BSRV 31.1 (2014) 125–140
doi: 10.1558/bsrv.v31i1.125
Buddhist Studies Review ISSN (print) 0256-2897
Buddhist Studies Review ISSN (online) 1747-9681

Mindfulness, Free Will and Buddhist Practice: Can Meditation Enhance Human Agency?

Terry Hyland

Emeritus Professor of Education and Training, University of Bolton

hylandterry@ymail.com

Abstract

Recent philosophical and neuroscientific writings on the problem of free will have tended to consolidate the deterministic accounts with the upshot that free will is deemed to be illusory and contrary to the scientific facts (Blackmore 2011; Harris 2012). Buddhist commentaries on these issues have been concerned in the main with whether karma and dependent origination implies a causal determinism which constrains free human agency or — in more nuanced interpretations allied with Buddhist meditation — whether mindfulness practice allows for the development of at least some potentially free volitions and actions (Harvey 2007; Repetti 2012). After examining some of the key arguments in this debate, it is suggested that the present-moment attention and awareness central to mindfulness practice may offer a way out of the impasse presented by the alleged illusion of free will. The meditative spaciousness of non-judgmental, present-moment awareness can help to foster the capacity to transform those mental formations which constrain autonomous thought and action. This conclusion is informed by the general thesis that free will is not a given — an innate aspect of the human condition — but, like wisdom or rationality, a potential quality of mind which may be developed through training, education and skilful means.

Keywords
free will, mindfulness, self, neuroscience

Who makes these changes?
I shoot an arrow right.
It lands left.
I ride after a deer and find myself
chased by a hog.
I plot to get what I want

and end up in prison.
I dig pits to trap others
and fall in.
I should be suspicious
of what I want.
"Who Makes These Changes?" — Rumi

Free will: The problem

Susan Blackmore — the psychologist and researcher on evolutionary theory, consciousness and meditation — expresses the central issues in this sphere by quoting Dr Johnson's famous remark that 'All theory is against freedom of the will; all experience for it'. She goes on to observe (2005, 41) that:

> With recent developments in neuroscience and theories of consciousness, theory is even more against it than it was in his time. So I long ago set about systematically changing the experience. I now have no feeling of acting with free will, although the feeling took many years to ebb away.

The 'theory' referred to by Blackmore which seems to count so decisively against the possibility of free will has emerged from two millennia of philosophical analysis of the central problems. Determinism — the notion that everything has law-governed cause — was part of the Stoic system of philosophy (Hamlyn 1987, 81ff), and the issues raised have formed part of philosophical speculation since the time of the Ancient Greeks, finding a mature expression in the atomistic theory of Democritus (Sheldrake 2013, 58ff). Such mechanistic and causal explanations of the world — including that of human agency — have developed exponentially with the growth of science and now, as Rupert Sheldrake argues, go to make up some of the key unquestioned axioms of all scientific activity.

If everything is determined — even our thoughts, beliefs, choices and actions — how can we be free to think, believe, choose or act in any ways other than the ways we in fact do? In the *Ethics*, Baruch Spinoza proposes the classic account of this philosophical doctrine which, in his system, even denies free will to God, who is co-identified with Nature. The proposition (1970, 23–25) is that:

> In the nature of things nothing contingent is granted, but all things are determined by the necessity of divine nature for existing and working in a certain way. The will can only be called a necessary cause, not a free one. Will, like intellect, is only a certain mode of thinking, and therefore any single volition cannot exist or be determined for performing anything unless it be determined by some other cause, and this one again by another, and so on to infinity ... Hence it follows that God does not act from freedom of the will.

Since, for Spinoza, God and Nature were just the same, we are presented here with the classical picture of the universe as a fixed and immutable machine which, once in motion, can be seen to operate in terms of unalterable laws. This is the basic premise of the materialistic worldview of science described by Sheldrake and summed up graphically in the argument by Laplace that, if we knew the position, mass and velocity of each particle of matter, we would be able to deduce any and every event in the history of the universe (Pinchin 1990, 113–114).

Of course, even the sort of hard-headed materialists of contemporary science taken to task by Sheldrake would no longer maintain such a simplistic and uncompromising position. The indeterminacy of sub-atomic particles revealed by quantum mechanics (Greene 2004) and the uncertainty of the cosmological constant revealed in the recent discoveries of an exponentially expanding universe driven by dark energy and dark matter (Panek 2001) have served to temper some of this materialistic certainty. However, the deterministic assumptions remain in much of scientific thinking and the implications for human thought and action of indeterminism offer (as noted later) very little scope for escape from arguments against freedom of the will.

Sam Harris expresses the position in stark terms (2012, 5):

> Free will *is* an illusion. Our wills are simply not of our own making. Thoughts and intentions emerge from background causes of which we are unaware and over which we exert no conscious control ... Either our wills are determined by prior causes and we are not responsible for them, or they are the product of chance and we are not responsible for them.

Given what we now know about DNA, evolutionary psychology and the link between brain states and emotions, desires and intentions (Pinker 1997; Blackmore 2011), it is difficult to make sense of the notion of people acting 'freely', particularly when we add social context, family background and life experiences to the general picture. Why, then, is there a problem about freedom of the will if there is very little evidence in favour of it? The answer is hinted at in the Blackmore quotation cited above. In spite of all the objective counter-evidence, we still have to account for the subjective *feeling* that we are free to choose, decide and act in particular ways, and that — in looking back on past actions and choices — we do seem to think that we could have acted and decided otherwise. However, this *feeling* can be accounted for in historical and anthropological accounts of the development of social, legal, moral, religious and political systems (Harris 2012) and it is important to find out why Blackmore's project of removing such a feeling from her life is one that has not been attractive to or adopted by more people. An interesting question is why it seems to be so difficult (or, at least, not that easy) to accept her conclusion — made after a lifetime's study of consciousness and Zen meditation practice — that there is:

> no persisting self, no show in a mental theatre, no power of consciousness and no free will, no duality of self and other — just the complex interactions between a body and the rest of the world, arising and falling away for no one in particular.
>
> (Blackmore 2011, 165)

Free will: Possible escape routes

An obvious response to the free will dilemma is to point to the distinction between voluntary and involuntary thought and action. If we cause harm to others at the point of a gun or under some other form of duress, this involuntary act is evaluated rather differently from that of causing harm to others in a voluntary and premeditated way. This distinction is, of course, crucially important in legal and moral contexts in which the notion of individual responsibility is often decisive. As Ted Honderich notes, one argument against determinism and in favour of free

will turns precisely on this notion; a 'man [*sic*] is responsible for an action if his future behaviour can be affected by punishment' (1984, 264–65). However, this merely shows that the 'freedom' implied by voluntary behaviour is — as all the historical accounts clearly show (Diamond 2005) — a fundamental *assumption* of legal and moral systems, not that unfettered freedom is actually possible.

This sort of thesis is central to 'compatibilism', one of the most common philosophical positions on these matters, which holds that 'free behaviour exists but it is just a small corner of the determined world — it is that corner of determined behaviour where certain kinds of force or compulsion are absent' (Searle 1985, 88–9). But this view simply amounts to saying that some of our actions (voluntary) are caused by our rational wants and desires whereas others (involuntary) are caused by coercion or irrational psychological impulses. However, on the basis that we seem to have no more control over our brain activity than we do over the rate at which our hearts beat, Harris concludes that 'my mental life is simply given to me by the cosmos' (2012, 19). It may appear at times that our decisions and actions are freely chosen on the basis of our needs or desires, but we do not choose to have those desires and needs in the first place. As Harris explains (2012, 20):

> There is no way I can influence my desires — for what tools of influence would I use? Other desires? To say that I would have done otherwise had I wanted to is simply to say that I would have lived in a different universe. Compatibilism amounts to nothing more than an assertion of the following creed: *A puppet is free as long as he loves his strings*. [Original italics]

Harris is here challenging those compatibilist or 'soft deterministic' accounts offered by Dennett (2003), Frankfurt (1971), Searle (1985) and others who claim that — even though our thoughts, decisions and actions are caused by our DNA, neurophysiology and life experience — we are free to the extent that they are *our* thoughts and actions. This appeal to existential agency, however, relies heavily on a notion of 'self' which may have shaky foundations.

Blackmore's denial of a separate self, cited earlier (and returned to below in the discussion of Buddhist conceptions), has a long philosophical pedigree. David Hume is best known as an opponent of the notion of a unique 'I' or 'me' and offered the famous observation that 'I can never catch myself at any time without a perception, and never can observe anything but the perception' (1964, 239). Timothy Chappell (2005) reminds us — in his examination of the 'inescapable self' as it applies to ethics, epistemology and philosophy of mind — that both Heraclitus and the Buddha had reached broadly the same conclusion as Hume as long ago as the fifth century BCE. Indeed, the notion of the self as a subjectively constructed narrative can be found in diverse spheres of thought from history to psychology, political science and literary criticism. As Chappell puts it:

> Humean, deconstructionist, Buddhist, Heraclitean, or Marxist historian: all of these different schools of thought move, in their different ways, towards the same conclusion about the self. The conclusion is that selves are causally and explanatorily inert because they do not actually exist as parts of the fabric of the world.
>
> (Chappell 2005, 220)

Moreover, recent studies in neuroscience have cast doubt on the concept of a centre of consciousness, a central and unified 'self' or 'I' directing all aspects of our behaviour. Blackmore (2005) discusses the counter-intuitive idea that — although we make the standard assumption that there is a unified centre to all our acts and experiences — this feeling is not supported by studies of consciousness. Neuroscientific research indicates that there are many facets of consciousness which can be linked to different brain states but little evidence of brain states which correspond to a single entity or source of consciousness. Certain fundamental assumptions — such as the notion of a fixed and unchanging self, located in a conscious mind through which flow a 'stream of ideas, feelings, images and perceptions' — have, according to Blackmore, to be 'thrown out' (2005, 128). So how are we to proceed? Blackmore suggests that we:

> start again with a new beginning. The starting point this time is quite different. We start from the simplest possible observation. Whenever I ask myself 'Am I conscious now?', the answer will always be 'yes'. But what about the rest of the time? The funny thing is that we cannot know. Whenever we ask the question we get an answer — yes — but we cannot ask about those times when we are not asking the question. (Blackmore 2005, 128)

Even more intriguing is the ground-breaking work by Libet (2003) using functional magnetic resonance imaging (fMRI) scanning techniques, which indicates that activity in the brain's motor sections — when subjects are asked to perform actions or respond to sights, sounds or touches — actually *precedes* consciousness of such perceptions. If consciousness (in the sense of awareness of the intention to respond) *follows* sense perception and action, how can such activity be said to have been *caused* by consciousness? Moreover, if we are not in complete conscious control of our thoughts and actions, does this not imply that we cannot be held fully accountable for them since they are in some sense determined by factors outside our control?

Certainly, the proposition that many of our choices and actions are self-generated does seem to make sense. However, if the 'self' doing the generating is no more than a subjective feeling in the brains of people who are the product of, on the one hand, unconscious neurological processes over which they have no control and, on the other, quantum fluctuations in the world in which we operate, what is left of any putative freedom? In fact, the indeterminism of quantum mechanics and astrophysics may be even more damaging to the argument for free will than determinism. Heisenberg's 'uncertainty principle' — the idea that 'it is impossible to measure both the position and momentum of a quantum object at the same time' (Gribbin 1995, 16) — leads to a probabilistic view of the world which applies to everything, including people and their brains. If the subatomic behaviour of neurons is unpredictable — or, at least, is characterised by a randomness which allows only for probabilistic predictions — then the minds and their contents which are the outcome of this brain activity may be equally random and probabilistic. The upshot is that we can never really know (in the sense that, in normal circumstances, it can be said that we have knowledge of past events) what we are going to do at any one time even though we may *feel* that we are acting freely and rationally.

If we then move from the inner to the outer world, recent developments in astrophysics and cosmology also cast doubt on the possibility of free will. The discovery that the universe was — contrary to previous scientific belief — expanding at an accelerating rate led astrophysicists to posit the idea of dark energy and matter as an explanation of this phenomenon. As Panek (2011, xv) puts it, the material is:

> not 'dark' as in black holes or deep space. This is 'dark' as in unknown for now, and possibly forever: 23% something mysterious they call dark matter, 73% something even more mysterious that they call dark energy. Which leaves only 4% the stuff of us.

Sheldrake explains how such new perspectives have thrown doubt on the traditional laws concerned with the conservation of matter and energy. In accounting for the observation that more gamma rays were being emitted from the centre of the Milky Way than could be accounted for, a number of astrophysicists have suggested that 'dark matter was being annihilated, giving rise to regular kinds of energy' (2012, 68–9). Such anomalies — along with quantum uncertainty and the staggering notion that 96% of the universe is unknown and unexplained — is more than enough to take the edge off determinism and render more plausible the possibility of indeterminism.

As Harris (2012, 30) concludes:

> If determinism is true the future is set — and this includes all our future states of mind and our subsequent behaviour. And to the extent that the law of cause and effect is subject to indeterminism — quantum or otherwise — we can take no credit for what happens. There is no combination of these truths that seems compatible with the popular notion of free will.

However, as argued below, Harris and Blackmore are not actually committed to a hard determinism which rules out all possibility of freely chosen thoughts and actions. What they seem to want to say is that, insofar as our decisions and choices are determined by antecedent phenomena (upbringing, life experience, DNA, and so on), then they are consequently heavily conditioned, thus circumscribing freedom of the will. Yet both are optimistic about the degree to which we can work with such conditioning and achieve some form of freedom of thought and action through meditation.

The illusion of free will

Unlike certain existentialist perspectives — and *contra* Arthur Schopenhauer's deeply pessimistic views about the role of the will in generating human suffering (Schopenhauer 1995) — in which despair and hopelessness take prominence, the denial of free will may become an optimistic affirmation of the way things really are, coupled with a positive commitment to 'improving ourselves and society' in 'working directly with nature, for there is nothing but nature itself to work with' (Harris 2012, 63). It seems that — although we may be persuaded into a deterministic stance on the basis of the scientific evidence — in terms of our *subjective* experience of choosing, deciding and acting, there is scope for positive and optimistic speculation. Notwithstanding their trenchant views on the illusory nature

of free will, both Harris and Blackmore appear to end up implicitly adopting a 'soft' determinist, compatibilist position in allowing for enough freedom to foster our potential for intentional and autonomous behaviour.

Blackmore expresses the view, for example, that it 'is possible to live happily and morally without believing in free will' (2005, 41) and has explained in detail how meditation has personally led to a 'massive integration of processes all over the brain and a corresponding sense of richer awareness' (2011, 164). How does all this work? Harris (2012, 47) gives us clues and also provides links to Buddhist mindfulness in noting that:

> Becoming sensitive to the background causes of one's thoughts and feelings can — paradoxically — allow for greater control over one's life ... This understanding reveals you to be a biochemical puppet, of course, but it also allows you to grab hold of one of your strings ... Getting behind our conscious thoughts and feelings can allow us to steer a more intelligent course through our lives (while knowing, of course, that we are ultimately being steered).

Elsewhere, Harris (2006, 2010) has noted the efficacy of meditation and Eastern contemplative traditions in providing a more solid foundation than religions such as Christianity and Islam for moral, political and legal systems, and there seem to be clear connections here between the suggested response to the alleged free will illusion and Buddhist practice.

Buddhism and freedom

It is worth entering a number of caveats here to preface the discussion. Although the Buddha argued against fatalism (Harvey 2007, 40) the notions of freedom, determinism and indeterminism are rather too metaphysical and theoretical to play a predominant role in the essentially pragmatic project of understanding and relieving suffering. Riccardo Repetti (2012, 135) agrees with Harvey that the 'Buddha rejected the fatalistic attitude of agential impotence, precisely on the ground that it would lead to what may be described as a form of volitional catatonia' and instead:

> emphasized the knowledge of cause and effect and the cultivation of mindfulness of beliefs, volitions, and actions as his basic prescription for what an agent may do to foster her own liberation and bring about the end of her suffering. Thus, if dependent origination *is* deterministic, the Buddha would arguably be more likely to accept a *soft* over a *hard* interpretation of determinism. (2007, 135)

Moreover, it is worth noting that if the complete Buddhist project — the full journey along the Noble Eightfold Path to achieve *nirvāṇa* and awakening — is completed, then the idea of free will or not free will becomes irrelevant. Since *nirvāṇa* may be defined technically as the 'complete silencing of concepts ... the extinction of all notions' (Nhat Hanh 1999, 136–37), the notion of free will would also be silenced, thus rendering many of the arguments redundant. On this account — indeed, within the framework of some leading Western theories and systems of morality (Foot 1970) — the concept of freedom is not predominant and needs to be balanced against other notions such as trust, benevolence, compassion and respect for persons. However, for the purposes of the present

discussion the centrality of free will is taken to be important in the sense that it informs the notion of autonomous human agency which is assumed to undergird all thought and action, including that which may lead to mindfulness practice and hence liberation.

Within Buddhist traditions the notion that we have free will would not be especially illusory (or rather delusory), but one of the many delusions that humans are driven to in the attempt to escape from the suffering that is part of being alive. These delusions are encapsulated in the construction of the (concept of) a personal and unique 'self' that is designed to protect us from suffering and the realisation that everything is impermanent. As Caroline Brazier (2003, 32) puts it:

> The self, according to Buddhist psychology, is the fortress we create to protect ourselves from experiencing the pain of loss and impermanence. It is our greatest defence mechanism. It is also our prison. Keeping this fortress in place becomes a life project, and consumes large amounts of our energy.

As Bhikkhu Bodhi (2000, 1844) expresses this in the translation of the second noble truth from the *Dhammacakkappavattana Sutta:*

> the noble truth of the origin of suffering: it is this craving which leads to renewed existence, accompanied by delight and lust, seeking delight here and there; that is craving for sensual pleasures, craving for existence, craving for extermination.

Such a project is seen to be monumentally counter-productive in that constantly feeding the self-notion through the consumption of sensual experience merely exacerbates and magnifies the suffering which the self-notion was constructed to escape from. The prison walls simply grow higher and more impenetrable. Thus far, there is agreement with both the philosophical critiques of 'self' and the contemporary neuroscientific studies of consciousness. But what of the more radical claims by Harris and Blackmore that the illusion/delusion of 'self' may be connected with the illusion of free will?

The third and fourth noble truths clearly indicate that there is a way out of suffering and illustrate forcefully what this escape route entails. Does this imply a commitment to a belief in free will? Certainly the notion of freedom or liberation which is incorporated into many Buddhist writings and commentaries, and the transformation implied in such contexts seems to presuppose the capacity to form freely chosen judgments and intentions of the sort associated with free will. On the third noble truth, Bodhi translates (2000, 1844):

> The noble truth of the cessation of suffering: it is the remainderless fading away and cessation of that same craving, the giving up and relinquishing of it, freedom from it, nonreliance on it.

Thus, there is a clear expression here of the human capacity to escape the thrall of self-delusion, and this implies the possibility of curtailing the endless cycle of strife through adopting the right track: the noble eightfold path. This track is 'right' in the pragmatic sense that it helps us to achieve the desired end of reducing or alleviating suffering in ourselves and others. The pragmatic thrust is highlighted in Stephen Batchelor's assertion that there 'is nothing particularly religious or spiritual about this path' and that it 'encompasses everything we do' as an 'authentic way of being in the world' (1998, 10). In more recent writ-

ings, Batchelor (2011, 181) crystallizes his secular existentialist perspective on Buddhism in the observation that:

> Buddhism has become for me a philosophy of action and responsibility. It provides a framework of values, ideas and practices that nurture my ability to create a path in life, to define myself as a person, to act, to take risks, to imagine things differently to make art.

In a similar vein — writing about the connections between Buddhist ideas and Western psychotherapy — Jeffrey Rubin (2002, 50) suggests that 'Buddhism points towards possibilities for self-awareness, freedom, wisdom and compassion that Western psychology in general, and psychoanalysis in particular, has never mapped'.

The idea of free will is implicit in all of this talk of personal authenticity, action, self-awareness and responsibility. How can we be authentic or take full responsibility for our actions if our decisions and intentions are not to some extent freely chosen by us? If we manage to escape from the illusion of self to embrace not-self, is this awareness of our not-self nature more liberating than the original false conception?

Charles Goodman (2009) has argued that the not-self element of Buddhism justifies determinism and the denial of free will, though Repetti offers a more nuanced account which distinguishes between delusional notions of self as being fixed and immutable and a refined notion in which a 'processual' and 'self-regulating' conception of self can be accepted without endorsing personal identity. As he puts it (2012, 190):

> For one may acknowledge that one's views, intentions, speech, actions, efforts, one-pointedness, and mindfulness are ultimately impersonal in origin, on the one hand, but that together they constitute a tightly clustered causal system that exhibits system reflexive features (system monitoring, system approving or disapproving, system revising, and so forth) that ground conventional or pragmatic attributions of responsible agency to the system, on the other hand, *without erroneously identifying with them*. [Original italics].

Arguing along broadly similar lines, Caroline Brazier (2003, 138–139) suggests that:

> The teaching of non-self is not a denial of the existence of the person as a complex entity, functioning in a complex world. Non-self theory places people in dynamic encounter with one another and with the environment which they inhabit. It acknowledges the ever-unfolding social process and the ways in which people provide conditions for one another... Our society is firmly attached to ideals of individuality and personal freedom. Ideas of non-self seem to threaten the basis on which this is founded and to cut the ground from under us. In fact, however, they offer liberation of a much more profound kind.

The process of liberation referred to here is clearly outlined in all the basic texts on mindfulness meditation. Thich Nhat Hanh (1999, 75) offers a graphic and forceful account in his observation that:

> Mindfulness helps us look deeply into the depths of our consciousness **...** When we practice this we are liberated from fear, sorrow and the fires burning inside us.

> When mindfulness embraces our joy, our sadness, and all our mental formations, sooner or later we will see their deep roots ... Mindfulness shines its light upon them and helps them to transform.

Given what was said in earlier sections about the illusion of free will, the really interesting question is whether the liberation and transformation described by Nhat Hanh can be achieved.

Harvey (2007, 84) offers an affirmative answer to this question in observing that:

> Buddhism accepts 'freedom of the will' in the sense that before one acts, one can and should stop and reflect on things ... One should be mindful of emotions and motives, etc., and guide how they or other factors influence one's actions. One's willing and action is conditioned but not rigidly determined. Freedom of action and will is a relative quantity which arises from the open interacting dance of rapidly changing mental states. Within this, a crucial quantity is the degree to which this cluster of processes contains good awareness of what is going on in the cluster and in the world.

Repetti has examined recent Buddhist writings on free will in some detail and has identified a range of shifting positions. Acknowledging the force of arguments of scholars such as Goodman (2009) and Mark Siderits (2008) which lead to incompatibilist or semi-compatibilist positions, he concludes (2012, 193) that:

> in recent-period scholarship these divisions run more acutely along doctrinal lines, scholars relying mostly on Pāli (pre-Mahāyāna) sources mostly accept determinism, but scholars relying mostly on Sanskrit (Mahāyāna) sources seem to embrace indeterminism. Both such groups agree, however, that Buddhism is compatible with free will even in the absence of a real self.

The principal reason for this optimistic stance on free will lies in the power of meditation in maintaining an intentional commitment to the path of enlightenment, and the wisdom and transformation which may result from such a commitment.

Mind, mindfulness and human agency

The basic procedures and processes of mindfulness offer a useful starting-point in dealing with the more practical issues surrounding freedom and Buddhist practice. Zindel Segal, Mark Williams and John Teasdale suggest that, rather than consisting in any particular method or approach, there are 'many different methods and techniques' for cultivating mindfulness. The process implies (2002, viii):

> Developing and refining a way of becoming more intimate with one's own experience through systematic self-observation. This includes intentionally suspending the impulse to characterise, evaluate and judge what one is experiencing. Doing so affords multiple opportunities to move beyond the well-worn grooves of our highly conditioned and largely habitual and unexamined thought processes and emotional reactivity.

Repetti (2010, 177) describes the process and outcomes of meditation as follows:

> Meditation cultivates an increasing awareness of pre-conscious, impersonal cognitive/volitional forces that fuel distractions, engage and direct attention, and trigger actions, and it simultaneously cultivates volitional detachment and liberation-oriented volitions and metavolitions. As the practitioner becomes more aware of behavioral triggers, she becomes more able to refrain from acting on them. Thus, Meditation is a form of metamental training that increases volitional self-regulation.

In a similar vein, Siegel observes that a 'useful fundamental view is that mindfulness can be seen to consist of the important dimensions of the self-regulation of attention and a certain orientation to experience' (2007, 11). Scott Bishop, et al. (2004, 232) proposed the following two key stages or elements of the process:

1. The self-regulation of attention so that it is maintained on immediate experience, thereby allowing for increased recognition of mental events in the present moment.
2. A particular orientation toward one's experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance.

The qualities of curiosity, openness and acceptance reported throughout accounts of the prerequisites of mindfulness practice are also especially relevant to the learning and development involved in responses to the free will dilemma outlined earlier. It is important, however, to note that the acceptance involved here — developed fully by Tara Brach (2003) in her theory of 'radical acceptance' — implies the acceptance of the *reality* of suffering or negative mind-states not, of course, acceptance that they be allowed to continue. The transformation of such unwholesome mind-states is a large part of what mindfulness practice is about. Siegel's work (2007, 2010) has demonstrated how mindfulness may be developed through educational strategies, and there is growing evidence of the effectiveness of such programmes in schools and colleges (Schoberlein and Sheth 2009; Hyland 2011).

Two other key elements relevant to practice are worth mentioning here as spheres that need to be satisfactorily accommodated in order to cultivate mindfulness: our tendency towards 'rumination' and 'experiential avoidance'. These figure prominently in Mindfulness-Based Cognitive Therapy (MBCT) and related practices and are explained by Rebecca Crane (2009, 11) as follows:

1. Rumination is a particular style of self-critical, self-focused, negative thinking. It is preoccupied with and driven by the desire to 'solve' the emotional challenge of unhappiness or lowered mood.
2. Experiential avoidance is the attempt to remain out of contact with the direct experience of challenging thoughts, emotions and body sensations.

Thus, whereas rumination and avoidance place obstacles in the way of achieving mindfulness, the cardinal virtues of curiosity, openness and acceptance — along with the key attitudinal factors such as non-judgement, patience, trust, acceptance and non-striving outlined by Jon Kabat-Zinn (1990, 33–38) — will, ideally, help to remove such obstacles.

All of these attitudes and procedures are designed to foster what Siegel (2010, xi-xii) has called 'mindsight,' which is defined as:

> a kind of focused attention that allows us to see the internal workings of our own minds. It helps us to be aware of our mental processes without being swept away by them, enables us to get ourselves off the autopilot of ingrained behaviours and habitual responses, and moves us beyond the reactive emotional loops we all have a tendency to get trapped in. It lets us 'name and tame' the emotions we are experiencing, rather than being overwhelmed by them.

Andrew Olendzki explains this process in discussing the Buddhist concept of wisdom which is exemplified by the notion that 'all experience is shaped within a milieu of cause and effect' (2010, 79). Awareness of dependent origination allows us to see the interdependence of thoughts, sensations and emotions; we learn that when this thought arises, that other idea or feeling arises. In developing insights through practice, the refinement of our inner knowing allows us to decentre from these constant co-arisings so that we may create a space between seeing the desire and aversion and our reactions to such mental phenomena. As Olendzki expresses it (2010, 79):

> When one realizes that the arising feeling is one thing, while the attitude generated in response to it is something else entirely, the chain of compulsive causation is broken and a moment of freedom is born.

The clear implication here is that mindfulness helps us to stand back from the welter of emotions — the stream of thoughts, images and sensations which often overwhelm our conscious minds — to achieve a form of expanded vision which allows us access to moments of freedom. Can this present moment level of consciousness enable us to move in the direction of freedom of thought and action?

Neuroscience has shown that mindfulness meditation changes the brain patterns of meditators (Siegel 2007; Goleman 2003; Doidge 2007; Gilbert 2009) through increasing left brain activation to enhance positive feelings and emotional resilience. Since meditators have 'chosen' to change their brains in this way, could we say that they have expanded their scope for experiencing the moments of freedom noted by Olendzki (2010) and Siegel (2010)? This seems a reasonable suggestion though it does not, of course, answer all the questions posed by Harris and Blackmore since they could pose the further query concerning the cause of the turn to Buddhist practice or mindfulness meditation in the first place. Can mindfulness practice respond to such further questions?

Mindfulness and freedom

Mindfulness practice enhances freedom by expanding the human capacity for being in the here and now, a state which, arguably, transcends the normal sequence of past/present/future causality. Much of the time, the mind is in a state of undirected flux as it fixes on one object after another in a seemingly random and dissipated fashion. By 'cultivating mindfulness', the Dalai Lama reminds us, 'we learn first to become aware of this process of dissipation, so that we can gently fine-tune the mind to follow a more directed path towards the objects on which we wish to focus' (2005, 160). It is important to note that such attention has:

> a deliberate intention that helps us select a specific aspect or a characteristic of an object. The continued, voluntary application of attention is what helps us maintain a sustained focus on the chosen object. Training in attention is closely linked with learning how to control our mental processes. (2005, 161)

The mindfulness literature suggests that — through this training in attention — the control of mental processes achieved is as near as possible that humans can approximate to free will. The move from a 'doing' to a 'being' mode which is characteristic of mindfulness might be as near as we can get to circumscribing worries arising from the past/present/future causal flow of determinism. As Segal, Williams and Teasdale (2002, 73) put it:

> In doing, it is often necessary to compute the future consequences of goal-related activity ... As a result, in doing mode, the mind often travels forward to the future or back to the past, and the experience is not one of actually being 'here' in the present moment much of the time. By contrast, in being mode, the mind has 'nothing to do, nowhere to go' and so processing can be dedicated exclusively to processing moment-by-moment experience.

Adopting a definition of *sati*, mindfulness, as that of 'lucid awareness', Bodhi views this perspective as providing a 'connection between its two primary canonical meanings: as memory and as lucid awareness of present happenings' (2013, 25). It is in these moments of lucid awareness that the employment of skilful means may provide some access to those moments of freedom in which future-oriented intentions and volitions can be formed.

Blackmore suggests that the only time that we are fully aware we are conscious is when we ask the question 'Am I conscious now?' (2011, 164–165). Just as we can only be conscious in the present moment of asking this question, so we can only experience a form of freedom in the here and now of that 'mindsight' which allows us to stand back and view the internal workings of our mental processes. Repetti (2010, 195) expresses similar sentiments in arguing that:

> In meditation, one practices freedom while being pushed or pulled by first-order mental fluctuations and volitions and pushing or pulling back against their currents. Meditation is a practice behavior, like weight lifting, that gradually enhances mental freedom the more one meditates *in action* — when 'chopping wood and carrying water,' as a Buddhist adage has it. Each Meditation adds a metaphorical 'quantum of mental freedom' to the increasingly-free meditative mind, akin to a grain of sand added to others in the construction of a heap.

Conclusion: Buddhist mindfulness and free will

The wise attention fostered though mindfulness allows us those moments of calm 'mindsight' in which we can observe and stand back from the past/present/future stream of consciousness and thus expand our understanding and control of possible futures in the 'here and now' of meditative spaciousness. Such 'quanta of freedom', as Repetti describes them, enhance our capacity for subverting those aspects of consciousness which constrain or determine thoughts, feelings and actions. Such a capacity is one which — like the fostering of knowledge and understanding — requires education and development exemplified by those

forms of training incorporated in a number of contemporary mindfulness-based programmes (Crane 2009; Siegel 2007). The internal freedom which may result from the employment of skilful means in all spheres of life requires forms of training and inculcation of the sort usually associated with rich and deep 'therapeutic' educational development (Hyland 2009).

The Buddhist origins of such ideas are exemplified in the 'Simile of the Six Animals' *Sutta* (Bodhi 2000, 1255–1257) in which the Buddha explains the importance of mindfulness of the body as a way of restraining unwholesome mental states. Mindfulness functions as a 'strong pillar or post', a way of enhancing present-moment awareness by training the senses so that 'the mind does not pull in the direction of agreeable mental phenomena nor are disagreeable mental phenomena repulsive' (2000, 1257). In commenting on this teaching, Olendzki (2010, 93) observes:

> We are used to thinking of freedom as being free to do what we want, but the Buddha sees real freedom as being free from wanting. We tend to think of the post as the fetter, and freedom as being able to obtain agreeable objects of sense — whereas the Buddha considers the pursuit of pleasure to be the fetter, and mindfulness offers us the chance to break free of its bonds. Perhaps internal freedom is ultimately more valuable than external freedom.

Hard-headed determinists might still want to claim that such states of mindfulness must have been caused by antecedent states. In answer to this, we might say that outside of *nirvāṇa* (or some fantasy utopia) limitless freedom is an impossible ideal — a chimera that is not worth pursuing. The benefits of mindfulness — validated by over two millennia of *Dharma* practice and, more recently, by the data of neuroscience — are achievable ideals and, arguably, as close as humans can approximate to freedom. Moreover, the qualities produced and choices made during present-moment mindfulness have been shown to be conducive to the fostering of compassion, lovingkindness, equanimity and sympathetic joy — all of which are, arguably, of more lasting value than putative notions of unbridled freedom.

In answer to the really difficult question noted earlier concerning the chance nature of the turn to mindfulness practice in the first place, I would offer the suggestion that — like knowledge, understanding, morality and general culture — mindfulness is far too important to be left to the lottery of life chances with all its attendant vicissitudes and vagaries. It ought to be an essential ingredient, a part of the core curriculum, of all education systems, and the growth of interest in mindfulness in schools and colleges in America and Europe in recent years is highly promising in this respect (Burnett 2011; Hyland 2011). As an inspirational mission statement for this educational project, it would be difficult to better Olendzki's (2010, 158) observation that:

> The goal of becoming a better person is within the reach of us all, at every moment. The tool for emerging from the primitive yoke of conditioned responses to the tangible freedom of the conscious life lies just behind our brow. We need only invoke the power of mindful awareness in any action of body, speech or mind to elevate that action from the unconscious reflex of a trained creature to the awakened choice of a human being who is guided to a higher life by wisdom.

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