on the part of modern investigators to attribute significance to the pleasure felt in mystical and meditative states, reports about them abound.’ (Bronkhorst, 2012) In fact, pleasure and other positive feelings have been neglected also in most other research areas besides meditation research. Only over the last twenty years or so has there been a turn in psychology toward studying what is enjoyable, positive, what makes life worthwhile. Positive Psychology (Seligman & Csikszentmihalyi, 2000) unified and extended a few research lines including flow theory (Csikszentmihalyi, 1990; Csikszentmihalyi & Nakamura, 2010) and self-determination theory (Ryan & Deci, 2017), among others. Remarkably, this neglect holds even more and still continues for low-arousal positive emotions (LAPA) like equanimity (*upekkhā*), which would seem to be natural objects of study in mindfulness research. (McManus, Siegel & Nakamura, 2019) Nevertheless, extant research suggests parallels between positive psychology and early Buddhism. For example, the absorption of the *jhanas* parallels the claim in flow theory

that ‘*a good life is one that is characterized by complete absorption in what one does* [original italics],’ according to Nakamura and Csikszentmihalyi (2002; 89), who later in the same chapter state that intense (but effortless: Csikszentmihalyi and Nakamura (2010)) concentration is ‘perhaps the defining quality of flow.’ (Compare also the attempt by Bronkhorst (2012) to relate absorption to psychoanalysis, in particular footnote 172 on page 132.) Autonomy, the most fundamental human psychological need according to Self-Determination Theory (Ryan & Deci, 2017), is in direct opposition to something unwanted in me (‘the Evil One’) ruling me; the importance of freedom from ties and bondage while still being able to act (‘walk confidently’) also turned up in an extension of self-determination theory: in the contrast between harmonic and obsessive passions (here not to be understood in a romantic sense!) in the dualistic model of passions. (Vallerand, 2015; Vallerand et al., 2003) ‘Harmonic’ here means what is in harmony with other aspects of oneself, whereas ‘obsessive’ is what one is attached to, what one clings to, what controls the person.

The opposite of (metaphorical) bondage, of attachment, of clinging, presumably is (mental) flexibility. This psychological flexibility is crucial in at least a number of important psychotherapy methods, as can be seen from a few examples: It is considered the hallmark of mental health in Acceptance and Commitment Therapy, an empirically well-supported behavioural method (Hayes, Strosahl & Wilson, 2012); the psychoanalyst Sheldon Kopp noted that ‘You are free to do whatever you like. You need only face the consequences’; Albert Ellis, founder of the first school of cognitive behaviour therapy which today is called REBT (rational emotive behaviour therapy), and still the most widely cited CBT theorist (Ruggiero, Spada, Caselli & Sassaroli, 2018; 385, Table 1) also seems to have seen inflexibility stemming from the belief that one must do certain things or that the world has to be a certain way – inner compulsion, or, in his somewhat colourful language ‘musturbation’ – as the central impediment to a flourishing life. He stated for example (Ellis, 1999; 82) that he ‘sees disturbance largely as rigidity, dogma, absolutism, and musturbation.’ (A discussion of the relationship between REBT and mindfulness can be found in Dredze (2020) , and

between REBT and positive psychology in Bernard, Froh, DiGiuseppe, Joyce and Dryden (2010).) It therefore seems reasonable to conjecture that this ‘musturbation’ is the cause both of individual *dukkha* and of various problems at the societal and global levels, like religious and political fanaticism. It is what ties us, and what a naturalistic *Dhamma* might be able to liberate us from.

## References

- Amaro, A. (2015). A Holistic Mindfulness. *Mindfulness*, 6, 63-73.
- Anālayo, B. (2018). Mindfulness Constructs in Early Buddhism and Theravāda: Another Contribution to the Memory Debate. *Mindfulness*, 9, 1047-1051.
- Anālayo, B. (2020a). Buddhist Antecedents to the Body Scan Meditation. *Mindfulness*, 11, 194-202.
- Anālayo, B. (2020b). The Myth of McM mindfulness. *Mindfulness*, 11, 472-479.
- Anālayo, V. (2013). The Chinese Parallels to the Dhammacakkappavattana-sutta (2). *Journal of the Oxford Centre for Buddhist Studies*, 5, 9-41.
- Anālayo, B. (2018). *Rebirth in Early Buddhism and Current Research*. Somerville, MA, USA: Wisdom Publications.
- Anālayo, B. (2017). *Early Buddhist Meditation Studies*. Barre, Massachusetts, USA: Barre Center for Buddhist Studies.
- Anālayo, V. (2011). Brahmā’s Invitation: the Ariyapariyesanā-sutta in the Light of its Madhyama-āgama Parallel. *Journal of the Oxford Centre for Buddhist Studies*, 1, 12-38.
- Batchelor, S. (2012). A Secular Buddhism. *Journal of Global Buddhism*, 13, 87-107.
- Batchelor, S. (2015). *After Buddhism: Rethinking the Dharma for a secular age*. New Haven & London: Yale University Press.
- Batson, C. D. (2015). *What's Wrong With Morality? A Social-Psychological Perspective* Oxford: Oxford University Press.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C. & Vohs, K. D. (2001). Bad Is Stronger Than Good. *Review of General Psychology*, 5, 323-370.
- Bebbington, K., MacLeod, C., Ellison, T. M. & Fay, N. (2017). The sky is falling: evidence of a negativity bias in the social transmission of information. *Evolution and Human Behavior*, 38, 92 - 101.
- Bernard, M. E., Froh, J. J., DiGiuseppe, R., Joyce, M. R. & Dryden, W. (2010). Albert Ellis: Unsung hero of positive psychology. *The Journal of Positive Psychology*, 5, 302-310.
- Bodhi, B. (2000). *The connected discourses of the Buddha: a translation of the Saṃyutta Nikāya*. Boston: Wisdom Publications.
- Bodhi, B. (2012). *The Numerical Discourses of the Buddha : A Translation of the Aṅguttara Nikāya*. Boston: Wisdom Publications.
- Braddock, G. (2000). Epicureanism, death, and the good life. *Philosophical inquiry*, 22, 47-66.
- Brewer, T. (2009). *The Retrieval of Ethics*. Oxford UP.



- Bronkhorst, J. (2009). *Buddhist teaching in India: studies in Indian and Tibetan Buddhism*. Wisdom Publications.
- Bronkhorst, J. (2012). *Absorption : human nature and Buddhist liberation*. Paris: UniversityMedia.
- Calobrisi, T. (2018). The Quantum Leap from Karma to Dharma: Moral Narrative in the Writings of Jon Kabat-Zinn. *Journal of Dharma Studies*, 1, 85-95.
- Carstensen L. L. & Charles, S. T. (2003). Human aging: Why is even good news taken as bad? In Aspinwall. L. G. & U. M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for a positive psychology* (pp. 75-86). Washington, D. C. : American Psychological Association
- Chagnon, N. (2013). *Noble Savages: My Life Among Two Dangerous Tribes—the Yanomamo and the Anthropologists*. Simon & Schuster.
- Chang, W. C., Toh, Y., Fan, Q. Q. & Chen, A. S. H. (2015). Mind over Body: Positive attitude and flexible control beliefs on positive aging. *Biophilia*, 2015, .
- Cooper, J. (2007). *Cognitive dissonance: fifty years of classic theory* (Reprinted 2013. ed.). London: Sage publications.
- Csikszentmihalyi, M. (1990). *Flow: the psychology of optimal experience*. Harper Perennial Edition (2008).
- Csikszentmihalyi, M. & Nakamura, J. (2010). Effortless attention in everyday life: A systematic phenomenology. In B. Bruya (Ed.), *Effortless attention: A new perspective in the cognitive science of attention and action*. (pp. 179-189). MIT Press
- Ditto, P. H. et al. (2019). At Least Bias Is Bipartisan: A Meta-Analytic Comparison of Partisan Bias in Liberals and Conservatives. *Perspectives on Psychological Science*, 14, 273-291.
- Dredze, J. M. (2020). Albert Ellis and Mindfulness-Based Therapy: Revisiting the Master's Words a Decade Later. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 38, 319-329.
- Dreger, A. (2015). *Galileo's Middle Finger: Heretics, Activists, and the Search for Justice in Science*. Penguin.
- Ellis, A. (1999). *How to make yourself happy and remarkably less disturbable*. Atascadero, Calif.: Impact Publishers.
- Fabbro, F., Fabbro, A. & Crescentini, C. (2018). Contributions of Neuropsychology to the Study of Ancient Literature. *Frontiers in Psychology*, 9, 1092.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston: Row, Peterson.
- Festinger, L., Riecken, H. W. & Schachter, S. (1964). *When prophecy fails: a social and psychological study of a modern group that predicted the destruction of the world*. New York: Harper & Row.
- Feynman, R. (1974). Cargo Cult Science. <http://calteches.library.caltech.edu/3043/1/CargoCult.pdf> (accessed 2020-03-28).
- Flanagan, O. J. (2011). *The Bodhisattva's brain: Buddhism naturalized*. Cambridge, Mass: MIT Press.
- Fried, J. (2016). *Dies irae : eine Geschichte des Weltuntergangs*. München: C.H. Beck.
- Fuller, P. (2005). *The Notion of Dīṭṭhi in Theravāda Buddhism: The Point of View*. Routledge.

- Gawande, A. (2010). *The checklist manifesto: how to get things right*. London: Profile.
- Gebauer, J. E. et al. (2018). Mind-Body Practices and the Self: Yoga and Meditation Do Not Quiet the Ego but Instead Boost Self-Enhancement. *Psychological Science*, 29, 1299-1308.
- Gethin, R. (2015). Buddhist conceptualizations of mindfulness. In K. W. Brown, J. D. Creswell & R. M. Ryan (Eds.), *Handbook of Mindfulness: Theory, Research, and Practice* (pp. 9-39). Guilford Press
- Gombrich, R. (2009). *What the Buddha thought*. London: Equinox.
- Gombrich, R. F. (2006). *How Buddhism began : the conditioned genesis of the early teachings* (2nd ed.). London: Routledge.
- Graham, A. C. (2001). *Chuang-tzu: The inner chapters* (Repr. ed.). Indianapolis, Ind.: Hackett.
- Gray, J. (2003). *Straw dogs: thoughts on humans and other animals* (paperback edition ed.). London: Granta Books.
- Grossman, P. (2011). Defining mindfulness by “how poorly I think I pay attention during everyday awareness” and other intractable problems for psychology's (re)invention of mindfulness: Comment on Brown et al. (2011). *Psychological Assessment*, 23, 1034 - 1040.
- Hafenbrack, A. C., Kinias, Z. & Barsade, S. G. (2014). Debiasing the Mind Through Meditation: Mindfulness and the Sunk-Cost Bias. *Psychological Science*, 25, 369-376.
- Hayes, S. C., Strosahl, K. D. & Wilson, K. G. (2012). *Acceptance and Commitment Therapy: The Process and Practice of Mindful Change* (Second Edition). Guilford Press.
- Hill, R. D. & Smith, D. J. (2015). Positive Aging: At the Crossroads of Positive Psychology and Geriatric Medicine. In P. A. Lichtenberg & B. T. Mast (Eds.), *APA Handbook of Clinical Geropsychology: Vol. 1. History and Status of the Field and Perspectives on Aging*.
- Kabat-Zinn, J. (2017). Too Early to Tell: The Potential Impact and Challenges---Ethical and Otherwise---Inherent in the Mainstreaming of Dharma in an Increasingly Dystopian World. *Mindfulness*, 8, 1125-1135.
- Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.
- Kiken, L. G. & Shook, N. J. (2011). Looking Up: Mindfulness Increases Positive Judgments and Reduces Negativity Bias. *Social Psychological and Personality Science*, 2, 425-431.
- Kloppenborg, R. (1973). *The Sutra on the foundation of the Buddhist order (Catuspariṣatsūtra) : relating the events from the Bodhisattva's enlightenment up to the conversion of Upatiṣya (Śāriputra) and Kolita (Maudgalyāyana)*. Leiden : Brill.
- Laaksonen, S. (2018). A Research Note: Happiness by Age is More Complex than U-Shaped. *Journal of Happiness Studies*, 19, 471-482.
- Lee, J. H. (2014). *The ethical foundations of early Daoism : Zhuangzi's unique moral vision*. New York, NY: Palgrave Macmillan.
- Levman, B. (2017). Putting *smṛti* back into *sati* (Putting remembrance back into mindfulness). *Journal of the Oxford Centre for Buddhist Studies*, 13, 121–149.
- Levy, S. R. (2018). Toward Reducing Ageism: PEACE (Positive Education about Aging and Contact Experiences) Model. *The Gerontologist*, 58, 226–232.
- Lin, C.-T. (2020). Could the Buddha Have Been a Naturalist?. *Sophia, Forthcoming*, .
- Lopez Donald S., J. 1952. (2012). *The scientific Buddha: his short and happy life*. New Haven: Yale University Press.

- Lumma, A.-L., Heidenreich, T. & Michalak, J. (2020). How Would the Buddha Rate on Rosenberg's Self-Esteem Scale? *Mindfulness*, *11*, 521-526.
- Mattes, J. (2018). Mindfulness and the psychology of ethical dogmatism. *Journal of Buddhist Ethics*, *28*, 233-269.
- Mattes, J. (2019a). Are we forgetting *sati*? Memory and the benefits of mindfulness from a non-Buddhist viewpoint. *Mindfulness*, *10*, 1703-1706.
- Mattes, J. (2019b). Reports of the Death of Value-Free Science Are Greatly Exaggerated. *Review of Philosophy and Psychology*, *10*, 689-699.
- Mayer, B., Polak, M. G. & Remmerswaal, D. (2019). Mindfulness, Interpretation Bias, and Levels of Anxiety and Depression: Two Mediation Studies. *Mindfulness*, *10*, 55-65.
- McManus, M. D., Siegel, J. T. & Nakamura, J. (2019). The predictive power of low-arousal positive affect. *Motivation and Emotion*, *43*, 130-144.
- Mikulas, W. L. (2010). Mindfulness: Significant Common Confusions. *Mindfulness*, *2*, 1-7.
- Monteiro, L., Musten, R. & Compson, J. (2015). Traditional and Contemporary Mindfulness: Finding the Middle Path in the Tangle of Concerns. *Mindfulness*, *6*, 1-13.
- Nakamura, J. & Csikszentmihalyi, M. (2002). The concept of flow. In C. R. Snyder & S. J. Lopez (Ed.), *Handbook of positive psychology* (pp. 89-106). Oxford UP
- Ñānamoli, B. & Bodhi, B. (Ed.) (1995). *The middle length discourses of the Buddha : a new translation of the Majjhima Nikāya* (fourth edition, 2015). Boston: Wisdom Publications in association with the Barre Center for Buddhist Studies.
- Nattier, J. (1992). *Once upon a future time: studies in a Buddhist prophecy of decline*. Berkeley, CA, USA: Asian Humanities Press.
- Norman, K. (2003). The Four Noble Truths. In *KR. Norman Collected Papers II* (originally in "Indological and Buddhist Studies (Volume for J.W. de Jong)", 1982. ed.) (pp. 210 — 223). : Pali Text Society
- Pinker, S. (2018). *Enlightenment now: the case for reason, science, humanism, and progress*. New York: Viking.
- Polak, G. (2011). *Reexamining Jhāna: towards a critical reconstruction of early Buddhist soteriology*. Lublin: Wydawnictwo UMCS.
- Polak, G. (2016). How Was Liberating Insight Related to the Development of the Four Jhānas in Early Buddhism? A New Perspective through an Interdisciplinary Approach. *Journal of the Oxford Centre for Buddhist Studies*, *10*, 85-112.
- Polak, G. (2018). Language, Conscious Experience and the Self in Early Buddhism: A Cross-cultural Interdisciplinary Study. *Journal of the Oxford Centre for Buddhist Studies*, *14*, 37–76.
- Repetti, R. (2016). Meditation Matters: Replies to the Anti-McMindfulness Bandwagon! In R. E. Purser, D. Forbes & A. Burke (Eds.), *Handbook of Mindfulness: Culture, Context, and Social Engagement* (pp. 473-493). Springer International Publishing
- Rockhill, W. W. (2000). *The life of the Buddha and the early history of his order : [derived from Tibetan works in the Bkah-hgyur and Bstan-hgyur ; followed by notices on the early history of Tibet and Khoten]* (Reprint of the London, 1907 edition). London : Routledge.
- Rozin, P. & Royzman, E. B. (2001). Negativity bias, negativity dominance, and contagion.

*Personality and Social Psychology Review*, 5, 296-320.

- Ruggiero, G. M., Spada, M. M., Caselli, G. & Sassaroli, S. (2018). A Historical and Theoretical Review of Cognitive Behavioral Therapies: From Structural Self-Knowledge to Functional Processes. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 36, 378–403.
- Ryan, R. M. & Deci, E. L. (2017). *Self-determination theory: basic psychological needs in motivation, development, and wellness*. New York, London: The Guilford Press.
- Seligman, M. & Csikszentmihalyi, M. (2000). Positive psychology. An introduction. *American Psychologist*, 55, 5-14.
- Sharples, R. W. (1996). *Stoics, Epicureans and sceptics: an introduction to Hellenistic philosophy*. London, New York: Routledge.
- Shonin, E., Gordon, W. V. & Singh, N. N. (Ed.) (2015). *Buddhist foundations of mindfulness*. Cham: Springer.
- Sujato, B. & Brahmali, B. (2015). The Authenticity of the Early Buddhist Texts. *Journal of the Oxford Centre for Buddhist Studies*, 5, 1-152.
- Thompson, E. (2020). *Why I Am Not a Buddhist*. Yale University Press.
- Vallerand, R. J. (2015). *The psychology of passion: A dualistic model*. Oxford University Press.
- Vallerand, R. J. et al. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85, 756-767.
- Van Gordon, W., Shonin, E., Griffiths, M. D. & Singh, N. N. (2015). There is Only One Mindfulness: Why Science and Buddhism Need to Work Together. *Mindfulness*, 6, 49-56.
- Verhaeghen, P. (2017). The Self-Effacing Buddhist: No(t)-Self in Early Buddhism and Contemplative Neuroscience. *Contemporary Buddhism*, 18, 21-36.
- Von Hinüber, O. (2006). Hoary Past and Hazy Memory: On the History of Early Buddhist Texts. *Journal of the International Association of Buddhist Studies*, 29, 193 - 210.
- Wallace, B. A. (2007). *Contemplative science: where Buddhism and neuroscience converge*. New York, NY: Columbia Univ. Press.
- Walshe, M. O. (1995). *The long discourses of the Buddha : a translation of the Dīgha Nikāya*. Somerville: Wisdom Publications.
- Walters, J. S. (1999). Suttas as History: Four Approaches to the Sermon on the Noble Quest (Ariyapariyesana-Sutta). *History of Religions*, 38, 247–284.
- Williams, J. M. G. & Kabat-Zinn, J. (2011). Mindfulness: diverse perspectives on its meaning, origins, and multiple applications at the intersection of science and dharma. *Contemporary Buddhism*, 12, 1-18.
- Wynne, A. (2007). *The origin of Buddhist meditation*. London: Routledge.
- Wynne, A. (2009). Early evidence for the ‘no self’ doctrine? A note on the second anātman teaching of the second Sermon. *Thai International Journal for Buddhist Studies*, 1, 64-84.