

The Dilemma of Mind in Contemporary Buddhism: Some British Testimony

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**Submitted in accordance with the requirements
of the degree of Doctor of Philosophy**

The University of Leeds

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and Religious Studies**

September 2006

The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

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Acknowledgements

This work has benefited from the inspiration, challenge and detailed attention provided by my supervisors, Professor Philip Mellor and Professor Kim Knott. I also thank Tony Adam for introduction to Buddhist Studies, Dr. Jacqui Stewart and Professor Geoff Cantor for introduction to the dialogue between religion and science, Dr. Andrew McGonigal for introduction to the philosophy of mind, and Dr. Pat McConnell for a critical reading of Chapter 3 and for assistance with Figures 1-5. I am grateful to Mat Francis, Martin Hobson, Jill Killington, Mel Prideaux and Dr. Kevin Ward for intellectual stimulus and for reasonably moral support. Thanks go to my family for regularly ordering me to shut up and get on with it. Any merit in the result is dedicated to the research participants, with gratitude and respect.

This research was supported by an award from the Arts and Humanities Research Council.

Abstract

Progress in neuroscience over the last half-century casts doubt on the religious intuition that the mind is a non-material entity. Without some dialogue between religion and science in order to resolve differences of fact and value, the dilemma of the competing plausibility of scientific and religious mind-theories may diminish the social acceptance of science and the social relevance of religion.

In order to identify whether meaningful discussion about neuroscience is taking place in the 'convert' British Buddhist community, I conducted qualitative interviews with ten people who have leadership responsibilities. Little formal discussion was reported within organisations, but there was some response to neuroscience at the level of personal attitude. Briefly, that response is of resistance to the neuroscientific view, and a corresponding prioritisation of subjective experience, which is felt to be more reliable than theoretical explanations that can only be believed, or findings that can only be empirically known. The existential certainty of experience is preferred to the uncertainty of explanation.

Interpreting the interview findings, I argue that explanation forms an unavoidable part of experience, providing guidance from the past for the creation of anticipated futures, but that incautious spatial modelling in linguistic explanation reinforces the notion an internal objective self by treating the mind as a containing entity. From the standpoint of the Buddhist attitude of 'right view', the scientific assertion of the materiality of mind is immaterial in two senses. Firstly, there can be no right motivation for schism over views as opposed to acts. Secondly, minds depend upon both physical and abstract property-relations across the brain-world barrier. The mind is constituted as a relationally holistic process, and is preoccupied by approximation to real and ideal homeostasis. Realisation of the relationally holistic origination of mind depends on the adoption of a meditative attitude of attention to the world, and is likely to motivate a contemporary Buddhist attitude of social engagement with the world.

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Abbreviations

OED Oxford English Dictionary

VT&R Varela, Thompson and Rosch

Abbreviations in square brackets with traditional text numbering

AN *Anguttara-Nikāya*

DN *Dīgha-Nikāya*

MN *Majjhima-Nikāya*

SN *Samyutta-Nikāya*

CG City of God

OC On Certainty

PI.I Philosophical Investigations Part I

TLP Tractatus Logico-Philosophicus

The convention is followed of using Pāli terms in early Buddhist and Theravāda contexts, and Sanskrit terms otherwise.

Chapter 1

Introduction

Introduction

Neuroscience has discovered correlations between some types of brain functioning and some types of mental event. These correlations provide inductive support for the hypothesis that the brain is the cause of the mind, or is identical to the mind. Some contemporary Buddhist response to that hypothesis might be expected, because statements about the nature and proper functioning of the mind form a significant part of the Buddhist tradition. This study was intended to discover whether British ‘convert’ Buddhists consider that neuroscientific explanations of mind are compatible with Buddhist explanations; that is to say, whether both discourses refer to the ‘way things really are’ (*yatha-bhūtam*) in a single, coherent world-system, or whether Buddhist and neuroscientific modes of *explanation* are incommensurable because they refer to events so ontologically distinct that they inhabit different philosophical worlds.

In pursuit of that intention, ten leading British Buddhists were interviewed. The findings were inconclusive, for participants in qualitative, dialogic interviews are free to respond in the way they see fit, and these participants saw fit to respond to explicit questions about the nature of mind in a way that was often ambiguous or tangential. They were more interested in the establishment of effective Buddhist practice than debate about doctrinal niceties. Several were of the view that faith in traditional Buddhist explanation is the most appropriate attitude for a practitioner, because from a soteriological perspective time spent on an academic search for compatibility between discourses is a waste of time that could be spent on practice. Another considered that neuroscientific findings remained too inconclusive to support a mind/brain identity theory. Another transcended the question by arguing that neither mind nor matter are as they seem. Yet another thought that the philosophical struggle to understand the nature (ontology) of mind is motivated by a desire for certainty, which is an inappropriate attitude from a Buddhist point of view. When the participants did touch upon the ontological question, two of them clearly expressed the traditional Buddhist, and perhaps pan-religious, view that the mind is a non-material entity. Of six participants who avoided ontological discussion, three subscribed to doctrines, such

as rebirth, which are dependent on a non-material basis for the mind, and three others made statements that were ambiguous. One participant admitted that they did not know if the mind could continue without material support, but not only did they conceive of that possibility, but it was their preference. Only one participant thought that the mind was causally dependent on the functioning of the embodied brain. All of the interview participants laid great stress on the importance of personal *experience* as the final source of validation for both scientific knowledge and religious meaning. It was clear from the interviews as a whole that individual attitudes towards the nature of the mind were reliant upon a balance struck between the significance of explanatory information and the significance of experience.

In the light of the importance attached to personal experience the ambiguity of many of the participant's responses is understandable, for none claimed special access to knowledge that could determine, once and for all, the problematic issue of the material or non-material nature of mind. But in advance of confirmation by experience the majority were not persuaded by their layperson's understanding of neuroscientific theory and evidence. Attitudes and opinions were influenced by the obvious difference between the non-material appearance of mental events and the material appearance of brain events, and by traditional Buddhist explanations. The ambiguous or tangential approach to the matter displayed by most of the participants could be taken to represent a transitional stage of uncertainty, which may or may not be resolved in the future as more neuroscientific evidence becomes available.

Although some of the participant's opinions were ambiguous, tangential, or uncertain, these uncertainties were expressed with clarity and personal authority. In the absence of information about motivations, any analysis of those expressions would be little more than systematic repetition. Instead, I summarise the interview material with as much direct quotation as possible, in order to accurately represent the participant's views, then I utilise the ideas and attitudes expressed in the interviews as the basis for the construction of an interpretation that is overtly *hermeneutic*. I characterise the interpretation as hermeneutic because, while it draws on information from the interview dialogues, it also draws information from the context, which in this case includes information from neuroscience and from Buddhist tradition. The

outcome of this hermeneutic process is a set of arguments for which I alone am responsible.

The hermeneutic methodology determines the sequence and structure of the thesis. After a discussion of that methodology in Chapter 2, and a presentation of the relevant neuroscience in Chapter 3, in Chapter 4 the interviews are summarised with quotations, and also presented briefly in synopsis. Chapter 5 describes the attitudes that subtend the participant's opinions, and establishes a modification of David Lewis's (1979) analysis of the priority of experience (*de se*) over explanation (*de dicto*), as a useful model of the functioning of the mind in the formation of attitudes, and as a theoretical framework for the interpretation in subsequent chapters, whereby the four-fold categories of experience and explanation, subject and self are investigated.

In Chapter 6 I argue that despite the priority of experience over explanation these two categories are not completely separable, for immediate experience is a non-linguistic mode of explanation of those features of the world that are salient for the organism. This experiential mode of explanation has evolved phylogenetically to contribute indirect, 'homomorphic' representations of the world to consciousness in order to facilitate response to complex scenarios (Llinás 2001). More communicable, symbolic and normally linguistic forms of *overt* explanation are the result of further evolution of the complexity of cognitive organisation, rather than the development of ontologically separate processes.

The relationship between 'subject' and 'self' is discussed in Chapter 7, and I argue on Buddhist and neuroscientific grounds that the temporal difference between these two modes of immediate (subject) and subsequent (self) personal reference confirms the role of subjective experience as the guarantor of overt explanations made by and for the self, and by and for other selves. I remark on the confusion caused by the ubiquitous Augustinian metaphor of the mind as a container for internal psychological contents, such as discrete souls and selves (Augustine 2002, Wittgenstein 1992, Johnston 1993, Lakoff and Johnson 1999).

Having asserted the epistemological priority of experience over explanation, and the prior externalism of immediate relations with the world over the internalism of temporally-extended imaginative processes, I note in Chapter 8 that attention to

immediate experience compresses sensory, cognitive and affective information into one swift temporal process. Meditative attention to that swift process can subvert ingrained intentional strategies that are motivated by attachment to an illusory self with an illusory freedom of choice. The anticipated outcome of greater attention to immediate experience is an affective sense of freedom in a determinate world (Crook 1992, Brazier 2003). Freedom develops from the ease that is associated with *homeostasis*. By extension, this physiological term can refer to the psychological maintenance of equilibrium in relation to external events and other persons. Long-term approximation to psychological equilibrium is a gradual achievement of regular practice, and is considered by the Buddhist tradition to aid the relinquishment of ingrained habits of mind resulting from attachment to the notion of a soul-like internal self. The relational experience of psychological approximation to homeostasis bears comparison to religious notions of ‘the sacred’ and to the Buddhist ideal of enlightenment.

In Chapter 9 I suggest that an attentional, rather than an intentional attitude is the basis for insight into ‘the way things really are’ (*yathā-bhūtam*) and the gradual achievement of Buddhist ‘right view’ (*sammā-dīṭṭhi*). Right view is not so much a belief or opinion with respect to a particular dogma, as an underlying attitude of equanimity and non-attachment with respect to all views (Fuller 2005). From the point of view of ‘right view’, no opposing view ought to be traduced, for there is no right motivation for schism over doctrinal disputes.

On the basis of the importance of experience and the explanatory correspondence between features of experience and features of the world, I argue for an ‘externalist’ view of the mind as a *relationally holistic* process occurring between an embodied brain and a real world. This view of the mind is not the same as the ‘standard’ scientific view of mind-brain identity, nor is it the same as the pan-religious view that the mind is capable of causal disassociation from its physical embodiment in the world; nor does it entirely differ from those two points of view. With respect to neuroscientific explanation, the brain is indeed a necessary cause of the mind, but not a sufficient cause. With respect to Buddhist explanation, the mind is indeed a non-material property, for it is not identical to neuronal activity, but is manifested by the functional patterning of that activity when ‘structurally coupled’ sensorimotor

relations occur between neuronal systems and external things. The mind *is* the totality of external brain/world relations, and of internal relations between interconnected neuronal ensembles acting in synchronicity: the mind is a nexus of structural relations in the world. Although the brain has no afferent neurons by which the internal, neuronal relations can be experienced, relations between the embodied brain and the world are the object of experience, and such relations can be considered to constitute the whole of experience, once it is realised that imaginative experiences are ‘as if’ explanations that are reliant on information from past experience. The relational holism that constitutes the mind is open to experiential confirmation. Such a confirmation relies upon the cultivation of an attentional attitude, in order that attachment to the restrictive notion of an ontologically separate self, soul or mind can be overcome.

The relationally holistic view of the mind is, I suggest, compatible with the foundational Buddhist doctrines of the Four Noble Truths, of dependent origination (*pratītya-samutpāda*),¹ and of the lack of inherent existence of all things (*śūnyatā*). But relational holism will not resolve the issue of the nature of mind to the satisfaction of all parties, for it can be objected that the mind is an *emergent* property of brain/world relations. The notion of emergence is a variation on the fundamental metaphor of the mind as a container (Lakoff and Johnson 1980, 1999). The container and emergence metaphors are rhetorical tropes, which inappropriately transfer the properties of movement in space from the source of the metaphor in the world to the target of the metaphor in the mind, as if the mind was a discrete entity with the capacity for mobility. It is not always clear whether discussions of mental emergence refer to higher-level effects that causally depend on lower-level property relations (epistemological emergence), or refer to the appearance of higher-level properties that are independent of causal determination by lower-level micro-properties (ontological emergence) (Girill 1976, Silberstein and McGeever 1999). Ontological emergence arguments are persuasive because they sustain the notion of individual agency, which is central to ‘folk’ psychological explanation. Mind/brain identity is less intuitively persuasive precisely because it is a lower-level causal theory, which lacks the resources to unite meaningfully with higher-level explanations of psychological significance. The relationally holistic view of mind is an intermediate-level

unification of lower-level neuroscience and higher-level psychological explanations of meaning. The theory is not value-neutral because it casts doubt on the common-sense reification of human agency as if the term referred to an objective entity, such as a soul, self, or mind, rather than a fairly habitual structural nexus of brain/world causal relations.

Relational holism may be compatible with foundational Buddhist doctrines, but it does not support the meaningful truth-values traditionally ascribed to mythological teachings, which are susceptible to reinterpretation as psychological works of the imagination. For that reason it is natural that those contemporary Buddhists who take a literal approach to the interface between mythology and doctrine should conclude that the mind is not relationally holistic, but is an ontologically emergent entity capable of transcending its causal basis. This divergence of opinion marks an exemplary case where the cultivation of the ‘right view’ attitude of equanimity is required with respect to opposing views, and with respect to one’s own attachment to an opinion. After all, the truth/fictional status of any theory is always indeterminate (Cartwright 1994, Teller 2004) since theory is explanation, and explanation is an ‘as if’ imaginative combination on the basis of past experience, always standing in need of future corrective verification on the anvil of present experience.

Motivation for the study

Reconciling explanations of mind

This study was initially motivated by my own search for meaning. Like any other human being at any other time, I have encountered suffering (*dukkha*). Like any other literate 20th-21st century person I have had the opportunity to encounter Buddhist practice according to the Four Noble Truths: the Buddhist diagnosis and prescription that existential suffering has causes that can be eliminated by the means of the Eight-fold Path. Thanks to the popular dissemination of scientific findings, I have also had the opportunity to acquire a layperson’s understanding of the human nervous system, and to appreciate the brain’s functional capacity to bind together the disparate features of consciousness into a single, evanescent stream of awareness. The opportunity to understand both Buddhism and neuroscience has only become available since the Second World War: my generation is the first to face the task of

combining both modes of explanation in order to maintain a unified understanding of the world that accords with the way things are felt to be experientially, and known to be experimentally. The desire for such a unified understanding is the principal motivation for this study.

At the outset, I thought it likely that Buddhism would eventually undergo doctrinal change in the light of neuroscientific findings. In the course of the study I realised that my opinion was naïve. Firstly, the metaphysical beliefs underlying Buddhism and science are opinions held in the absence of certainty; secondly, the ‘standard’ scientific view of mind/brain identity remains a hypothesis, although it is a coherent hypothesis with considerable evidential support; and thirdly, neuroscientific theory lacks the resources to adequately account for mental events that require a psychological explanation. Because the interpretation presented in the latter half of the thesis is hermeneutic, its conclusions represent my current, more considered opinion. I now hold that the mind is not identical to the brain, but is a relational nexus constituted by the entirety of structural relations between brain and world. With some hesitation, I also want to say that the mind is an epistemologically emergent property *of* the world, rather than an ontologically emergent property that is capable of transcending, or becoming *not of* the world. But I might be wrong, and those contemporary Buddhists who subscribe to the latter view might be right.

If Buddhist and neuroscientific modes of explanation turn out to be incompatible in the long run, then one or the other ought to be modified or rejected, or else the world-view of a contemporary Buddhist who takes science seriously would be inconsistent. That is a grave charge, for the compartmentalisation necessary for the maintenance of mental inconsistency places severe limitations on the activity of thought. From a Socratic point of view, inconsistency within persons is worse than inconsistency between persons, for a person who cannot think about their own prejudices, or whose thinking is out of harmony with itself, may be sufficiently deluded to be incapable of separating right from wrong (Arendt 1978: 179-183).²

Social consequences

Socratic consistency of thought may not bother most people, for lives are not invariably guided by reason, but by habitual social practice, imagination, and the

common lore of ‘ethical know-how’ gleaned from countless everyday situations (Varela 1999a). Irrational attitudes affect the consistency of rational opinions, but it is patronising to assume in advance that someone is incapable of adjusting their opinions on the basis of available information in order to eliminate inconsistency in their reasoning. Despite the complex forces that shape collective social representations (Moscovici 2001, Potter and Litton 1985), by virtue of its explanatory successes science tends to enjoy high status in contemporary society, in comparison to the declining status of religion. This is particularly the case for sciences associated with medicine, as the popular image of hospitals has changed from association with suffering and death to association with the alleviation of suffering and the hope of survival. In an era when doctors are priests and nurses are angels, the status of science in general and neuroscience in particular provides additional, non-rational support for the ‘standard’ view of mind/brain identity, and may limit the attraction and influence of forms of Buddhism that advocate an opposing view of the mind.

Such a hypothetical limitation is not immediately apparent, for the available statistics suggest that Buddhism in Britain grew exponentially between the 1960s and the beginning of the 21st century.³ But that growth was supported by immigration, the arrival of new traditions, and by the missionary activities undertaken by the three largest ‘convert’ Buddhist groups: the Friends of the Western Buddhist Order, the New Kadampa Tradition, and Sōka Gakkai. Mission may not be a major factor in the future, for the inability of organisations to attract a significant proportion of those registered as Buddhists in the 2001 Census could be taken to indicate that interest in Buddhism may be approaching a natural ceiling (Bluck 2006: 17). According to the 2001 census, 0.26% of the British population are Buddhist (Buck 2006: 15). Buddhism may exert a disproportionate influence through the popularization of its compassionate teachings, but so long as it remains such a niche activity it is unlikely to make inroads into the levels and consequences of greed, hatred and delusion. My contention is that, unlike Buddhism, neuroscience has a natural connection with the ‘reified universe’ of specialist discourse *and* the ‘consensual universe’ of social discourse (Moscovici 2001), by virtue of the high status attached to the medical sciences. I do not suggest that Buddhism should come to an accommodation with the findings of neuroscience for venal reasons of social acceptability, but I do suggest,

firstly, that the location of Buddhism as an exotic alternative for those who find scientific empiricism unpalatable will limit Buddhist adherence to a niche interest in secularised, multicultural, western societies; and secondly, that something similar may happen in the Buddhist heartlands, for 21st century science is now a worldwide, pursuit. The second motivation for this study, therefore, is an interest in the extent to which compatibility with neuroscience might release Buddhism from the exotic niche label it has acquired as an alternative lifestyle brand for those who, temporarily or permanently and for a mixture of reasons, are moved to reject the mainstream consensus of their social situation. Despite the salience of such considerations, I am motivated more by the question of whether or not Buddhist and neuroscientific mind-theories can be unified, than I am by the applied and thus far hypothetical social consequences. In consequence, the thesis takes the form of a philosophical inquiry into the relationship between certain theoretical ideas and certain empirical findings, rather than an anthropological inquiry into the social consequences of doctrinal positions advanced by particular Buddhist organisations. Because the issue addressed by this thesis may have future social consequences, the greater part of the information for the study is collected from contemporary sources.

Design of the study

Interaction between experience and tradition

Because this thesis goes in search of contemporary understanding, the main source of data is the testimony of living Buddhist practitioners. Correspondingly less attention is paid to the guidance that is preserved in traditional texts. Filtering the tradition through the views of practitioners escapes the ‘orientalist’ charge that the western study of Buddhism is biased towards the normative significance of texts. The data collection method of a study influences the possible conclusions. If this study were a comparison between, for example, neuroscience and the Pāli Abhidhamma, which largely treats of the mind under systematic lists (*mātikā*) of possible mental states, it could map the similarities and differences between the two sorts of explanation but could not achieve the its goal: a unified interpretation that is applicable to the contemporary social circumstances from which it is derived. Across the tradition as a whole, Abhidhamma (Skt. *Abhidharma*) commentaries, are

exegetical works intended to exhaust the range of interpretations that can be derived from the early Buddhist *suttas* and *āgamas*, and the Mahāyāna *sūtras* and *śāstras*. It is precisely because a practitioner's understanding of the meaning of doctrine is not exhaustive until it is experienced, that continuing personal insight keeps open the possibility of the development of tradition.

Tradition is a temporal chain of guidance for action, descending from a common origin in the past down to the present, but there are doctrinal and practical innovations along the way. There is a combination of elements, some of which may be considered essential because they 'persist' throughout the chain, whereas other elements undergo change or do not persist. The prototypical coherence and continuity of the whole must be sufficient to warrant affiliation to the tradition by practitioners, and recognition of the identity of the tradition by outsiders (Shils 1981: 12-14). Rather than a chain, the analogy of a *braid* better expresses the combination of elements, the continuity of some elements and the evolution of others. The survival of original or early texts is an important strand, but the accumulating interpretation of those texts is of equal importance. Pelikan remarks that 'every tradition, old and new, offers a variety of responses' (1984: 49). Such openness to possibility depends on the apprehension that tradition takes the form of guidance, or a model for action, rather than the kind of coercive prescription that is characteristic of traditionalism.

Tradition is the living faith of the dead, traditionalism is the dead faith of the living. And...it is traditionalism that gives tradition such a bad name. (Pelikan 1984: 69).

There is inevitably some tension between the design and the execution of a traditional model: between the normativity of the model and the creativity of the experiential insights generated as the model is implemented. Vibrant tradition is distinguished from moribund traditionalism by its ability to act as 'a source of depth and power for the creative impulse' (Pelikan 1984: 71, 78). The creativity of a living tradition relies in part upon the insufficiency of the social transmission of meaning. Language, pedagogy and mimetic practice are insufficient because they are no more than approximate indicators of meaning, which has to be located individually by personal experience in the *current* social context.⁴

The importance of current experience as the completion of explanatory insufficiency has been noted in both western and Abhidharma philosophy, although with a difference of emphasis. From a western perspective, Burge notes that ‘partial understanding is common or even normal in the case of a large number of expressions in our vocabularies’, therefore:

it is plausible that our well-understood propositional attitudes depend partly for their content on social factors independent of the individual...This argument suggests that communal practice is a factor...in fixing the contents of my attitudes, even in cases where I fully understand the content (Burge 1979: 85).

As a consequence of partial understanding there is room for social and contextual influences on attitudes and on meaning (Burge 1979: 73-84), therefore room for contemporary social influence on tradition. From an Abhidharma perspective it is the priority of individual rather than social experience that is asserted, in the form of a movement from wisdom based on study, to wisdom based on thought and finally wisdom based on meditation (Adam 2006: 82-84). According to Kamalaśīla, wisdom based on meditation (*bhāvanā*) is a discernment of reality (*bhūta-pratyavekṣa*) by means of non-conceptual knowledge (*nirvikalpa-jñāna*) (Adam 2006: 73).

In the Buddhist context, direct experience possesses an epistemologically privileged position; it is considered indubitable in the way that conclusions reached through reasoning alone are not. Here two forms of wisdom may be considered as ‘thinking through’ what one has studied (*cintāmayī prajñā*) versus actually ‘going through’ or concentratedly ‘experiencing’ the reality of what one has already thought through. (Adam 2006: 85).

Despite the assertion that ‘innovation is one of the great sins of Buddhist letters’ (Lopez 1996: 244), the epistemological privilege granted to direct experience opens a way for re-interpretation of the textual tradition, on the hermeneutic principle that ‘whatever is well spoken is spoken by the Buddha’ (Lopez 1995: 27, 44 n 15). Because insight into reality is not transmitted by the textual tradition, only indicated, it remains open for tradition to be augmented by contemporary understanding that is grounded in a sequence of study, reflection, and meditative experience.⁵

This study is based on four sorts of information: from interview testimony, from Buddhist tradition, from neuroscience and from western philosophy. The discussion

of neuroscience in Chapter 3 is gathered from ‘secondary’ sources, in that I make use of theoretical texts by authors who examine the implications of neuroscience as a whole, as well as reporting the implications of individual experiments. In the same manner I mainly, but not exclusively, make use of secondary interpretations of primary Buddhist sources, and for the same practical reason: my expertise lies in the study of contemporary Buddhism in its social and philosophical context, not in the comparative study of raw neuroscientific data or the comparative assessment of conflicting Abhidharma texts.

The conclusions of the study may not be compatible with some Abhidharma codifications of tradition, or with all of the *suttas* (which may themselves be codifying interpretations of earlier passages), but the conclusions are compatible with the contemporary context, which now includes neuroscientific information. As with the hypothetical social consequences of the Buddhist/neuroscientific dialogue, a comparative investigation of the relationally holistic view of mind in the light of the Abhidharma tradition must be left for a further study. According to Chappell in Lopez (1987) the continuity of tradition is maintained in response to new interpretations by hermeneutic processes of initial ‘individualization’, followed by ‘reintegration’ and finally ‘control’. It is too soon to identify the range of these processes with respect to contemporary Buddhist views of the nature of mind. This study engages with the first stage of the process, at the point when new interpretations emerge. Future comparisons with Abhidharma texts will be more concerned with the outcome of Chappell’s second and third stages.

Neuroscience in dialogue with religion and philosophy

Scientific methodology restricts the scope of explanation to the causal relations between the objects and forces that are observed or inferred to be operational in the universe. Traditional religious explanations are less metaphysically conservative, commonly including reference to objects and forces not ordinarily observed or inferred on the basis of ordinary observations, yet religion and science are not opposed by definition.⁶ The distinction between the two disciplines is a difference of method and purpose rather than of different objects of investigation. The objects of religious investigation are not all immaterial, for religion also investigates and

regulates embodied human behaviour, and the objects of scientific study are not all physical, for virtual or hypothetical objects are the focus of methodical enquiry in quantum physics, in cognitive science and in the human sciences of sociology, psychology and economics.

Differences of method, the explanatory success of scientific models and the high status enjoyed by science in modern society, predisposes dialogue between science and religion to become confrontational when divergent conclusions are reached in similar fields of enquiry. The obvious examples are Galileo's confirmation of a heliocentric solar system (Brooke 1991: 37, 87), and the geological extension of the earth's history (Himmelfarb 1969: 194, Rudwick 2005: 181). The former case led to a temporary disengagement with scientific explanation, the latter to re-interpretation of creation accounts as symbolic and metaphorical rather than literal.

Disengagement is no longer a viable option, and over the course of the last fifty years neuroscientific research has been accompanied by much expectation, much philosophical theorising, some progress in understanding the neurobiological mechanisms that appear to be causally associated with mental events, and has raised the tantalising possibility that the link between mind-events and brain-events will prove amenable to empirically-verifiable explanation.⁷ In the community of ideas the context for traditional Buddhist mind-theory now includes the 'standard' scientific theory that the mind is identical to the brain (Baker 2001: 17-18).⁸ This view has evidential support, for specific mental functions are obliterated by localised trauma (Penfield 1950: 6-7, 157-159) and neuro-chemical activity in the brainstem initiates or suppresses mental activity (Parvici and Damasio 2001: 136). However, scientific research does not provide conclusive evidence for the 'standard' theory, which remains counter-intuitive in the face of the 'hard problem' of relating the subjectivity of first-person experience to the objectivity of the embodied brain (Chalmers 1995: 201, Levine 1997: 102). It seems impossible for individuals to gain sufficient acquaintance of relations between their mental continuum and their neurons to confirm the adequacy of explanations of that relation. It is this *insufficiency of acquaintance* that sets up the 'hard problem' of the explanatory gap between third-person objective descriptions of the brain and first-person subjective descriptions of 'what it is like' to be conscious (Nagel 1974: 435-443). This insufficiency results in

part from the complete absence of afferent connections contributing sensory information from the brain to conscious experience. Although the brain creates what Locke calls the ‘world of appearances’ out of sensori-motor information (Arendt 1978: 31), the brain only becomes apparent during surgical operations, as an anatomical pro-section, or through imaging techniques. The sensory sequestration of the brain is in marked contrast to the heart, which, although also short of sensory connections, is experienced through the modulation of its activity by the autonomic nervous and endocrine systems, which prepare the body for significant events. Unlike the heart, the brain is completely absent from life’s sensori-motor feast and in consequence was rarely implicated in mind-explanations before the advent of neuroscience.⁹ Scientists tend to ignore the ‘hard problem’, of the phenomenon of consciousness as a metaphysical question with few consequences (Jackendoff 1987: 14). They are more concerned with the empirical question as to whether the evolution of synchronous electro-chemical activity between interconnected neurons is sufficient for the explanation of mental processes (Llinás 2001: *ix*, 120-123, Crick 1994: 243-246). Once the complexity and functional integration of the brain is understood, mind/brain identity becomes a comprehensible possibility, rather than a counterintuitive combination of opposites.¹⁰ Chapter 3 provides a brief description of that complexity, in order to make apparent the kind of information which underpins the ‘standard’ scientific theory.

Dialogue between neuroscience and religion began inauspiciously with a riot during Gall’s lectures on phrenology in 1802 (Freeman 2003: 27). The exchange is now more civilised, as scientific theorising has become grounded in anatomy and physiology, as well as brain imaging, stimulation and clinical trauma studies. Although the mind/brain correlation has not been demonstrated beyond all reasonable doubt,¹¹ the hypothesis that the two terms have identical reference has percolated beyond the ‘reified universe’ of specialist interest, where ‘all things...are the measure of man’, into the ‘consensual universe’ of general lay discourse, where ‘man is the measure of all things’ (Moscovici 2001: 33-36). Since the relation between the mind and the brain is a ‘live’ issue in informed public debate, I anticipated that religions laying claim to relevance would wish to join that debate.

Amongst the religions, Buddhism is chosen as a case study on the insubstantial ground of my own interest as a Buddhist practitioner, and the substantial ground of the expectation that brain research will generate insights into issues of personality, personal continuity and psychological change, which Buddhism has hitherto explained in proto-scientific and metaphorical terms. This congruence of psychological interest between science and Buddhism might be expected to kindle debate within the Buddhist community in particular about appropriate inter-translations of psychological explanations of mind.

Differences of paradigm and terminology obscure any obvious fit between Buddhist and neuroscientific discourse, yet there is merit in dialogue, because each side can ask interesting questions about the presuppositions of the other, to the philosophical benefit of both. The two discourses may only ever achieve partial compatibility if mind is held by Buddhism to be a brute fact about the world, but that cannot be presupposed to be the only view held by a diverse cultural tradition, which exhibits a complex hermeneutic dynamic between authorship, textuality and orality, and between succinct doctrinal expression, detailed exposition and contextual interpretation (Lopez 1995: 23-28). Despite intimations that Buddhist and western worldviews are fundamentally incompatible (Willson 1984: 7, Green 1989: 278, Dumont 1986: 44), Buddhism has often found it necessary to deploy skilful means to 'assimilate' the traditional terms of Buddhist teaching to new cultural contexts (Matsunaga 1969: 283). The status of science presents Buddhism with yet another cultural and a philosophical challenge.

Science has high status in contemporary societies by virtue of its explanatory success and of the utility of technology, but scientific theories are not magically supported by empirical findings; they begin as 'myths', 'uncertain stories', 'assumptions', 'a woven web of guesses', and as a 'method of conjecture', until the presupposed consequences are explored and tested (Popper 1998: 115-116, 243-247). The 'standard' scientific theory of mind carries a conjectural overhang, for the mind/brain relation is difficult to explore by virtue of the duality of first-person and third-person access. So long as the mind/brain relation is not fully verified it is methodologically appropriate to suspend belief and disbelief on both sides and to identify compatible features within both discourses, which might indicate that

Buddhist teaching and scientific theory seek to explain ‘the way things really are’ (*yatha-bhūtam*) in the same world.

Literature review: Buddhism and neuroscience

There are numerous studies which examine traditional Buddhist mind-theory, including theories of self, from philosophical, comparative and historical perspectives. There are numerous studies examining the relationship between Buddhism, psychology and psychotherapy. There are innumerable studies that examine the nature and functioning of mind from the variety of academic disciplines. Such a plethora of resources is too extensive for a brief review, so the following discussion is restricted to works that directly address the relationship between Buddhism and neuroscience.

Over the course of the twentieth century it has become apparent that the brain possesses the connective and organisational capacity necessary for the implementation of mental functions and for the maintenance of consciousness. Eccles speculates that this necessary capacity is insufficient without some form of ‘interactive liaison’ between the separate ‘worlds’ of a material brain and an immaterial mind (1979: 214-217, 223-224). His dualist view of mind/brain interaction has not prevailed in the scientific community as a whole, for the non-dual or monist idea of mind/brain identity has become the ‘standard scientific view’ (Baker 2001: 17-18). Of the scientists who have written about the encounter between Buddhism and neuroscience, Austin (1998: 294) and Varela (Depraz, Varela and Vermersch 2003: 118) both hold to some version of the standard view, with the important caveat that the significance of conscious experience is not thereby diminished (Austin 1998: 295)¹² (Depraz, Varela and Vermersch 2003: 119).¹³

Mind/brain identity theory, in combination with methodological problems encountered by attempts to establish objective standards for assessment of first-person reporting of psychological states, has been responsible over much of the twentieth-century for a diversion of scientific interest away from the study of consciousness, towards a third-person approach that restricts the study of mind to observation of overt behaviour. The methodological rigor of the behavioural approach places severe limitations on the scope of research, since behaviour is

normally accompanied by reportable conscious experiences, including sensations of pain and suffering, which cry out for scientific explanation. Apart from the expansion of human understanding and clinical applications in the treatment of disease, it is arguable that neuroscience is of little practical use unless its findings can be correlated with first-person reports of the complex mental events that constitute the mind.

Because Buddhism is concerned with the transformation of the mind in order to eliminate suffering (Gyatso 2003a, 2003b: 92),¹⁴ Buddhism has a natural interest in studying consciousness and a natural interest in the epistemological status of first-person reporting of consciousness. On these topics there is a convergence of interest between Buddhism and neuroscience, which is most manifest in the work of a loosely-associated group of neuroscientists, philosophers, and psychologists who are both commentators and practitioners of Buddhism, and commentators or practitioners of science. For twenty years Francisco Varela was the *de facto* facilitator of this group, which developed out of his cross-disciplinary research collaborations and his active participation in conference dialogues with the Dalai Lama organised by the Mind-Life Institute.¹⁵

The Mind and Life conferences were designed to facilitate dialogue in an atmosphere of goodwill, but that atmosphere is not necessarily conducive to the resolution of intractable issues of the kind that, in the Dalai Lama's keynote phrase, 'call for further investigation' (Gyatso 2003b: 95, 96). In reviewing the major trends in the discussion between Buddhism and neuroscience, I concentrate on those issues that call for further investigation: metaphysical arguments about the relationship between mind and brain, and phenomenological attempts to close the third-person/second person 'explanatory gap', which makes the question of identity or difference between mind and brain so intractable.

With the notable exceptions of Austin (1999) and Wallace (1996, 1999, 2001, 2002, 2003) and also of deCharms (1998) and Kurak (2001), the Buddhist-neuroscientific debate thus far is a legacy of Varela's ability to motivate and facilitate interdisciplinary work. Varela died in 2001, but his cooperative projects were completed and published by his collaborators up to 2003. His collaborators include

the philosophers Evan Thompson and Natalie Depraz, and the psychologists Eleanor Rosch and Pierre Vermersch.

Although he is also a participant in the Mind and Life conferences, Alan Wallace can be distinguished from Varela's group by virtue of his training in physics and in religious studies, and his concern for fundamental metaphysical issues. He represents the Dalai Lama's side of the dialogues, as his occasional translator and as a former Gelug-pa Buddhist monk, and his position on the nature of mind is the same as that expressed by the Dalai Lama (Gyatso 2003a, Flanagan 2006: 32, 37). There is, therefore, an evident apologetic strand in Wallace's writings. While Varela attempts a convergence of neuroscientific and phenomenological research with relevant Buddhist teachings, Wallace mounts a vigorous defence of 'Indo-Tibetan' Buddhist doctrine.

Wallace

Wallace characterises the non-dualism of mind/brain identity theory as an unverifiable metaphysical belief. His own 'Two Truths' position is not compatible with the standard scientific view because he considers mind to have a dual relation to its worldly embodiment at a 'conventional' level of explanation, whereas at an 'ultimate' level of understanding mind/world dualism resolves into a more encompassing monism, which represents both world and ordinary mind as a 'creative display' of the 'very subtle energy mind (Tib. *shin tu phra ba'i rlung sems*), which is a primordial reality having both physical and cognitive attributes' (Wallace 1999: 182 n. 13, see also Gyatso in Varela 1997: 123, 165). He criticises scientific and religious studies approaches to Buddhist mind-theory on the grounds that they are not supported by sustained meditative practice, which is the only method for verifying the existence of subtle forms of mind.

Wallace stresses the explanatory gap between first-person access to mental events and third-person access to neuronal events, and argues that correlation between mental and neuronal events does not entail identity.

...what neuroscientists actually *know* is that specific neural events (N) are correlated to specific mental events (M), such that if N occurs, M occurs; if M occurs, N occurs; if N doesn't occur, M doesn't occur; and if M doesn't occur, N doesn't occur. Such a correlation could imply that the occurrence of N has a *causal* role in the production of

M, or vice versa; or it could imply that N and M are actually the same phenomenon viewed from different perspectives. There is not enough scientific knowledge at this point to determine which of these types of correlation is the correct one. But Damasio seems to overlook this ambiguity and simply decrees the equivalence of mental and neural processes, without any logical or empirical justification. In other words, this equivalence is simply a metaphysical belief (Wallace 2002: 19).

The standard scientific view of mind, which Wallace takes to be exemplified by Damasio (Damasio 2002: 1-7), is not a random metaphysical belief without inductive support: it treats the mind as category relative to scientific interest in ontology, that is, to an interest in understanding the way things really are. The way things are, for scientists, is defined by the ‘joining behaviours’ of one thing in relation to another (Westerhoff 2004: 616-619),¹⁶ with ‘mind’ as a covering term for consciousness and the collection of joining behaviours that give rise to consciousness. Wallace’s Madhyamaka view is also a metaphysical belief, but is distinguished by deductive and experiential support, rather than inductive support. Wallace treats mind as a category relative to his Buddhist interest in understanding the way things really are, and he also defines the mind according to its behaviours, but he is persuaded by traditional deductive inferences from the experiences of Buddhist ‘contemplatives’, to admit the possibility that the category of mind is capable of a wider range of behaviours than are ordinarily observed (1996: 196-197), including collective origination of the world (1996: 184, 1999: 182 n. 13)

With regards to their interests, both Damasio’s scientific and Wallace’s Buddhist views are *religious* in the simple connective sense of that term, for they explain how the world is put together and therefore what it is. Wallace’s theory is also religious in the conventional usage of the term, because it explains how the world ought to be. According to the theory this is no mere anthropocentric bias, because contemplative experience of subtle levels of consciousness reveals that the mind naturally exhibits the quality of loving-kindness (*mettā*) (Wallace 2001: 213, Harvey 1995: 167). This conclusion entails that a stable understanding of the mind, which is wisdom, and of the ethical consequences of mind, which are compassionate, naturally constitutes a unified attitude.

To briefly characterise the key difference between Damasio and Wallace: either mind originates causally as a property of exogenous relations between material things, or the mind and the world originate from the endogenous relations of an underlying essence that can exhibit both physical and mental properties. Wallace supports his endogenous explanation by a division of causation into the actions of ‘substantial’ and ‘cooperative’ causes, and the specific Gelug-pa view that ‘prior mental events act as the substantial causes for subsequent mental events’ (1996: 183, 1999: 162, see also Gyatso in Varela 1997: 119-120). He suggests that neural events are cooperative causes, but that mental events are the most significant causes of their own succession.¹⁷ This presentation chimes with the argument that like causes have like effects, expressed in the ‘circular’ Gelug-pa view that the properties of an effect are inherent in their causal ground (Rosch 1994: 52-53).¹⁸ To my mind these arguments sit uncomfortably with the Madhyamaka *śūnyatā* teaching that *all* phenomena exist in virtue of their relation of dependence on *other* phenomena. This teaching casts doubt on the atomic notion of a part-less material particle (Cabezón 2003: 60), but also casts doubt on the notion of mind as a fundamental element.¹⁹

Wallace asserts a Buddhist phenomenological theory of causation without any requirement for mechanical explanation, such that ‘A can be regarded as a cause of B if and only if (1) A precedes B, and (2) were the occurrence of A to have been averted, the occurrence of B would have been averted’ (1996: 161). The first point is idle if the mental/neural relation is one of identity, for causal relations must be temporally sequential (Ryan 2003). The second point requires a causal example; otherwise no explanation is forthcoming. It is precisely because clinical and trauma studies in neuroscience demonstrate that the suppression of neural events averts the occurrence of particular mental events, whereas particular neural excitation leads to particular mental events (Penfield 1950, Afraz et al 2006), that the identity theory of mind is inductively persuasive.

Wallace mounts an attack on scientific reductionism in the light of the evident phenomenal reality of mental events. The reductionist view, popularised by Wilson, (1998) is that all scientific theories can be incorporated within a foundational, physical explanation of everything (Wallace 1996: 161-162, 2003: 2-3). Wallace’s point is already widely accepted, for the critique of naïve reductionism is an accepted

theme in the philosophy of science (Fodor 1974, Kitcher 1976, Kitcher and Salmon 1980, Cartwright 1983, 1993, Teller 2004), but Wallace fails to observe a crucial distinction between the reduction and the unification of scientific theories. Under theory reduction the more foundational theory eliminates its competitor and takes over responsibility for all explanatory tasks *in the terms of the reducing theory*. Under theory unification the two theories are causally associated, but the ‘higher-level’ theory (say, psychology) is not eliminated by the ‘lower-level’ theory (say, neuroscience) because it retains the unique ability to fulfil particular explanatory duties. These issues are examined in more detail in Chapter 6 but the upshot, in this context, is that mind/brain identity can be restated as a ‘union theory’: a refined form that allows for the phenomenal ubiquity of mental events, but maintains their ‘intimate’ and ‘nomic’ correlation with neural events (Honderich 1993: 25). That refinement does not answer the question as to whether mental events (reasons) can be causes, or whether they exist in a co-temporal, epiphenomenal relation of ‘supervenience’ with the brain (Kim 1993). This unification revision of mind/brain identity theory is probably not acceptable to Wallace: it takes no account of the possibility of mental events that have no correlation to brain events, of the sort implied by the traditional entailments of Buddhist theories of mind, such as rebirth or the superknowledges (*abhīñña*) (Wallace 2001: 212, 1996: 141).

It is vital to warranted belief in the entailments of Wallace’s Buddhist presentation that there should be experiential support for his explanation, and that the explanation should indicate experiences with sufficient accuracy to facilitate meditative access. His explanation depends on an isolated *sutta* reference to purified or ‘brightly shining’ consciousness (*pabhassara citta*) (AN 1.10) which he associates with the Abhidhamma notion of a basic continuum of consciousness between lifetimes (*bhavaṅga*) (Harvey 1995: 155-179, Wallace 2001: 212-213), with the Tibetan notion of a temporally-extended transitional state between rebirths (*bardo*), and with the Gelug-pa and Dzogchen concept of the ‘clear light nature of the mind’ (Wallace 2001: 212, 226). Harvey adds the notions of store-house consciousness (*ālaya-vijñāna*) and of Buddha-nature (*Buddha-dhātu*) or enlightenment-potential (*tathāgata-garbha*) to this genealogy of concepts that bestow continuity on mental states (Harvey 1995: 174-176). Harvey’s analysis broadly supports Wallace’s

association of *pabhassara citta* with *bhavaṅga*, but also unearths some inconsistencies. Firstly, analogical notions of the latency or potential existence of fundamental elements, which support *bhavaṅga* as an assurance for the continuity of *cittas*, originate in the Upaniśads and the ancient Indian cultural background, rather than being specifically Buddhist insights (Harvey 1995: 155-159). Secondly, in the Abhidhamma *bhavaṅga* is a causal link that only arises between cognitive events, for example during dreamless sleep, between ‘perceptual cycles’ and between rebirths, but not during the meditative cessation of consciousness (Harvey 1995: 159-160). Thus, although Abhidhamma texts do associate the latent but discontinuous *bhavaṅga* with the undefiled but continuous *pabhassara citta*, this association is an exegetical feat. That said, the origin and conceptual variation of a family of analogical terms are of less significance than their status as indicators of real meditative experience.

This is why Wallace worries that insufficient credence is given to the experiences of ‘Buddhist contemplatives’ that are preserved in the ‘Indo-Tibetan’ Buddhist tradition (2001: 209-230, 2002: 24, 26). He admits some distinction between ‘empirical’ reports of contemplative experience and normative scholastic exegesis of those reports (2002: 26) but does not indicate how that distinction is to be maintained.²⁰ If traditional Buddhist contemplative accounts are to be taken as valid evidence the exegesis ought to be subjected to philosophical interrogation, yet when that happens Wallace adopts a strong apologetic stance. For instance, he criticises Griffiths’ examination of the Buddhist meditative category of the attainment of complete cessation of consciousness (Griffiths 1999, Wallace 2003: 7), on the grounds that the only way to examine contemplative experience is by personal replication. Griffiths’ historical-philosophical, Buddhist-studies approach is dismissed as ‘unscientific’ ‘absurd’, ‘Orientalist’, ‘non-empirical’, ‘dogmatic’, and ‘scholastic’ (Wallace 2003: 7), yet Wallace does not question, equably, whether elements of the tradition might also be unscientific, philosophical, historically-motivated, non-empirical, dogmatic or scholastic. This case is an example of the wider problem, considered in Chapter 6 of this thesis, of how explanation (*de dicto*) might affect experience (*de se*) as much as experience affects explanation. The narrower issue is whether meditative cessation of consciousness requires an underlying basis or substratum capable of reactivating intentional mental events. If

such cessation is truly complete and longer than momentary, that basis must be physical or else some sort of object-less consciousness that carries causal efficiency across temporal extension.²¹

Notwithstanding the difficulties of separating reports of experience from the influence of prior explanation, the cognitive scientific project of correlating neural events with mental events relies on first-person report. Varela, Thompson and Rosch share Wallace's view that such testimony ought to include Buddhist meditative accounts (1991: 31-32), and Varela (1996) argues for the use of phenomenological methods to increase their reliability as evidence. Unlike Wallace, there is no suggestion in Varela's writings that testimony can transcend natural limitations to provide evidence for either mind/brain dualism or 'ultimate' non-dualism of mind and world. Instead he develops a neuroscientific theory of mind as an emergence from a basis of material embodiment, but since it is a metaphor, rather than an agreed technical term, there is scope for disagreement about the meaning of 'emergence' as it is applied to the mind.

Varela: the emergence of mind

Varela advocates the incorporation of phenomenology into scientific methodology, to create a combined 'neurophenomenology' that could 'bridge the gap between cognition and experience', which bedevils understanding of the mind/brain relationship (Varela 1996: 331). Characterising his position with respect to other views, he rules out:

...On the one hand views that take a traditional dualistic stance (à la J. C. Eccles). On the other hand calls for new foundations from the quantum mechanics proponents. These views seem extreme, and we concentrate on current neuroscience and cognitive science in some explicit manner. (Varela 2002: 118)

Among the positions that he does countenance, (but not support) he locates the eliminativists, for whom conscious experience is an irrelevance, to the right of an 'imaginary map'. At the centre he locates the functionalists who rely solely on third-person data to 'assimilate' experience to the categories of 'cognitive behaviour, propositional attitude, or functional role'. He locates himself to the left, amongst those who allow '...an explicit and central role to first person accounts and to the

irreducible nature of experience, while at the same time refusing...a dualistic concession...' (Varela 2002: 119). Varela, therefore, differs markedly from Wallace, who is willing to countenance mind/brain dualism at the conventional level.

Varela argues that mental events are 'enactions' 'emerging' from the global dissemination of the 'phase-locked' synchronous firing of neuronal 'ensembles'. He holds that the central and peripheral nervous system as a whole is 'autopoietic'. By this he means that the nervous system constitutes an 'operationally-closed' system. Although 'structurally-coupled' by sensori-motor contact to embodiment in an environment external to the system, the autopoietic neural system does not 'mirror' or represent that environment, but enacts or 'brings forth' a world of experience from its own endogenous resources. The notions of autopoiesis, structural coupling, enaction and emergence save Varela's theory from being just a cognitive scientific argument for mind/brain identity, for they support a theory of mental events that are not instantiated by neurons as such, but by their particular mode of activation as a dynamical system coupled to an environment. It might be objected that the difference between neuronal instantiation and dynamic neuronal activity amounts to not much more than the quickening of the life of the organism. But the notion that mental events have some sort of emergent autonomy is supported by Varela's argument that neuronal ensemble synchronicity gives rise to event organisation at a second structural level, which becomes capable of exerting 'downward' causal effects. The notion of downward causation carries the implication that emergent mental events somehow transcend their causal determination at the level of neuronal ensemble synchronicity.

Since its first presentation (1991), Varela, Thompson and Rosch's neuronal enaction theory has been developed and refined in work with other collaborators. The theory is persuasive as a rhetorical whole, but the precise meaning of some of the details is obscure.

Enaction versus representation

A significant element of Varela's theory is the argument that perception of the phenomenal world is not constituted from representations with a 'mirror' or correspondence relation to an external world, but is an autopoietic enactment

emerging from the endogenous abilities of an operationally-closed, embodied neural network (Varela, Thompson and Rosch 1991: 172-174). This theory is a neuroscientifically-informed rejection of the computational model of the mind as a dual process, whereby symbolic mental content is processed by the ‘wetware’ of the brain. According to Varela, neural activity enacts the function of both content and vehicle (Varela, Thompson and Rosch 1991: 98-100, Varela 1992: 238-250). Unfortunately, the theory runs into philosophical difficulties with respect to the epistemological relationship of representational correspondence between mental events and the external Kantian world of ‘hyletic’ things-in-themselves (*Ding-an-sich*). Together with its supporting evidence, mainly from the neuroscience of visual perception, autopoietic enaction theory demolishes the naïve idea that the senses represent real qualitative features of the environment, such as colour, sound, or taste (Varela, Thompson and Rosch 1991: 165-171). But that demolition does not exhaust the likelihood of a systematic correspondence between qualitative features of neuronally-enacted experience and structural features of the environment. Thus autopoietic neural enaction may not be an isomorphic representation but may be a ‘homomorphic’ presentation capable of supporting a correspondence relation that is good enough for the evolved epistemological interests of the organism (Linás 2001: 65). Varela, Thompson and Rosch cite research that demonstrates that the relationship between light wavelengths and qualitative colour perception is indirect and variable by affect and by other perceptual modalities, but that does not rule out a relatively invariable correspondence relation that is phylogenetically-determined, as when the ascription of three-dimensional shapes to objects is continually verified by embodied behaviour. Issues of homomorphism and representation are discussed further in Chapter 6, but the upshot is that Varela, Thompson and Rosch’s arguments for the autonomous enactment of perception have to be weighed against the phylogenetic ubiquity of the organism’s ‘structural coupling’ to an external environment. Varela, Thompson and Rosch are right to argue that perception is not a direct ‘mirror of nature’ (1991: 141), and that there is no discrete self in the mind that is capable of subjection to a cinematic sort of representational display (1991: 123-129). Yet the combination of structural coupling and neural autopoiesis enacts a phenomenal world that corresponds to natural kinds in the ‘hyletic’ external world,

with sufficient reliability for the needs and interests of the organism to be satisfied, *as if* the enactment was epistemologically representational.

Internalism

Varela Thompson and Rosch (1991) emphasise exogenous structural coupling to the environment as much as endogenous enaction by neural networks, but their explanation of autonomous natural and artificial neural networks can create the impression of a philosophically internalist, or even an idealist view of the mind, especially if the *operational* closure of the neural system is misunderstood to imply *causal* closure (Maturana and Varela 1998: 163-166). Such a misconception of Varela Thompson and Rosch's argument could be reinforced by their rather confusing transfer of the terminology of enaction from the endogeny of neural networks to the exogenous evolutionary effects exerted by organisms on their external environments.²² The theory then becomes entangled in the converse of the 'hard problem' of the nature of consciousness, for not only does the dual/non-dual ontology of the mind become open to question, but so does the real/ideal ontology of the world. Varela was perhaps aware of the possibility of an internalist misreading, for the importance of the organism's history of structural coupling is re-emphasised in Varela (1999b). In Varela and Thompson (2003) an overtly externalist interpretation of the mind is presented, and was to have been depicted once again in a book entitled 'Why the Mind Isn't in the Head'.²³

Emergence and downward causation

The notions of 'emergent' properties appear in Varela, Thompson and Rosch (1991: 99-103), and are further developed in Depraz, Varela and Vermersch (2003) and Varela and Thompson (2003) as giving rise to 'downward' or 'reciprocal' causation. It is far from clear if this metaphorically spatial and directionally mobile rhetoric of 'emergence' points to unique causal valences at different levels within one system, or if interactions between different systems come into play. The notion of emergence has important consequences for Buddhism because it bears on the issue of freedom and determinism. It is discussed on pages 272 and 281 in Chapter 8 of this thesis, and in the conclusions in Chapter 10. Depraz, Varela and Vermersch do

not clarify whether or in what way mental emergence is of such a ‘radical kind’ that ‘the macro parts of the whole reach down and alter the course of events at the micro level from what they would be if determined entirely by the properties and laws of the micro level’ (van Gulick 2001: 18-19). My view is that that the mental events are not ‘radical kind’ or ‘ontological’ emergences between different levels of a single system (Silberstein and McGeever 1999), but they are feedback interactions dependent upon structural coupling between two or more different systems: the operationally-autopoietic brain and the activity of the body in the ‘hyletic’ external environment. Varela says something similar in a late remark on the origin of intentionality:

Like a jam session, the environment inspires the neural ‘music’ of the cognitive system. Indeed, the cognitive system cannot live without this constant coupling with and the constant emerging regularities provided by its environment; without the possibility of coupled activity the system would become like a ghost (Varela 1999a: 56).

Thompson stresses the role of empathy and inter-subjectivity in the emergence of consciousness, with the implication that emergence is not an entirely endogenous property of autopoietic enaction, but is a combination of endogenous and exogenous ‘processes that span and interconnect the brain, body and environment’ (2001: 3). The upshot is that the definition of mind needs to be redrawn to include the relationship between the embodied brain and the world, with the ethical entailment that Buddhism ought to concentrate as much on collective salvation as on individual salvation.

Phenomenology

In Varela, Thompson and Rosch (1991) Varela (1997), and Depraz, Varela and Vermersch (2003), the practice of phenomenology is presented, firstly, as a scientific method for gathering reliable first-person evidence; secondly, as an engagement with the phenomenological accounts developed by Husserl and Merleau-Ponty on the basis of their own introspection of embodied mental events; and thirdly, as a characterisation of the traditional Buddhist meditative techniques of *śamathā-vipaśyanā*.

With regard to the use of phenomenology as a scientific method, there are problems in treating introspection as a verifiable form of observation, problems of consistent terminology in the reliable reporting of introspection, and restrictions on the scope of the conclusions that may be drawn when metaphysical beliefs are ‘bracketed out’ under ‘eidetic reduction’. Notwithstanding Varela’s argument that phenomenological eidetic reduction is a specialised, disciplinary form that differs from the ‘natural attitude’ of introspection (1997: 334-5), the phenomenology of mind does depend upon private reflection, which according to Wittgenstein (1992: 7, 10) can never be evidence in a scientific sense, because, *ex hypothesi*, observational evidence must be verifiable publicly by others. It might be objected that in the final analysis all observations are subjective events. That misses the point, for there can be mutual observation of a public image such as an x-ray but not mutual observation of an imaginary recollection of the same x-ray. In the case of mutual observation there can be doubt about the interpretation but not about the objective evidence, whereas with introspection there is doubt about both the evidence and the interpretation.

Such considerations are methodological ideals intended to guide practical applications in real situations. Because introspections are the only direct means of access to mental events, whether they are acceptable as ‘good enough’ scientific evidence must be a matter of case-by-case judgements that achieve a balance between methodological ideals, sensitivity to confirmatory behaviours, and the pragmatic utility of conclusions.²⁴ Neurophenomenology is a correlation between introspection and scientific observation, and it is methodologically reasonable that the consilient information from two different sources should be more acceptable than from a single source. Flanagan argues that cooperation between first and third person viewpoints is already standard practice in the cognitive neuroscientific search for neuronal correlates for mental states (2006: 32-34), but subjective reports in the studies he cites are either tightly controlled by study design protocols, or inferred from behavioural evidence.²⁵ Varela is arguing for a more enterprising approach to the reporting of qualitative mental states, which would permit cooperation between neuroscientific techniques and the kind of testimony found in the Buddhist meditative tradition (Depraz, Varela and Vermersch 2003: 22, 32-34).

On the basis of an interview with Kamtrul Rinpoche, deCharms (1998) presents a view of Buddhist tradition that depends on the intuitions of more enlightened beings, which are subsequently ‘expanded using a detailed system of internally coherent logic’ (1998: 47, 48-49). It cannot be assumed that this inferential logic is commensurate with the logic of Husserlian phenomenology, therefore the problem of reliable descriptive terminology for mental events may be exacerbated by translation issues between logical discourses and specialist terms. There remains the objection that no introspection is free from the cognitive interference of language, to which Depraz, Varela and Vermersch admit they can offer no response other than proposing ‘a pragmatic spirit’ and an intention to pursue a ‘prudent but daring middle ground’ between the supposed ineffability of cognition and its supposed linguistic subversion (2003:10).

Despite pointing to methodological problems, I consider that Varela’s neurophenomenological project is worth the attempt, and can provide ‘good enough’ testimony for a widening field of correlations between mental events and neuronal activations. But the difficulties attending the ‘bracketing out’ of *de dicto* linguistic explanations of traditional metaphysical beliefs, either under western *epoché* or Buddhist *śamathā-vipaśyanā* descriptions (Depraz, Varela and Vermersch 2003: 22, 30-34), suggests that the resulting intuitive reports (Depraz, Varela and Vermersch 2003: 43-44, Varela 1997: 337) are unlikely to provide strong support for metaphysical theorising about the nature (ontology) of mind. Whether or not Buddhist phenomenological intuitions and neurophenomenological correlations produce warranted conclusions about the mind/brain relation is a matter for peer agreement, and as with the meaning of words, it is the generality of peer agreement that matters: specialist views about the nature of mind must not only be tested in the laboratory, the meditation hall, and the interdisciplinary conference, but judged in the court of popular opinion.

The qualitative interview method

There are problems of method in the assessment of any syncretic and synchronic Buddhist point of view. Buddhism is not a unitary category, but a ‘polythetic’ complex of religious manifestations of various sorts (Gombrich 2004: 18),²⁶ including

traditional sets of social forms, practices, and doctrines, utilised for a variety of purposes (Harris 2000a: 128-131). Not only is Buddhism diachronic, and both doctrinally and culturally disparate, but it has no unified hierarchy, central administration, or single authoritative spokesperson. In the disparate case of Buddhism, any syncretic statement will only have the validity of a contextual interpretation from a particular standpoint, and not necessarily be characteristic of the tradition as a whole.²⁷ Nevertheless, syncretic statements are commonly made, difficult to avoid, and occasionally made in this study when they constitute meaningful generalities.

It follows from the ascription of polythetism that any interpretation of the contemporary Buddhist response to neuroscience should be grounded in the views of the Buddhist community, for although dialogue is notionally between propositions it actually occurs between proponents. In order to provide the theoretical interpretation in Chapters 5-9 with more grounding than one scholar's view of the meaning of historical texts for the contemporary context, current opinions were sought from a selection of British Buddhists with the aim of discovering if information from contexts external to Buddhism's traditional resources was conducive to hermeneutic reinterpretation of Buddhist mind-theory.

The method deployed, justified in Chapter 3, is philosophically hermeneutic: it involves the collection of a set of dialogues about the possibility of Buddhist/scientific dialogue, followed by interpretation of the interpretations retrieved from those dialogues. No hermeneutic statement can have the status of a final conclusion, for *ex hypothesi* it is modifiable by future responses in the dialogue. In this study the dialogue has been transposed from oral interview to written text, but with the expectation that this procedure will lead to continued dialogue rather than conclusion. The method for gathering data was qualitative, in the form of interviews lasting from one and a half to three hours, which were tape-recorded and subsequently transcribed. The ten participants had the opportunity to check and edit a summary of their interview transcript, which provided the material summarised in Chapter 4 before being brought into notional dialogue with scientific and philosophical accounts in subsequent chapters.

Mainly for reasons of logistics and consistency, the collection of data was restricted to the opinions and attitudes of British residents who were ‘convert’ Buddhists.²⁸ This restriction does not imply that new directions in science and philosophy do not also elicit a response amongst ‘ethnic’ Buddhists in Britain or in any other location. It would equally be ‘orientalist’ to assume that ‘eastern’ as opposed to ‘western’ Buddhists are not interested in science, are not informed about science, may not be scientists, and are not party to debates about neuroscience.

Themes in the interviews

The schedule of interview questions addressed four themes: awareness of the historicity of traditional accounts of mind; whether dialogue is occurring with respect to mind-theory in the Buddhist community; responses to psychology and science; and responses to issues in the philosophy of mind. The participants do not idealise tradition in a wholly uncritical fashion; they are aware that accounts of notable individuals, including the Buddha, are historically equivocal, and aware of some historical succession of doctrine, but this awareness is conditioned by a devotional rather than a historical attitude, and by a hermeneutic of skilful means (*upāya-kauśalya*) (Pye 1978), which treats tradition uncritically, as a useful resource.

Despite a lack of organisational dialogue on the implications of neuroscience, there is some reflection on this issue by individuals. The combination of a ‘skilful means’ usage of tradition and reflection at an individual level may be conducive to contextual re-interpretation of doctrine over the long term. Two of the participants are scientists by training, with an insider’s understanding of scientific method and motivation. They have both published work that attempts to situate Buddhist practice in relation to the evolution of consciousness and self-consciousness (Crook 1980, Cooper 2003) and they present a more nuanced response to science than the other participants, but they share in the majority view that Buddhist soteriological methods are scientific forms of self-investigation, although science and religion address different concerns in different domains.

Responses to questions related to the philosophy of mind are muted by preference for Buddhist terminology, and by ambiguity about the meaning of key terms, not least the meaning of ‘mind’. It is not always appropriate to translate the serendipity of

interview dialogue into consistent philosophical positions, but with that caveat, there are divergences of opinion about the mind's relation to embodiment in the world. The majority of the participants are realists, but with some precautionary ambiguity. All express some degree of psychological idealism: they consider that, as the gatekeeper to phenomenal experience, the mind plays a significant modulating role in the constitution of the knowable world. Psychological idealism offers a 'bridge' between naïve realism and philosophical idealism for some participants, with the tempting prospect that an equation between psychology and ontology might eventually permit the constraints of physical embodiment to be relinquished.

It is not just the unequivocal realists, however, who agree that the (syncretic) Buddhist view of the mind/world relation has some affinities with 'externalism' in the philosophy of mind.²⁹ This dependence on the external world seems to be one of the reasons why mind/brain identity is not completely acceptable to any participant. Other objections are phenomenally based on the manifest immateriality of subjective awareness, or counterfactually based, on the meaninglessness of life without the moral opportunity for 'just deserts' across lifetimes. It is also felt that neuroscientific explanations are congenitally unsuited to the characterisation of ethical questions, with the implication that incomplete explanations are wrong explanations.

Interview findings

The findings of the interview component of the study are negative, in that the initial expectation that there would be evidence of discussion about the nature of mind in the light of neuroscience at an organisational level was not confirmed. This expectation was either misguided, too broadly drawn to characterise individual responses, or it may be that neuroscientific endeavours have not yet been sufficiently assimilated into ordinary discourse for considered Buddhist responses to be forthcoming.

The participants are more concerned with the psychology of mental functioning; they prefer not to discuss the ontology of the mind in the context of neuroscientific research. This lack of interest is only paradoxical if ontological security is taken to be foundational for other types of explanation. On the contrary, the participants generally feel that focus on underlying ontology, rather than on psychological and

ethical aspects of experience, is a grasping after certainty where certainty cannot be found. There is no feeling that lack of response to scientific findings might lead to loss of relevance for Buddhism, for it is felt that scientific interests are often antithetical to human concerns. Even those participants with scientific training prefer to explain mental phenomena in metaphorical and ‘folk’ psychological terms. This preference raises the issue of appropriate relations between levels of causal explanation, a question much discussed in the philosophy of science, (Fodor 1980, Cartwright 1983, 1994, Sklar 2003, Teller 2004), which also has relevance for religious explanation. Despite their preference for Buddhist terminology, most participants felt that any explanation, including Buddhist explanation, is provisional and derivative because it is only indicative of subjective experience. The participants generally consider that the Buddhist community, at least in Britain, is not yet disposed to reinterpret doctrine radically for the contemporary context. They are more disposed to question the tendency for science to run ahead of verification by making unwarranted claims on inductive bases, as they are to question Buddhist mind-theory or the limitations of meditative introspection. There is some evidence of doctrinal re-emphasis in the course of the ‘transplantation’ of Buddhism into the contemporary context (Pye 1969). The participants’ reliance on subjective experience means that rebirth, merit-making, and sympathetic or magical practices are not emphasised. It is not clear whether that change of emphasis constitutes doctrinal reappraisal, or whether the mind-sciences have influenced that change.

Interpretation³⁰

There is no easy conclusion to be drawn from the participant’s a-historical approach to traditional Buddhist mind-theory, their reluctant engagement in dialogue about the nature of mind, their critique of the ‘standard’ scientific view of mind/brain identity, their variety of views (under philosophical re-expression) about the mind/world relation, and their marked preference for subjective experience of mental events as opposed to scientific or doctrinal explanations of the nature of mind. To hazard an impression of the motivations underlying their views would be ethically inappropriate and evidentially uninformed, but on the basis of the interviews, summarised in Chapter 4, I attempt to characterise their attitudes in Chapter 5.

Attitudes are the tacit background without which logical statements are incomprehensible, and are indicated by the expressions of opinion that they inform. I identify the participant's attitudes of *resistance*, *faith*, *equanimity*, *speculation*, and *acceptance*. There is general resistance to the reductive tenor of scientific explanation, which in various combinations takes the forms of faith in traditional explanation, equanimity with respect to the ontological explanation of mind on the grounds of the epistemic priority of experience, speculation about a transcendent form of mind that encompasses ordinary reality, and a measured acceptance of some neuroscientific hypotheses, but not of the 'standard theory' in its entirety.

I suggest that the preference for psychological experience over ontological explanation reflects the priority of self-determination over determination by others with respect to the formation of an attitude such as a belief. This is despite the fact that explanation by others forms a natural part of 'suitable acquaintance' with the object of an attitude (Lewis 1979). When Lewis's account of attitude-formation is applied in Chapter 5 as a model of the activity of the mind, two shortcomings become apparent. Firstly, it is the subject, not the self, which engages with phenomenal experience in the immediacy of experiential awareness. On this basis, an alteration of emphasis from self-determination to the more fundamental form of subject-determination may characterise some types of religious experience. Secondly, in linguistic beings explanation often forms a major component of 'acquaintance' with the object of an attitude. This priority of theoretical explanation happens in science when the object of an attitude (say, belief in the synchronous firing of interneurons) can only be observed instrumentally and in Buddhist mind-theory when the object of the attitude (say, belief in the *ālaya-vijñāna* or store-consciousness) can only be inferred or accepted *ad hominem*³¹ to be trustworthy testimony. The influence exerted on attitudes by explanation and by experience probably takes no fixed proportion, but in Buddhism the notion of 'realisation' seems to indicate that self-location of an attitude is made under the guidance of an explanation, but that subject-location constitutes the personal verification of that explanation.

Explanation, a term partially synonymous with theory, teaching and doctrine, is a combination of knowledge and fiction for the purpose of prediction. Explanation cannot be said to demonstrate the plain truth, because 'truth' depends on yet another

explanatory discourse having the same structure of knowledge, fiction, and prediction. Knowledge approximates to truth empirically, fiction evaluates truth by idealistic resemblance (Jauss 1989: 5), and prediction characterises truth with respect to the context and interests of a person, group or society. During the reflexive dynamic of mental functioning, explanation contributes to the constitution of experience, is part of experience, yet may be confirmed or disconfirmed by experience. Experience is not indubitably true, for it is reflexively constituted in tandem with explanation as a model of the world. Experience may be an illusion, yet it comes with a reliable sense of certainty or ‘facticity’.

Spatio-temporal experience is (relatively) immediate, and accumulates in memory as personal history. Over duration, experience is the domain of the self; with immediacy, experience is the domain of the subject, but the former domain exerts some feedback effect on the latter. If realism about the external world is meaningful, from a third person perspective experience is spatially-constituted to the extent that mental events consist of, or are supervenient upon, physical events at various locations within the brain. But from a first-person perspective experience is a spaceless temporal continuum that happens to be capable of exhibiting spatial characteristics. In other words, experience as such occupies no additional space and is only conceptually differentiated from its contents as a kind of vehicle.

Explanations of mind take the form of spatial models. They are fictional constructs, using features from the external world to explain what is otherwise inaccessible. The first premise guiding spatial constructs of mind is the assumption that external spatial experience must necessarily be produced by minds with a corresponding *internal* structure. The second premise is that the ‘folk’ psychological categories of mental functioning, such as the subject, the self, the imagination and memory, are virtual spatial objects sequestered within this internal spatial world. This is only metaphorically so, for the ascription of space to mind is an imaginative fiction for the purposes of prediction, valid within the context of the explanation, but not apparent to immediate experience.³²

The ascription of space to mind is a useful model because it allows for first and third-person discussion of selfhood and personal responsibility, but it can be misleading, because it is only a metaphorical characterisation of the real state of

affairs (Arendt 1978: 102-110, Wittgenstein 1992: 61-88, Johnston 1993: 198, Lakoff and Johnson 1999: 266).³³ The closest approximation to understanding ‘the way things really are’ (*yatha-bhūtam*) is not achieved by metaphorical explanation alone, but by self-location that leads to subject-location: by some duration of intentional attitude, which includes but is not overwhelmed by the predictive component of explanation, leading finally to full attention to immediate or subjective or ‘primary’ experience. In Buddhism this is a sequential move from doctrine to ritual practice, from intention to attention, from deliberation to spontaneity (Kennedy 2004: 151-152) and, in theory, from gradual to sudden enlightenment.

If the variable truth-value of explanations is granted, religious explanation has no other criteria than soteriological efficiency when the philosophical function of religion is under consideration, rather than the social-anthropological function.³⁴ If a religious explanation is inefficient it will merely other-locate the individual practitioner: they will not pass beyond the explanation to instantiate the relevant experience. In pathological occasions the explanation might determine the entirety of an experience, but in ordinary circumstances explanation and experience may be compartmentalised, with the theoretical risk of Socratic inconsistency and unconscionable action. If a religious explanation is partially effective the practitioner will self-locate to a cognitive understanding of experience over time, structured according to a self-assessment of who they are and how they are in relation to the social standards of behaviour (Duval, Silvia and Lalwani 2001: 31-40). If fully effective, religious explanation becomes a minor part of the subjective experience it has facilitated. On this account it is subject-location that matters most; religious identity, practice and doctrine being initially important because they are provisionally indicative, but playing a minor role in immediate experience and subsequent attitudes.³⁵

From the standpoint of cognitive science, explanation is produced by top-down, higher-cognitive, logical sequences of brain events. Experience is also modulated by top-down cognitive processes, but is more closely matched to the occurrence of basic self-consciousness as a reaction to bottom-up, sensori-motor events that are propagated throughout the brain via the thalamo-cortical system (Llinás 2001, Parvizi and Damasio 2001, Panksepp 1998, Crick 1994), and via the claustrum (Crick and

Koch 2005). Top-down processes in particular require temporal delay in order to enable neuronal synchronicity. It is this delay that ‘affords opportunity for computational complexity’ or ‘extended brain events’ (Pibram 1999, 22, 27). Delay makes the cognitive enrichment of consciousness possible by allowing time for the coordination of the multiple feedback mechanisms that facilitate prediction (Llinás 2001: 21-29, Grush 2003: 56, 81-87), as consciousness is constructed out of cognitive representations of the external world, which impute spatiality, object-aspect and object-identity to the reliable characteristics of the continual influx of percepts. Explanation is a subsequent linguistic form of representation, which develops to enable the comparative description of ‘one thing in terms of another’ (Lakoff and Johnson 1980: 5).

In the absence of any other resources, space, object, aspect and identity metaphors tend to be deployed in this comparative manner to describe the mind. Yet mind, unlike brain, is not a spatial object, has no space for contents, has no sensory aspect, and the enduring identity of individual minds is a historical construct based on memories of embodiment. Mind is seemingly just the totality of the sensori-motor relationship between embodied brain and world. There are grounds for asserting that this relationship is certain, for otherwise experience would be senseless (Wittgenstein 1974, Stroll 1994). In addition, Wittgenstein’s ‘private language argument’ demonstrates that communication without certainty about the existence of other people would be senseless (Wittgenstein 2001: 80-82 [PI. I. 256-280], Hacker 1990: 96-97). Although, on a questionable interpretation, Yogācāra Buddhism denies the existence of a world external to the mind, it does not deny the existence of other minds (Wood 1991: 171-173). Aside from such disputes about realism, idealism and solipsism, the mind is a holistic relationship between relating entities, and whatever the ontology of the entities, it is the relationship rather than the entities that constitutes the ontology of mind. The reliability of relationships grants a sense of epistemological certainty in the form of the ‘facticity’ of immediate experience.³⁶

This relational view entails firstly, that it is reasonable to hold that there is no such physically objective thing as a mind; secondly, that mind is as much externally-constituted as neuronally-constituted; thirdly, that the mind is not precisely identical to, or supervenient upon the brain; and fourthly, that comprehending or *grasping*

mind, soul or self as any sort of object (physical, virtual or metaphorical) is not to see things as they really are (*yatha-bhūtam*).

From a syncretic Buddhist standpoint, believing in the mind as an abstract metaphorical object is just the adoption of a provisional attitude towards an explanation that is anticipated to be useful. It is not the belief, but the underlying motivation for the belief-attitude that matters, because it is intentional motivation that is karmically-efficient. If a belief is conditioned by unconscious mental concomitants (*cetasika*) of craving or desire, then awareness is unconsciously ruled by that belief-attitude: it becomes self-addicted. The Buddhist attitude of ‘right-view’ is the antithesis of this addictive state of mind (Fuller 2005: 1, 11, Brazier 2003: 97). Right view may incorporate particular beliefs but is not overwhelmed by addiction to those beliefs. Achievement of this interested-yet-disinterested standpoint facilitates a precautionary attitude to the influence of explanation on experience. From a neuroscientific viewpoint, experience is not a direct presentation, but an indirect representation, a succession of cognitive and sensori-motor ‘enactions’ of the relationship between the individual and the world (Varela Thompson and Rosch 1991).

In principle, a model can be constructed that accounts for all views of the mind’s external relations without prejudice to the possibility that some of those relations advert to a second, mental continuum, in other words, to the possibility that intersections in mental relations constitute virtual objects called minds, which operate with metaphorical likeness to physical objects in a metaphorical likeness to space. However, to call something an object, abstract or otherwise is merely a manner of speaking that diverts attention from the structural relations that constitute that thing (Ladyman 1998: 422, Chakravarty 2003: 869). Disagreements about a relational model either reflect conceptual problems that emerge when inappropriate objective spatial modelling of structural relationships is attempted, or reflect a refusal to allow room in the model for the possibility of other kinds of structural relation.

A more charitable perspective (Davidson 1984: 197), which accommodates heterodoxy by ‘complementary’ syncretism, rather than by conflict, is more characteristic of eastern than western procedures (Dumont 1970a: 36-38, 1970b: 193). This complementary approach seems to be a dialogic rather than a combative route to

understanding, to be compatible with the Buddhist attitude of ‘right view’, and to correspond to the human epistemological circumstance, which depends upon the aggregation of information from childhood, as a foundational ‘hinge’ on which any theoretical understanding must turn (Wittgenstein 1979: 44 [OC. 341]). I think that this charitable approach to epistemic justification underlies the interview participants’ instinctive response to the current transitional state of global culture, where the nature of mind is no longer normatively defined for society as a whole. The participants resist the scientific ‘standard view’ of mind-brain identity because it is totalising and hegemonic, but rather than confidently asserting a confrontational theoretical alternative they prefer to rely on subjective experience as the ultimate source of evidence that may eventually resolve disputes about knowledge and meaning.

The relational holism view advanced in this thesis will not be universally acceptable, for there are transcendental Buddhist alternatives that entail an ideal or absolute ‘Platonic residue’ (Jauss 1989: 5, [AN 1.10]), or hold to be literally true what others hold to be mythological. Neither truth nor fiction are absolute ideals, and their division under modernity mirrors the separation between what is and what ought to be the case (MacIntyre 1971: 111). ‘Is’ and ‘ought’ were not divided in ancient India (Fuller 2005: 9), and truth and fiction, which were entwined in European culture until the late medieval period (Jauss 1989: 4-10), may never be fully disentangled. The neuroscience of perceptual cognition, and theories of explanation in the philosophy of science, indicate that all explanations and all perceptual cognitions are partially fictional. The mind/brain has been characterised as a machine that has evolved for the generation of prediction (Llinás 2001), and it is the reliability and efficacy of action in the world that verifies predictions constructed out of empirical fact and imaginative fiction. If Llinás is right, fiction is necessary to the understanding of experience, and therefore unlikely to be extricated from fact. When an individual switches attention from partially-fictive explanation to partially-fictive experience, the change is from a mode of mental sequestration to a mode of being manifest in the world.³⁷ This is subject-location, not self-location; a simple process that is apparently hard to maintain over the long term. According to the *Kālāma Sutta* (Woodward 1932: 170 [AN III. 7.65]), it marks a turn from explanation to intuition.

Notes to Chapter 1

¹ Relational holism may not be compatible with the traditional interpretation of *pratītya-samutpāda* as the twelve-fold *nidāna*-chain that establishes a karmic association between lifetimes, although it is compatible with Buddhadasa's contemporary reinterpretation of that teaching, which stresses moment-by-moment rebirth in order to emphasise the constant need to guard against egocentricity and maintain ethical responsibility (Bucknell and Stuart-Fox 1983: 104-106, Gabaude 1990: 223).

² Arendt applied the Socratic point that evil thrives on inconsistency of thought to the case of Adolf Eichmann (1964).

³ See the discussion, at the beginning of Chapter 4, of the figures cited by Bluck (2006).

⁴ See the discussion in of explanation and experience in Chapter 6, including Chapter 6 note 1.

⁵ Sharf argues against the very idea of religious experience as a separate category, particularly mystical experience, on the grounds that experience is not necessarily as it is academically described (1988: 94-116). That is just a reversal of the point about the inadequacy of explanation. The emphasis on experience in this thesis does not conflict with his argument, however, for the concern here is only with the relationship between given explanations, (which may be empirically true or may be imaginative predictions), as reported experiences.

⁶ According to Rosch, categories are not initially defined by boundaries but by an 'internal structure' of approximation to a 'core meaning', 'prototype' or 'focal example'. Such a structural approach to categorisation is better suited to cross-cultural research than reliance on formal definitions (1973: 140, 142-3).

⁷ Some philosophers argue, on the contrary, that the problem of the relation between mental and neural events is constitutionally insolvable by the human mind (McGinn 1989: 349)

⁸ The philosophical arguments for variations of the standard view extend beyond the scope of the thesis (Lowe 2000: 48-51), which concentrates on a hybrid of the 'type-type' and the 'type-token' view, such that mental events are identical to or supervenient upon neuronal events, but a particular type of mental event is not necessarily tokened by precisely the same type of neuronal event. On this hybrid view there is room for variation in the correlation between mental and neural events, but not so much latitude that a mental event could be correlated or tokened by, say, a computational event.

⁹ Aristotle and the *Abhidhamma* commentators identified the heart as the seat of consciousness, whereas no location was specified in the Pāli *suttas* (Sugnasiri 1995: 409, 412-413).

¹⁰ Mind/brain identity is the conventional designation, although Honderich considers it more accurate to speak of ‘one event with two kinds of properties’, or the ‘union’ of a ‘psychoneural pair’ (1993: 19-30)

¹¹ The correlates of particular sensory contents of consciousness have been located by brain imaging in stimulation studies, but it is argued that the correlates of consciousness as a grand vehicle have yet to be found (Nöe and Thompson 2004). The problem may be resolvable by the view that vehicle-content distinctions are aspects of one phenomenon (Metzinger 2003: 4). A consciousness may be just the sum total of its contents, and the sum of many neuronal events.

¹² I respond to Varela’s work rather than Austin’s for a number of reasons:

i) Austin’s work is encapsulated in *Zen and the Brain*, a single encyclopaedic presentation of neuroscientific issues of relevance to Zen Buddhism, a work that merits a monograph in its own right. Austin incorporates more anatomical and physiological information than the lay commentator can assimilate (Metcalf 2001: 351), whereas Varela is selective in his use of examples. I attempt a more simplified presentation of the relevant neuroscientific issues, retrieved from theoretical commentary by a selection of neuroscientists, in Chapter 3 of this thesis.

ii) Austin is particularly concerned to relate neuroscientific knowledge to the process and language of enlightenment in the Ch’an/Zen tradition. I am concerned with the Buddhism as a whole and with theoretical problems in the apperception and explanation of experience.

iii) Austin is a staunch non-dualist with regard to the mind (Rosch 1999: 222). Varela’s perspective is more nuanced by virtue of his dialogic engagement with the Dalai Lama (Varela 1997) and by his theorising on phenomenological methodology and on emergent properties.

¹³ In his earlier work (Varela Thompson and Rosch 1991) discussion of the ‘groundlessness’ implied by world-enaction in neural networks makes it possible to lose sight of the fact that Varela bases mental events on the materiality of the embodied mind. In his later work (Varela and Thompson 2003) the rhetoric of emergence *could* be interpreted as reopening the question of mind-brain duality, yet his presentation in Depraz, Varela and Vermersch (2003: 118-119) appears to rule that possibility out of court.

¹⁴ ‘Dalai Lama’ (Ocean of Wisdom) is an honorific and a job title, so I cite the fourteenth post-holder, Tenzin Gyatso, by his personal name, although most publications and bibliographies do not follow this reasoning.

¹⁵ The Mind and Life Conferences were constituted as a forum for regular dialogue between the Dalai Lama and western scientists (Wallace 2003: 417-421). The work of the Mind and Life Institute is currently the subject of doctoral study by Rob Hogendoorn at the University of Leiden, with the provisional title: *Probing “Mind And Life”: A Foundational Inquiry Into A Cross-Cultural Meeting of Indo-Tibetan Buddhism and the Sciences*.

¹⁶ I am indebted to Westerhoff for my understanding of ontological categories. He does not discuss science as a specific example.

¹⁷ The main purpose of causal theory is to identify, from out of a network of conditions, those preceding events which provide a significant explanation for the occurrence in question. Strevens cites the example of drowning as the most significant amongst possible causes of the death of Rasputin (Strevens 2004: 154-56). To assert one moment in an immaterial mental sequence as the cause of the next may indeed be as relevant as drowning, bludgeoning, or poisoning in the Rasputin case, but that is only an introduction to the task of demonstrating that an endogenous cause has greater significance than the exogenous causal claim asserted for neuronal activity in cooperation with environmental influences.

¹⁸ See Chapter 8 of this thesis for a ‘Democritean’ view of properties that contradicts Rosch’s ‘Empedoclean’ model of causation.

¹⁹ There has been speculation that the significance of observational participation in quantum theory implies that the mind is present at all levels of the natural order (Bohm and Peat 2000). My argument is that this reifies the mind as a fundamental property thereby contradicting the *śūnyatā* negation of all intrinsic nature.

²⁰ The distinction cannot be absolute, for any verbal report of an experience is an explanation indicative of the experience, not the experience in itself. The point is that normative scholastic exegesis places the explanation at a further remove from the experience. This is one of the reasons why this thesis relies on the accounts of contemporary Buddhists as much as on textual tradition.

²¹ Harvey disputes Griffiths’ view that a mental event could not have a physical basis: In fact, Theravādin Abhidhamma is not so dualistic as Griffiths claims. While conception and conceptual-discernment normally arise conditioned by other mental states, they also have an unspecified form of matter (*rūpa*) as ‘support condition’ and ‘basis’ (Harvey 1995: 165).

²² It is a short step from viewing the ‘enactive’ evolutionary effect of an organism on its environment as a naturalised or ‘tame’ form of karmic causation, to viewing collective enaction by sentient beings as a form of ‘untame’ karmic causation that literally creates a world. (Flanagan 2006: 17- 29). Varela does not take that step in his published work.

²³ This externalist re-emphasis on the parallel importance of structural coupling for the constitution of mind will be presented in Thompson (2007) (personal communication).

²⁴ Since practical scientific method is a matter of judgement, the common law juridical example may be of assistance. A judge may decide to admit or a jury to believe subjective testimony of mental states without any supporting evidence, but normally supporting external factors are considered, such as the testimony of an

expert, which in itself may be subjective testimony, but usually includes reference to a disciplinary tradition with a history of combining first-person reports with behavioural observations. For example, in the case of Post Traumatic Stress Disorder:

There is greater diagnostic uncertainty in psychiatric cases than in physical injury cases (White v. Chief Constable of South Yorkshire - Lord Justice Steyn: 33).

The courts have developed sufficient confidence in medical expertise to be willing to award damages for mental disturbances which manifest in bodily symptoms...such as “recognised psychiatric illness” (White V. Chief Constable of South Yorkshire – Lord Hoffman: 40)

Thus, where subjective testimony is concerned the law applies a weaker standard of evidence than the *ideal* scientific method; particularly where there is supporting expertise or corroborating testimony, relying either on the balance of probabilities or on determination beyond reasonable doubt.

²⁵ Flanagan (2006: 33) mentions a study by Logothetis and Schall on binocular rivalry in rhesus macaque monkeys, but makes it clear that the subjective reporting in that case was not a linguistic expression, but an inference from lever-pressing behaviour.

²⁶ By ‘polythetic’ Gombrich is referring to a multiplicity of purposes, rather than a multiplicity of gods.

²⁷ Different traditions arise from different causal moments in the diachronic series of Buddhism’s history, yet all refer back to the historical Buddha; thus, to develop Hervieu-Léger’s metaphor of ‘religion as a chain of memory’ (2000: 123-127), there are distinct strands of memory braided into a single chain.

²⁸ In an article reporting the findings of M.A. research into the experiences of Buddhists in Leeds (Kennedy 2004), I suggest that, under globalized circumstances, religious identity can be as much a matter of discovery as of a choice or conversion:

The interview subjects, bereft of overarching (theo)logical explanations, were brought by crises to reflexively examine their own biographies. In this conscious process of discovering self-identity they also discovered, sometimes inadvertently, that Buddhism provided the label and the behavioural routines most appropriate to those identities. They were then in a position to begin to make lifestyle choices involving engagement with particular Buddhist traditions, and so to create social identities as Buddhists of Western origin.

The privileging of the notion of discovery over the notion of choice, made on the basis of interview testimonies, amounts to a reduced emphasis on autonomous acts of free-will in the creation of self-identity, and an increased awareness of the influence of relationships and the environment. While it may be methodologically appropriate to talk about ‘choices’ with regard to the creation of social identity, and with regard to the effects of consumption at the structural level of society, the term ‘choice’ obscures more than it illuminates when applied to significant events in the lives of individuals. In the case of

the adoption of Buddhism, the psychological determinants tend to have occurred long before the gradual hermeneutic process by which individuals come to understand that their self-identity includes characteristics, such as suffering and dissatisfaction, existential uncertainty and an opaque sense of self, which are specifically addressed by Buddhist discourse and practice (Kennedy 2004: 147).

²⁹ Externalism is the view that meaning is not determined by the psychological state of individuals but by the way things are in the world (Putnam 1975: 222, Burge 1979: 85).

³⁰ In this brief summary of Chapter 5-10 there is no room to mention the numerous instances, cited in the text, where the ideas and attitudes of the interview participants provide the material and the impetus for the construction of my interpretation.

³¹ By *ad hominem* I mean that an argument is assessed on the basis of the merits of its author rather than on its own merit.

³² As an example, retrieval from memory is news from nowhere, other than from past time, when time is treated metaphorically as a location.

³³ I owe to Arendt (1978) my understanding that the ascription of an ‘inner’ mental life to persons is metaphorical. My understanding that this ascription is metaphysically uncertain, but a fictional convention that is socially useful, I owe to Johnston’s retrieval of this theme from throughout Wittgenstein’s note-works (Johnston 1993).

³⁴ Harris points out that while elite institutional Buddhism has been concerned with scholasticism and the transcendence of nature, there is a parallel strand of practice concerned with the ‘magical manipulation of the natural world’; he associates the former tendency with Sāriputta, and the latter with Moggallāna (Harris 2000a: 129-130).

³⁵ See note 5.

³⁶ Augustine says that the activity of mind is combination (*coactu*) (2002: 66-67). That combination may rely upon the properties of subject and object, but the combination itself, and therefore the mind, is neither: it is consciousness of the relation between the two.

³⁷ Arendt notes that to think is to live in hiding, and is the philosophic mode, whereas to become manifest by action in the world is the heroic mode (1978: 71).

Chapter 2

Methodology and Method

Introduction

It is difficult to constrain an examination of contemporary Buddhist ideas about the nature of mind to manageable proportions, firstly, because philosophy of mind informs many other areas of enquiry (McGinn 1996: 163), and secondly, because Buddhism is sufficiently ‘polythetic’ for divergent views to be contained within a broad tradition (Gombrich 2004: 18). A philosophically hermeneutic methodology was chosen to guide the research process because it is cross-culturally applicable, because it facilitates access to a range of views by virtue of its dialogic method, and because the hermeneutic imperative to contribute a contextual interpretation to a continuing dialogic process acts as an encouragement to restraint amidst a welter of explanatory discourses about the mind.

Aims determine methodology

Religious studies use inductive methods from the human sciences when considering social manifestations, but tends to adopt a humanities approach when considering ideas and ideals. In neither case is theoretical methodology, ‘the logic of justification of scientific statements’ (da Silva 1982: 15-16) as separable from the research method or the research object as is the case for the natural sciences (Moustakas 1990: 11). A rigidly structured methodology cannot be specified, by means of which data about personal opinions collected in a religious context can be analysed into scientifically verifiable statements for interpretation from a wholly disinterested point of view. This is particularly so for this study, which aims to interpret Buddhist views on the nature of mind in the contemporary context, yet by doing so participates in the same category as those views, the category of interpretations of previous interpretations of Buddhist mind-theory. The aim of the study therefore determines that the underlying methodology should be hermeneutic, but how that methodology is justified depends on what sort of mind is envisaged to be performing the interpretation, and consequently, in what way minds are believed to receive and manipulate information. Since these issues cannot be determined in advance of the study, data collection must happen in advance of theoretical discussion,

and be used to inform theoretical discussion about how mental acts of understanding and interpretation take place. Such a cautious approach has the advantage of parsimony and cross-cultural equality, although the western literature on hermeneutics is more extensive than in the East, where only exegesis is overtly theorised. The difference is unsurprising, for hermeneutics is a western term, although it refers to a natural linguistic process.¹

Hermeneutics is the identification and explanation of meanings that are 'veiled' or obscured by their indicative signs (Ferraris 1996: 2), but that basic definition frames an experience that is too general to constitute a methodology. Descombes suggests that hermeneutics is derived from the special case of priestly communication of divine intentions that are communicated within the sacred boundary of the temple (Descombes 1986: 25), yet hermeneutics is also a necessary component of profane juridical and literary practice (Ferraris 1996: 2). If the western philosophical exposition clarifies anything, it is that hermeneutics is implicated in all discourses as a technique of human understanding (Ferraris 1996: 2, 19-39, 285). According to Gadamer this technique is universal and is not performed by any interpreter in isolation, but by participation in some sort of dialogic context (Gadamer 1976: 56-57, 1998, Jauss 1989: 213, Grondin 1994: 118). Priestly dialogue with the divine is just a special application of a general human ability. Prototypically, dialogue is two-way communication with another person, but since communication is always by means of a sign (object, event, gesture, word or text), by extension dialogue can take place between a person and a sign, so long as the underlying two-way structure of question and answer is maintained. It is the capacity of the human dialogic experience to give rise to an interpretation as the second stage in its dialectic that turns hermeneutics from a characterisation of experience in general into a characterisation of a particular kind of experience, which can be used as a methodology. The universality of this capacity, applied with suitable attention to detail and context, makes hermeneutics an appropriate methodology for a cross-cultural religious study.

If Gadamer's emphasis on dialogue is granted, there is only one hermeneutic structure, which western tradition invests with theoretical hypotheses about precisely who communicates, who interprets, what is interpreted, the relation between sign and meaning, and why, how and where an interpretation takes place. Gadamer's dialogic

structure justifies the expenditure of research effort on the establishment of dialogic partnerships required for the collection of expressed, rather than notional, information on contemporary Buddhist opinions about the mind, justifies attention to the ‘horizons’ or boundaries of historical context and foundational presupposition that are anticipated to be operative for the participants in this study, and justifies application cross-culturally by virtue of the natural origin of hermeneutic possibility in ordinary human communication. It is for these reasons that philosophical hermeneutics is the methodology that guides the data collection method, and constrains the subsequent interpretation.

Philosophical hermeneutics

Eighteenth and nineteenth century methodological hermeneutics attempted to provide the humanities with the same objective foundation that had brought success to the sciences (Grondin 1994: 18-20, 69, 79, 88). As reformulated by Gadamer on the basis of Heidegger’s critique of phenomenology, philosophical hermeneutics marks a turn away from that methodological model of scientific objectivity, and an attempt to justify valid interpretation in the absence of transcendental foundations or limitation by rules other than those inherent to the dialogic context. Gadamer’s theory does contain one presupposition that should be treated with caution in a cross-cultural study of the nature of mind. Behind the external dialogue of linguistic communication with others, Gadamer suggests that there is a ‘*verbum interius*’ or ‘inner word’ of dialogic communication between consciousness and the rest of experience (Gadamer 1998: 418-428), and he identifies this internalised communication as a ‘universal dimension’ of hermeneutics. Rather than the intuitive understanding of the ‘transcendental subject’ of Husserl’s phenomenology, the ‘inner word’ is a continual endeavour to understand, which can never be wholly captured by propositional language. The inner dialogue is motivated by human facticity and finitude, and by the necessity for engagement across the boundary between self and world, and self and other, in order to ascertain meaning and acquire understanding (Grondin 1994: 121-124). So far so good, but inner dialogue should not be misconceived as a secularisation of the Augustinian notion of inner communion with divinely-ordained Platonic ideas, rather than a characterisation of the problematic

outward relation between a notional self, a mental experience and its object. If the study of the contemporary Buddhist understanding of mind is to be open to cross-cultural dialogue, it cannot begin with an assumption that mental events are organised in the form of an interior dialogue, any more than it can presume the ‘fictional’ transcendental subject of phenomenology (Carr 1999: 92-94). In order to facilitate a cross-cultural study, the universal dimension of hermeneutics must be provisionally assumed to be the external dialogue, not the inner conversation, since an unobservable mental event cannot be presupposed, when it clearly forms part of the object of the investigation.

It is the refusal to elevate assumptions to the objective status of rules, and interpreters to the status of authorities, which individuates philosophical from religious hermeneutics. There is no priestly authority, no priestly rules of interpretation and the only sacred space is the embodiment of participants in a dialogic context, where constraints are established inherently by the embedding of dialogue in the contemporary horizon of understanding. For Gadamer, any search for objectivity is an attempt to escape the finitude of existence in time and space by means of access to disembodied absolute truths. The sole truth-criterion that he admits is that of ‘historicity’, which indicates that complete objectivity cannot be attained from a particular and finite situation (Grondin 1994: 107-112), for historical spatio-temporal situation imposes a ‘horizon’ on understanding (Gadamer 1998: 300, Grondin 1994: 114).

In the absence of transcendental, objective or mentally-internal foundations, hermeneutics relies on the historical ‘facticity’ of human existence with others (Gadamer 1998: 256-257, Philippe 1998: 53, Grondin 1994: 2, 11). Heidegger discerned a ‘fore-structure’ or interpretative disposition towards that facticity, which he referred to as ‘care’ (*Sorge*): a readiness to be and do in the world (Philippe 1998: 28, 148, 176), including the being and doing of understanding and interpretation. The practice of hermeneutics is a matter of bringing this interpretative disposition to consciousness, and thereby dispelling individual self-alienation from the finitude of being (Grondin 1994: 93-94). Behind every statement and its logical content lies the pre-understanding of *Sorge* towards self and world, which is prior to the self-conscious use of language, yet is articulated in the unselfconsciously meaningful use

of language. Hermeneutics is thus seen not as a methodology for the interpretation of a 'Platonic residue' (Jauss 1989: 5) of transcendental, essential or internal meanings, but as a situated response to finite being.

Like the '*verbus interius*', the notion of *Sorge* must be treated with caution, as a western characterisation of another internal mental event, and thus part of the object of study, but the observation that understanding always has a 'fore-structure' serves as a useful corrective to the tendency to assume that all knowledge can be reduced to propositions, for methodological ordering tends to ignore the implicit and favour the explicit by restricting the scope of investigation to what can be formulated in logical propositions. Gadamer observes that the objects of propositional statements tend to be shorn of the rich texture and variety of meanings made available by context and by tradition. On the contrary, propositions can always be interpreted as answers to questions, and the prior *dia*-logic of question and answer indicates that the understanding of meaning abstracted into logical propositions with a determinate truth-value depends on participation in shared language and traditional practice (Gadamer 1998: 369-379, Grondin 1994: 118-119).

Since this religious study is inter-disciplinary, it will naturally include logical propositions about empirical objects justified by scientific methods, but religious study must also engage with unverifiable abstract objects such as subjective experiences, metaphysical ideas and soteriological ideals. Buddhism encapsulates such experiences ideas and ideals, and any study that treats Buddhism holistically must attempt to interpret counterintuitive statements about non-empirical objects with logical consistency, yet with due regard for context.² Informally, logic refers to non-contradiction or consistency. It is on the practice of consistency that justification in the humanities, as the validation of non-contradictory explanation, extends through dialogue to the hermeneutic clarification of statements that appear to be inconsistent when the intended meaning is implicit in the fore-structure but not explicit in propositional statements.

In sum, philosophical hermeneutics claims no transcendental reference, is grounded in the finitude and historicity of human existence, and takes note of the dialogical formation of understanding, which is a neglected prerequisite for propositional statements. Notwithstanding Gadamer's critique of scientific

methodology (1976: 107-112), hermeneutics can be used as a methodology in the examination of the cultural impact of science in its relation to objects of study in the human sciences and the humanities. So long as the culturally-specific hypotheses of the 'transcendental subject', the 'inner conversation' and the 'fore-structure' of 'care' are temporarily set aside as more properly part of the research object, hermeneutics is a valid cross-cultural methodology for the study of explanations of mind. Above all, philosophical hermeneutics prioritises the external dialogue between persons: 'the possibility that the other person may be right is the soul of hermeneutics' (Gadamer in Grondin 1994: 124). Initial openness to equitable dialogue, rather than an attitude of appropriation and domination, makes an equitable encounter possible between explanations, traditions and cultures, and continual dialogic openness prevents reductive closure.

Method

A suitable method enables the production of a theory by ensuring the collection of the most useful data (Glaser and Strauss 1967: 3, 28-29). Since the methodology is grounded in interpersonal dialogue, it is appropriate that the main data collection method for this study should be the qualitative interview, and that analysis of those interviews should take account of context, including the contemporary conjunction of scientific findings and theories with philosophical and Buddhist mind-theories. The resulting interpretation is a further step in dialogic engagement, rather than a disinterested evaluation or a completed theory: it is the expression of my opinion, after extensive modification by dialogues, summarised in Chapter 4, with the ten British Buddhists who agreed to be interviewed. My interpretation is not intended to be conclusive, but to contribute to continuing dialogue on the contemporary Buddhist view of the mind.

An inevitable hiatus occurs in the dialogue, when the interviewer takes control of the transcription of oral interview into written record and the production of interpretative text. There is a movement from spontaneity to rumination and from the real-time ebb and flow of dialogic power relations in an interview, to a transitional reliance on the good faith of the interpreter. This hiatus is a change of method from spoken word to written text rather than a change of methodology, for the dialogic

process is not concluded and authority only attaches to a communicator for the duration of their communication, after which it is assumed by any person who is inclined to respond.³

Qualitative interviews

In order to discover whether information external to Buddhist tradition was leading to hermeneutic reconsideration of Buddhist mind-theory, qualitative rather than quantitative information was required. The method for gathering this data took the form of interviews lasting from one and a half to three hours, which were tape-recorded and subsequently transcribed. The participants were asked to check and edit a summary of their interview, which then provided the material for subsequent description, quotation and interpretation.

Quantitative methods would have enabled the collection of data about the prevalence of pre-determined opinions, but would not have been a viable method for collecting opinions without presumption as to what those opinions might be. Quantitative means such as questionnaires face practical restrictions on the detail of the questions asked, compromise the freedom of the interview participants to respond to questions as they see fit, and make it difficult to ensure that the participants fully understand the aims and scope of the study (Pawson 1996: 297-299). Quantitative methods based on scientific methodology would require the cooperation of a statistically-representative sample of British Buddhists, but access to such a sample is not available, for the 2001 Census indicates that the majority of people in Britain who call themselves Buddhists are not members of Buddhist organisations (Bluck 2004).⁴

This study did not aim to quantify opinions, or to collect all the opinions there may be, but to collect a sample of contemporary opinions without restraining their expression. By writing to organisations with a request for participants, an attempt was made to gain participants who reflect the diversity of 'convert' Buddhist opinion in organisations active in Britain, but there was no expectation that the sample would be quantitatively significant. In the event, representative capture of opinion across organisations was not achieved, because requests to some organisations produced no agreement to participate. For example, there was no participation from members of the New Kadampa Tradition, Karma Kagyu (Samye Ling), Sharpham College. The

Order of Buddhist Contemplatives (Throssel Hole), or from Sōka Gakkai. The reasons why participation was declined were various: lack of interest, lack of time, and the view that research was soteriologically pointless. Nothing can be inferred from this reluctance to nominate participants and, in any event, individuals were interviewed as much to ascertain personal views as to ascertain organisational positions, since that information is obtainable through textual research and participant observation.⁵

The data collection method included the initiation of dialogue before the interview with each participant, by initial mailing of a detailed list of questions intended to elicit prior consideration that might enable a more focussed interview. A pilot mailing established that this procedure would not succeed. The participants were willing to be interviewed but not prepared spend time answering a detailed preliminary questionnaire. All participants were therefore sent a concise schedule of optional questions, to which most responded by e-mail, and one by audio-tape.

The schedule of interview questions was modified to engage with the initially-expressed views of each participant, but in order achieve some consistency across the interviews, and to understand influences on particular views, an attempt was made to cover four broad areas of:

- 1) Relation to traditional views of the nature of mind.
- 2) Opportunities for dialogue about the nature of mind.
- 3) The impact of science, including neuroscience and psychology.
- 4) Responses to western philosophy of mind.

The intention was to discover individual attitudes towards traditional Buddhist mind-theory, how those attitudes affect present interpretation, to gauge opinions about the possibility of dialogue between Buddhist and contemporary explanatory systems, and to ascertain attitudes towards current scientific theories.

Although the participants were offered a guarantee of anonymity and confidentiality, all who agreed to take part chose to be cited. The naming of interview participants is unusual in social research, but has the advantage of enabling the interviews and the subsequent interpretation to include reference to published work, for six of the participants are authors. Naming also makes the interview record verifiable and opens the opportunity for further public dialogue. The disadvantage is

that participants could be dismayed if they felt that their views had been misrepresented, and gross misrepresentation might harm reputations; there are therefore issues of consent of the kind that occur in medical research. Following the medical example of continuing informed consent, all participants were eventually sent an interview transcript, a summary of the thesis, and given a second opportunity to opt for anonymity.

As much as possible, the summary of the interviews in Chapter 4 includes quotations referring to key points: those quotations are mainly of speech in an extempore and interactive dialogic setting. Although the responses were initiated by questions, they were not necessarily directed by those questions: by virtue of the egalitarian nature of dialogue, the participants responded as they saw fit. By so doing they could redirect the emphasis of their interview, as supplementary questions were put in reaction to initial answers. Because the participant's opinions were spontaneously expressed in the context of an interview process, they may not represent final views of the kind that might be deployed in fully considered published work. However, it was an advantage of the interview method that participants took the opportunity to comment on their publications. I take it as a confirmation of the hermeneutic methodology that some participants offered reinterpretations of their past work: this provides some indication that a written text becomes independent of its author as views are changed by continuing opportunities for dialogue and reflection.

Hermeneutic interpretation can only be from within a context rather than determined from a spuriously exterior 'God's eye' perspective, but any matter relevant to the context of this study can properly be taken into account in the interpretation, so long as it was introduced into discussion during the interviews. Questions concerning Buddhist tradition and western philosophical tradition, neuroscience, psychology and psychotherapy were put in most interviews; even if some participants did not choose to pursue those issues, their prior introduction allows them to form part of the subsequent interpretation. Because questions about the personal motivations for particular views were rarely discussed in the interviews, those issues could not properly be introduced at the stage of interpretation.⁶

Interpretation as translation

Any communication would be a translation, in a broad sense of the term, if meanings were transitive from one person to another, but that is not an accurate description of communication. Firstly, communication is the signification, not the transference of meaning, for language is not a metaphorical ‘conduit’ for the passage of meanings from one person to another, but a shorthand indicator of meanings to be discovered in context (Reddy 1979: 286-292). Secondly, Putnam’s ‘twin earth’ thought experiment suggests that the meanings of terms are not determined by ‘intension’, ‘in the head’, but by their external reference to the world (1975: 216-217, 223-226). Thirdly, in the absence of divine intervention, nothing can be taught by language without personal observation of the meaning of words in connection with things and events in the world (Wittgenstein 2001: 2 [PI. 1: 1], Burnyeat 1999: 299-300).

Problems of translation are more acute when communication is between languages, discourses and cultures, rather than between individuals. The combination of scientific disciplines with philosophical and Buddhist mind-theory in this study introduces issues of translation between discourses, which are additional to problems in the translation of Asian Buddhist texts into English, and to the cultural translation of Buddhist praxis into contemporary globalised social circumstances. Difficulties occur with individual terms, but also with the wider implications of a discourse, and with the cultural understanding of the social utility of the tradition. Thus, there are three applications of the word ‘translation’: philologically between languages, interpretatively between discourses, and culturally between religious and secular traditions.

I am not proficient in any Asian language, and therefore discussion in this study of the translations of Buddhist terms is either derivative of other work,⁷ or depends on the usage of the interview participants. Naturally, mistranslation of terms will affect understanding of a language or a discourse, but it is a working principle of Buddhist exegesis that terms should be understood with some reference to intention of the whole discourse (Bond 1980: 19), the implication being that the accuracy of translation improves with increased understanding of the whole discourse.

It has been argued, to the contrary, that terms are ‘underdetermined’, given the multiplicity of possible empirical observations of the extension of those terms, and ‘inscrutable’, in the absence of a prior translation manual (Quine 1960: 27, 52-54, 1970: 182-183).⁸ Davidson’s response is that relative indeterminacy is acceptable, therefore translation remains possible, if there is broad agreement or overlap between the reference of two discourses which refer to the same world, and if it can be charitably assumed that the proponents of each discourse mean what they say (Davidson 1984: 197).⁹ He argues that there is indeed sufficient overlap between linguistic systems referring to experience of the same world, and that people can generally be trusted to believe that what they say is true (Davidson 1984: 191, 195). It is a reasonable supposition that Buddhist mind-theory, having survived transmission across several cultures, is worthy of translation, and Davidson’s ‘agreement’, ‘charity’ and ‘belief’ arguments for the possibility of translation between discourses offers a basic defence for the continuing relevance of religious discourse against scientific polemics, and of the relevance of scientific discourse against religious indifference. In either case, translation fails without the charitable acceptance that the proponents of other discourses mean what they say, and without initial search for broad agreement, prior to identification of cases where translation is problematic.

The presence of Buddhism in western societies indicates that globalisation is not a one-way process, but since this study is concerned with the consequences of translation between eastern and western discourses, it is susceptible to the charge of ‘orientalism’. Orientalism is, firstly ‘a style of thought...based on an ontological and epistemological distinction between “the Orient”...and “the Occident”’; secondly ‘a certain *will* or *intention* towards what is a manifestly different (or alternative and novel) world’; and thirdly, orientalism is an academic bias towards philosophical discourse rather than cultural praxis (Said 1978: 2-3, 12).¹⁰

Orientalism: bias in cultural translation

In response to the orientalist charge I contend that Buddhism *is* a combination of both philosophical theory and religious cultural praxis, and that concentration on the theory does not entail denigration of the practice. This study is more susceptible to

the opposing criticism that it is insufficiently attentive to the cultural difference between East and West, by virtue its assumption that, despite cultural conditioning, human brains and human nature are the same the world over. Although human genes continue to evolve (Bustamente et al 2005: 1153), the effects on the brain are unlikely to have been significant since the time of the Buddha; much more significant is the possibility that cultural influences may determine that ancient and modern minds embark on soteriological paths from different baseline psychological states.¹¹

The most troubling orientalist charge, however, is not whether mental functioning is culturally determined, but whether the western study of Buddhism is influenced by a culturally imperialist attitude, which values origin and written text over the oral testimony of the native interpreter (Lopez 1995: 3). Cultural imperialism cuts both ways, and to deprecate western influence on Buddhism is to ignore the reciprocal influence of Buddhism on the West (Clausen 1975, Scott 1986, 2000, Batchelor 1994, Sharf 1998), and the long-term influence of eastern ideas and technologies on the formation of European civilization (Edwardes 1971). A more invidious effect of over-extensive application of the orientalist hypothesis of cultural imperialism is that if Buddhism must only be studied anthropologically, philosophical inconsistency becomes immune from critique. Such an outcome would be a perverse form of orientalism, with the implication that Buddhists are incapable of justifying their cultural and soteriological practice. It could lead to the patronising presumption that study participants are influenced by collective representations that they do not understand, and indifferent to the logical coherence of the associated ideas. Buddhists may have surprising views about facts and their logical organisation, but they also have access to a scholarly tradition that justifies those views. Some defence other than the orientalist thesis would be required, if contemporary Buddhists were to be excused from the dialogue of ideas.

This study presents an ambiguous target for the orientalist rebuke, for the authority of the interview participant as 'native' interpreter is valued on a par with the authority of texts - but the 'native' interpreters, selected on the practical basis of accessibility, happen to be Buddhists of western ethnic origin. I accept that a study of 'convert' Buddhists admits some cultural bias, but deflect the orientalist charge with the aspiration for the replication of the study with the participation of culturally-

ethnic Buddhists resident in Britain, or in a predominately Buddhist society. Participants with a 'first' cultural allegiance to Buddhism might be expected to express some differences of opinion in comparison to the present sample, but how far globalisation may attenuate or enhance that effect is unknown, not least because science discourse has become as much an eastern as a western project.

How the mind is explained may be culturally differentiated, yet discussions of the mind, as the object of investigation over a brief period of the evolutionary timescale, warrants translation between discourses, the identification of cultural and ideological difference, and the identification of occasions when one discourse is to be preferred in a particular context because it has more explanatory power than another. It cannot be presupposed that one discourse about the mind is better than any other in all circumstances, or that a single synthetic discourse will be useful for all human purposes: it might turn out that the nearest approximation to a full explanation of the mind will be a combination of many discourses building bridges and finding out together. (Metzinger 2003: 2)

Notes to Chapter 2

¹ The search for tacit hermeneutics amongst overtly conservative Buddhist exegesis is an etic or ‘outsider’ activity, which must be justified by the truth-value of its conclusions. The standard Pāli treatise on interpretation is the *Nettipakaraṇa* (trans. Ñāṇamoli 1962), which gives exegetical examples of the contextual re-wording of Buddhist teaching without loss of the traditional meaning (1962: viii). Later exegesis, such as the Chinese *P’an Chiao* system, attempts to integrate the teachings of schools and *sūtras* by hierarchical doctrinal classification, ‘highlighting the distinctive characteristics...as well as reconciling the apparent disparities between them’ (Ming-Wood 1993: 105). There is work for tacit hermeneutics in this dynamic of differentiation and reconciliation, which Chappell characterises by a tripartite sequence, proceeding from ‘individualization’ when a ‘pioneering’ thinker produces a new interpretation, through ‘integration’ when the new teaching is interpreted traditionally, and ‘control’, when the new interpretation is accepted without question as being a ‘gloss’ on the old teaching (Chappell in Lopez 1987: 82).

Pye points out the hermeneutic possibilities inherent in the doctrine of skilful means (Pye 1980: 29-30). There was much scope for tacit hermeneutics in the Mahāyāna assumption that ‘that which is well-spoken...is spoken by the Buddha’ (Lopez 1995: 27), and in the composition of new *sūtras*, which attempt ‘to maintain the pretence of speech’ as an ostensible record of having heard the Buddha’s words, (Lopez 1995: 40-42). ‘Innovation is one of the great sins of Buddhist letters’, yet meanings for new contexts are discovered by the examination of texts for hidden allusions. These contextual meanings are often found by etymological association between the authorial words and the desired interpretation (Lopez 1996: 8, 239-246).

² Religion cannot be distinguished from science on the ground that it supports propositions that are ‘counterintuitive’ (Pyysiäinen 2001: 18-23), because many scientific explanations, including heliocentricity, the embedding of evolutionary succession in geological series and quantum indeterminacy are equally counterintuitive. It is a plain fact that things are not always as they seem, therefore causal explanations that delve beneath appearances often produce counterintuitive conclusions.

³ According to Adorno and Horkheimer, a concluded discourse would be totalising, making reality and fiction indistinguishable and obliterating time by condemning the understanding of the present to be a repetitious analogy of the past (1997: 5, 7, Van Reijan 1988: 418-422). If time is a property external to minds, time could not be utterly obliterated by misunderstanding, but the affective quality of its perception might be erased.

⁴ A tentative typology of organisationally-unattached American Buddhists has been elaborated by Tweed (2002: 28-29).

⁵ This study could not determine the extent to which organisations influenced the formation of individual opinions but my impression is that in the course of lively dialogues the interview participants abandoned the precautionary attitude generated by their organisational role, to give genuinely held opinions.

⁶ My caution with regard to factors that can be brought into the interpretation, and with regard to methodological issues of consent, is a response to difficulties encountered by a previous study (Mellor 1989), which suggested that the contemporary practice of Buddhism is a translation of an eastern religious form into an individualistic, western Protestant style of religiosity. That study carried the implication that contemporary western Buddhists misperceived their own practice of Buddhism, in a way that paid too much attention to the importance of the individual and to the notion of essential Buddhist ideas. The salient problem discussed by Mellor is whether the guest discourse is compromised subliminally by translation into the host discourse, and the thrust of his argument is correct, for the fashioning of a contextual (although not necessarily Protestant or individualistic) form of Buddhism is an inevitable hermeneutic event (Pye 1969: 236), and as such represents a creative rather than a repetitive expression of tradition. The methodologically-objective stance of Mellor's interpretation, and the interpretation itself, was famously resented by one of his interviewees (Sangharakshita 1992).

⁷ I have relied upon the dictionaries of MacDonnell (1929) *Nyānatiloka* (1980), and Keown (2003).

⁸ Yudkin deprecates Quine's 'passion for exactness', on the grounds that 'any translation is only as good as the translator's understanding' (1979: 93-95).

⁹ The importance of the principle of charity in comparative religious studies is noted by Payne (2004: 196-197 n.5)

¹⁰ See Mellor (2004) for strong criticism of Said's thesis.

¹¹ Jaynes' (1976) argument that integrated consciousness is a post-Homeric invention is hypothetical and controversial. I prefer the view that the 'preoccupations of contemporary human beings with autonomy, self-development and conscious intentionality' are already in place in the Indian city-states at the time of the Buddha (Crook 1980: 275-276).

Chapter 3

Brain Structure and Function

Introduction

This chapter provides a brief overview of the basic neuroscience that informs both the ‘standard’ view of mind-brain identity, and the more conservative philosophical view of mind-brain supervenience. Such an overview is necessary for without some appreciation of brain complexity it is counter-intuitive to imagine that a corrugated lump of flesh could correlate to the conscious functions that are normally ascribed to the mind.

Since the discovery of neuronal architecture by Golgi and synaptic connectivity by Ramón y Cajal in the 1880s (Mazzarello 1999: 220-226, Ramón y Cajal 1995: xxiii-xxv), it has become increasingly evident that the brain controls the body and responds to the world, using an evolved structure that reflects the entire history of embodied animal being and doing. As a minor branch of its investigative activity neuroscience establishes correlations between, on one hand, first-person reports and third-person behavioural observations of mental events, and on the other hand, the structural organisation and electro-chemical activity of the cells that constitute the brain. It is then a matter of conjecture, as to whether such correlations demonstrate an identity or a supervenience-relation between mind and brain. Theories explaining how the organisation of brain activity might lead to the emergence of consciousness are undergoing development, rather than nearing completion, but are supported by accumulating evidence. Contributions to the field by Damasio, Panksepp, Llinás and Crick are examined here.¹

Basic consciousness does not originate in ‘top-down’, rational forms of cognition, but in ‘bottom-up’ processes in evolutionarily ancient parts of the brain, as a response to variations in body/environment homeostasis. The purpose of consciousness is the generation of anticipatory prediction, enabling rapid responses to complex scenarios that tend to destabilise homeostatic balance. Consciousness depends upon pathways to and from the brainstem and the sensorimotor cortex *via* the thalamus, and also upon limbic cortical forebrain structures responsible for the emotional mediation of cognition and action. The organisation of emotional and cognitive pathways is developmental as well as ontogenetic, and may therefore be capable of some

psychological modification (Damasio 1995, Panksepp 1998, Lazar 2005). Detailed or ‘extended’ forms of consciousness are a global property of the brain (Damasio 1999), but the neural correlates that globally disseminate, functionally integrate and temporally bind the information that appears *in* or *as* consciousness, have not hitherto been located (Nöe and Thompson 2004), although Crick and Koch (2005) have recently argued that the claustrum is the most likely anatomical candidate. Further research is required to test their theory.

Neuron structure and function

The brain and spinal cord (the central nervous system) is a system of specialised cells called *neurons*. The human central nervous system comprises billions of neurons, conditioned and chemically maintained by their surrounding environment. There are approximately thirty billion neurons, with an estimated 10^{13} synaptic connections, with most neurons maintaining connections to thousands of other neurons (Martini 1998: 409, Panksepp 1998: 74). The sum of all possible variations in brain connectivity may exceed the number of atoms in the universe, and ‘any comparison between the nervous system and a computer is misleading, because even the most sophisticated computer lacks the versatility and adaptability of a single neuron’ (Martini 1998: 368).

The most common neurons are multipolar cells, having two types of extension: *dendrites* and *axons*. Each multipolar neuron has several multiply-branching dendrites, which are contacted and electro-chemically influenced by the axons of other neurons. Each neuron has one axon, which transports chemicals synthesized in the cell body, and is able to contact and influence other neurons via collateral branches from the main axon and the multiple *synapses* or terminuses at the end of the main and collateral branches, which locate at, but do not fuse to the dendrites and bodies of other cells (Martini 1998: 370-373).

When chemical ion imbalances across the cellular membranes of neurons reach critical levels or *threshold potentials*, they cause the neuron to depolarize or ‘fire’, allowing waves of electrical activity known as *action potentials* to travel rapidly along axons. At the synapse (the terminus) of axons, the arrival of the electrical charge causes a release of chemicals (neurotransmitters), which cross the synaptic gap

to influence the target neurons (Martini 1998: 388, 402-405). Depending upon the particular neurotransmitter released and its interaction with hormones and other neurotransmitters in the local environment of the synapse (Thagard 2002, 434), the electro-chemical state of the receiving neuron will be inhibited or reinforced. These individual events combine to propagate or suppress activity throughout the neural networks that constitute the brain.

As well as being the initiating cause of electro-chemical transmission across the synapses between neurons, action potentials are peaks in rhythmic oscillations of electrical potentials within neurons. The oscillations in groups of associated neurons can achieve synchronicity with each other, creating a local 'field potential'; this temporal integration of action potentials across particular fields of neurons has been associated with particular mental events (Gray, et. al. 1989, Crick 1994: 243-245).

Neurons in the human nervous system are functionally categorised as afferent, efferent or associative. The afferent neurons deliver signals from the peripheral nervous system and the bodily senses, while the efferent neurons send signals to initiate and modulate the motor activity of the body (Martini 1998: 369). The associative 'interneurons', which are in the majority, are engaged in the spinal cord's rapid processing of sensorimotor reflexes, and in the brain's multiple connectivity, delay and feedback processes, which mediate between sensory input and motor output. In the main, it is interneuronal connection and interaction that is considered to achieve sufficient complexity to give rise to consciousness (Martini 1998: 375), for 'these neurons are where we think' (Llinás 2001: 81).

Neurons can become more or less liable to 'fire' and can lose or grow connections in response to frequency of excitation or inhibition; in consequence the healthy brain exhibits plasticity and adaptability in response to changing functional requirements (Hebb 1949: 69). Local interconnectivity can enable some parts of the brain to replicate the role of other parts in the event of trauma, but the scope of this adaptive plasticity has limits. Firstly, the brain's anatomical structure, although widely interconnected, is organised into parts that have specific functions, which are delineated by their connections to specific sensory and motor pathways. Secondly, adaptation is eventually overwhelmed by age-related degradation, as blood flow reduces, as abnormal deposits occur inside and outside neurons, as dendritic branches

and synaptic connections decrease, as neurotransmitter production declines, and as the total number of neurons markedly declines (Martini 1998: 509).

Anatomical structure and function²

The anatomy of the sentient brain is organised hierarchically in a manner that is indicative of evolutionary origins, as earlier versions became augmented in order to enable and control more complex physical capacities and activities (MacLean 1989). In humans as in other animals, some rapid sensorimotor reflexes are initiated at the spinal cord before signals have time to reach the brain. Above the spinal cord, the brain has been theoretically differentiated three evolutionary parts (MacLean 1989). Firstly, the brainstem and the ‘striatal complex’ of associated nuclei at the base of the brain are of ancient ‘reptilian’ origin; they are involved in motor control and routine behaviour (MacLean 1989: 35, 62, 161-2, 167, 189). Secondly, the ‘paleomammalian’ brain, incorporating the reptilian brainstem but with the additional development of most of the limbic system, is involved in self-realisation and self-preservation, food seeking, procreation, maternal instinct and play, initiates some reflex responses, modulates the experience of emotion (affect) and its expression, and facilitates short-term memory (Maclean 1989: 325, 410, 465, 514-516).³ Thirdly, the more recently-evolved ‘neo-mammalian’ forebrain includes some parts of the limbic system, but most notably consists of the twin cerebral hemispheres, which are particularly involved in complex sensorimotor information processing and cognitive activity, including empathy, creativity, prediction and linguistic capability (MacLean 1989: 531-534, 552). These evolutionarily-differentiated areas of the brain operate as a unified whole, for functional groups of neurons situated in discrete parts of each of these divisions are interconnected, *via* their axons, with neuronal groups in other parts.

Figure 1 - Medial view of brain

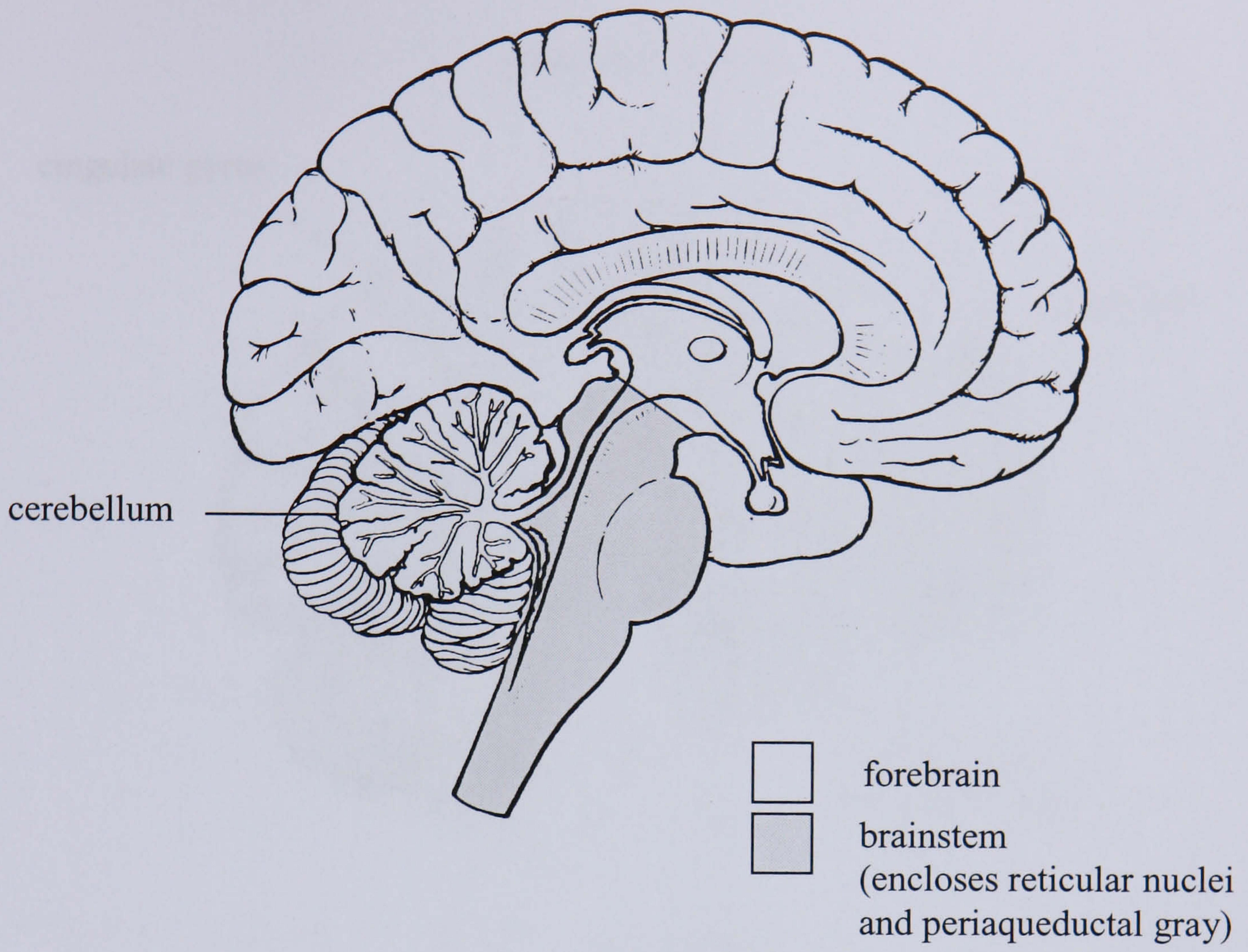


Figure 2 - Lateral view of brain

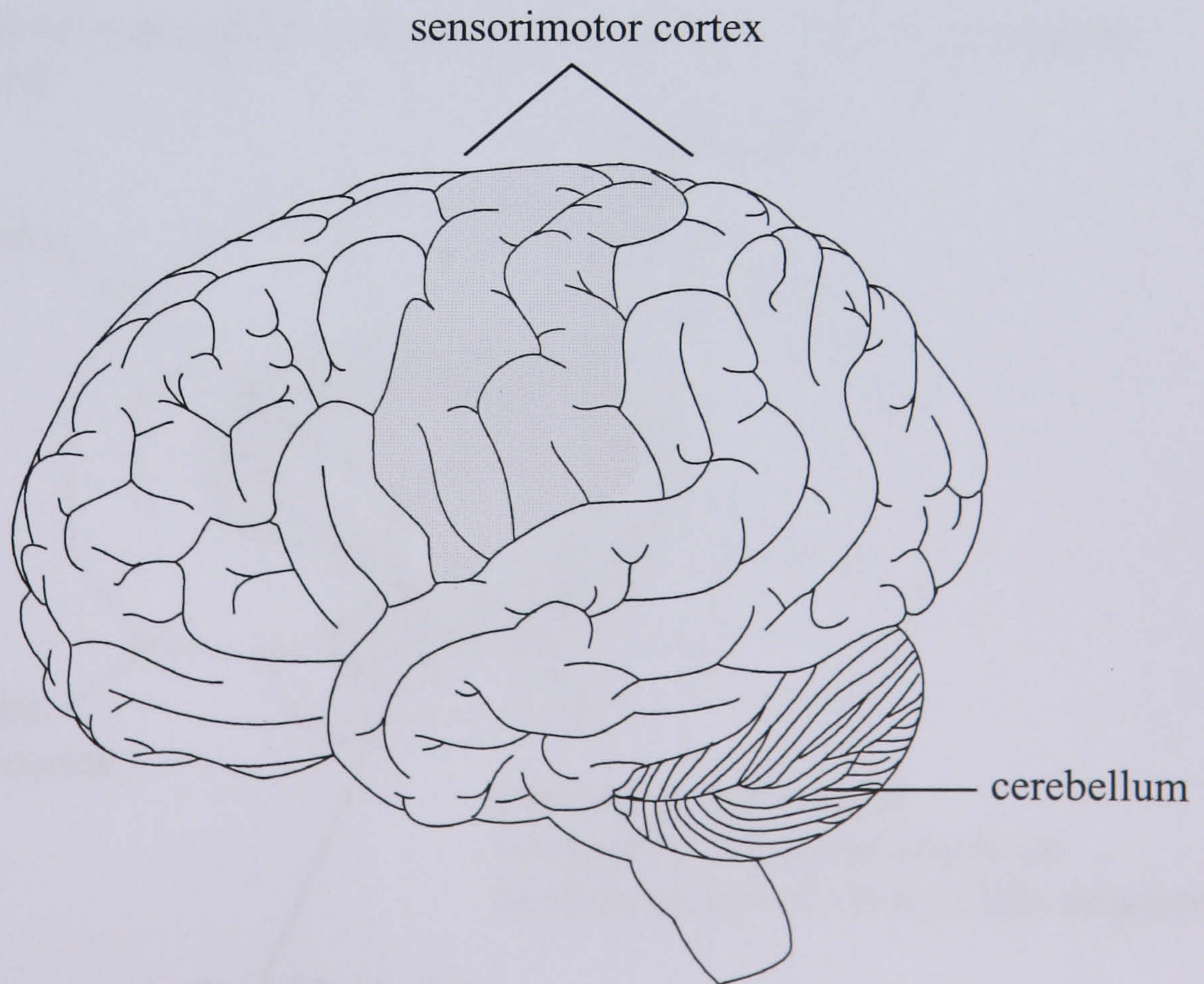


Figure 3 - Medial view of brain

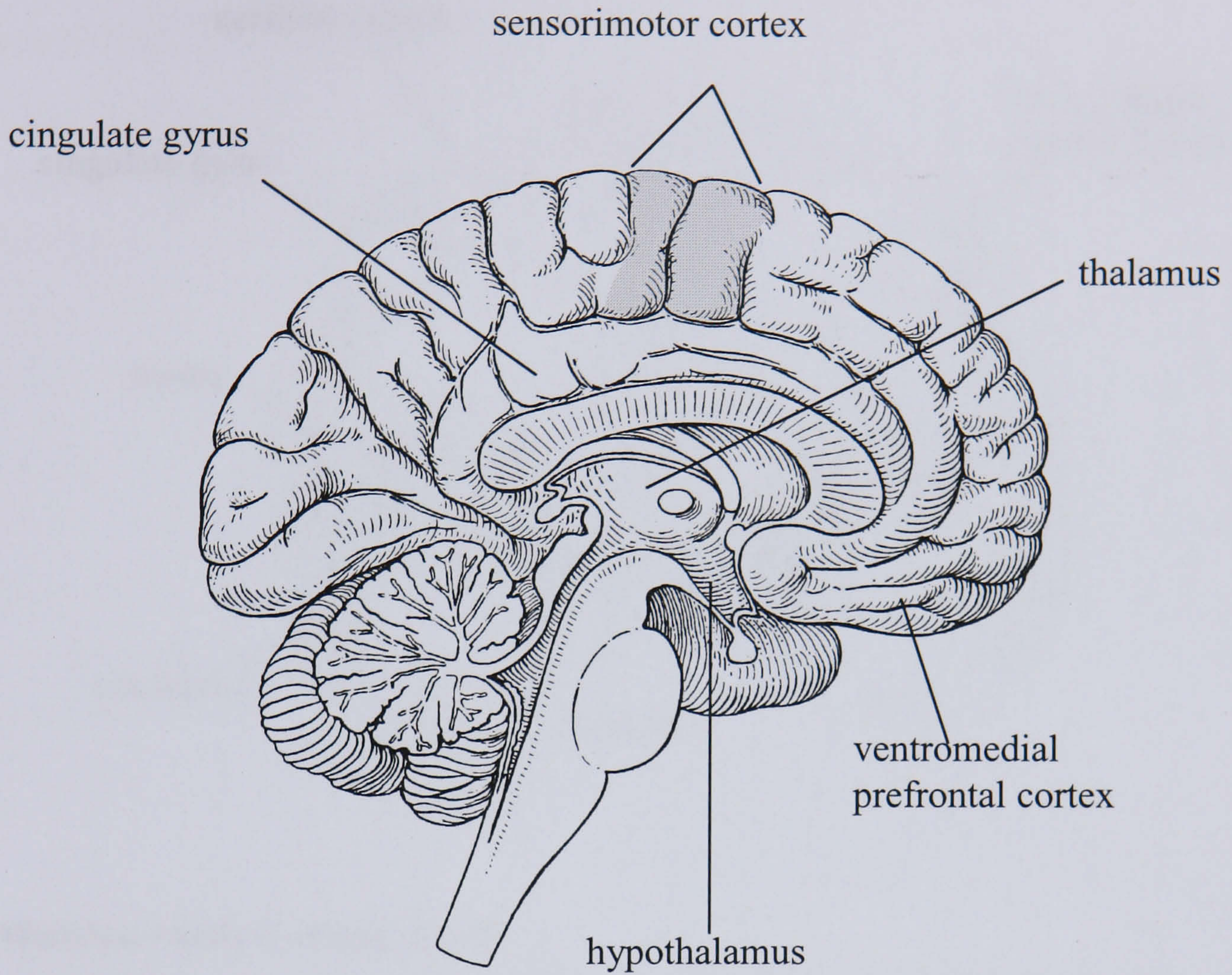


Figure 4 – medial view of right hemisphere showing limbic cortex (shaded area), brainstem removed.

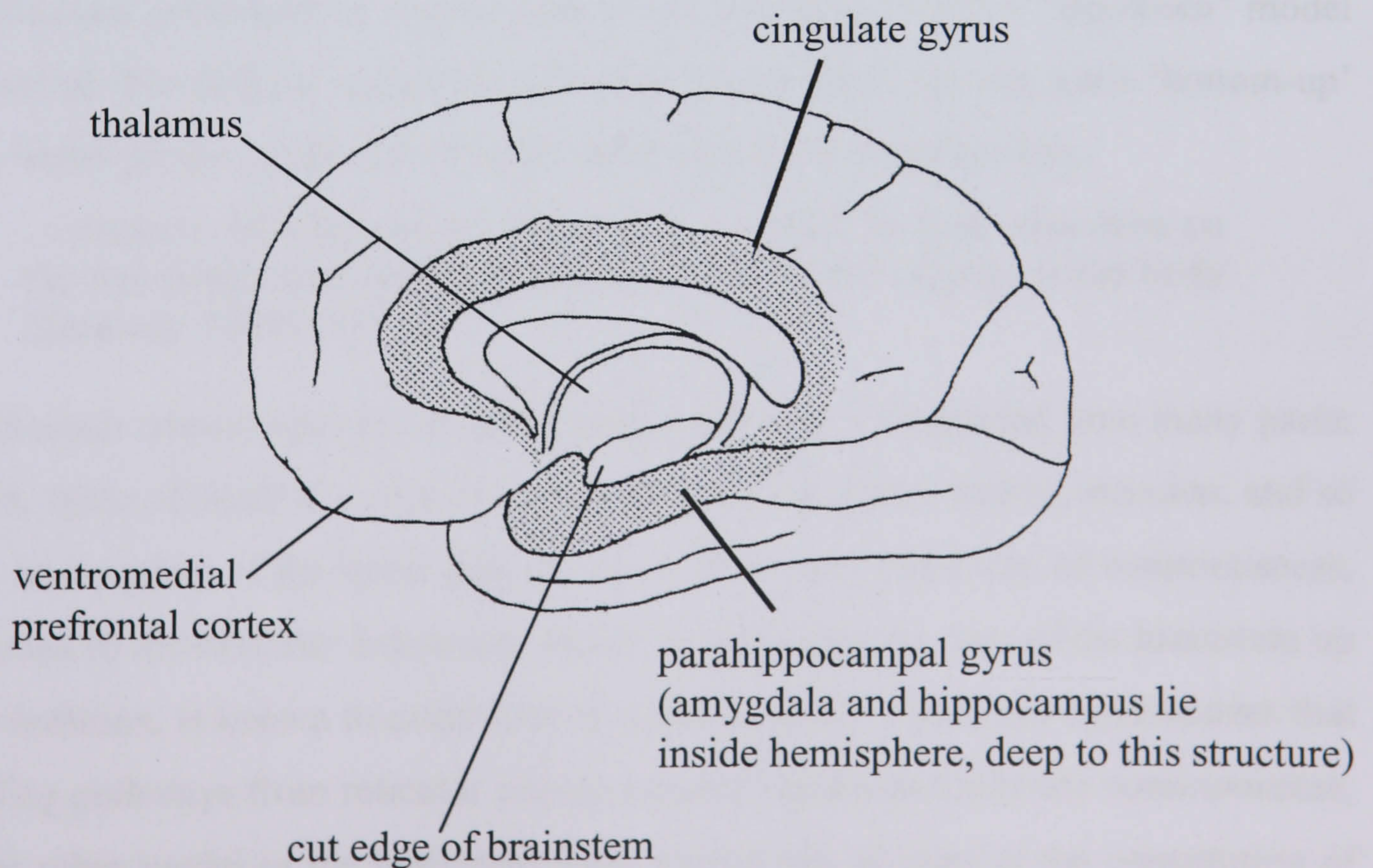
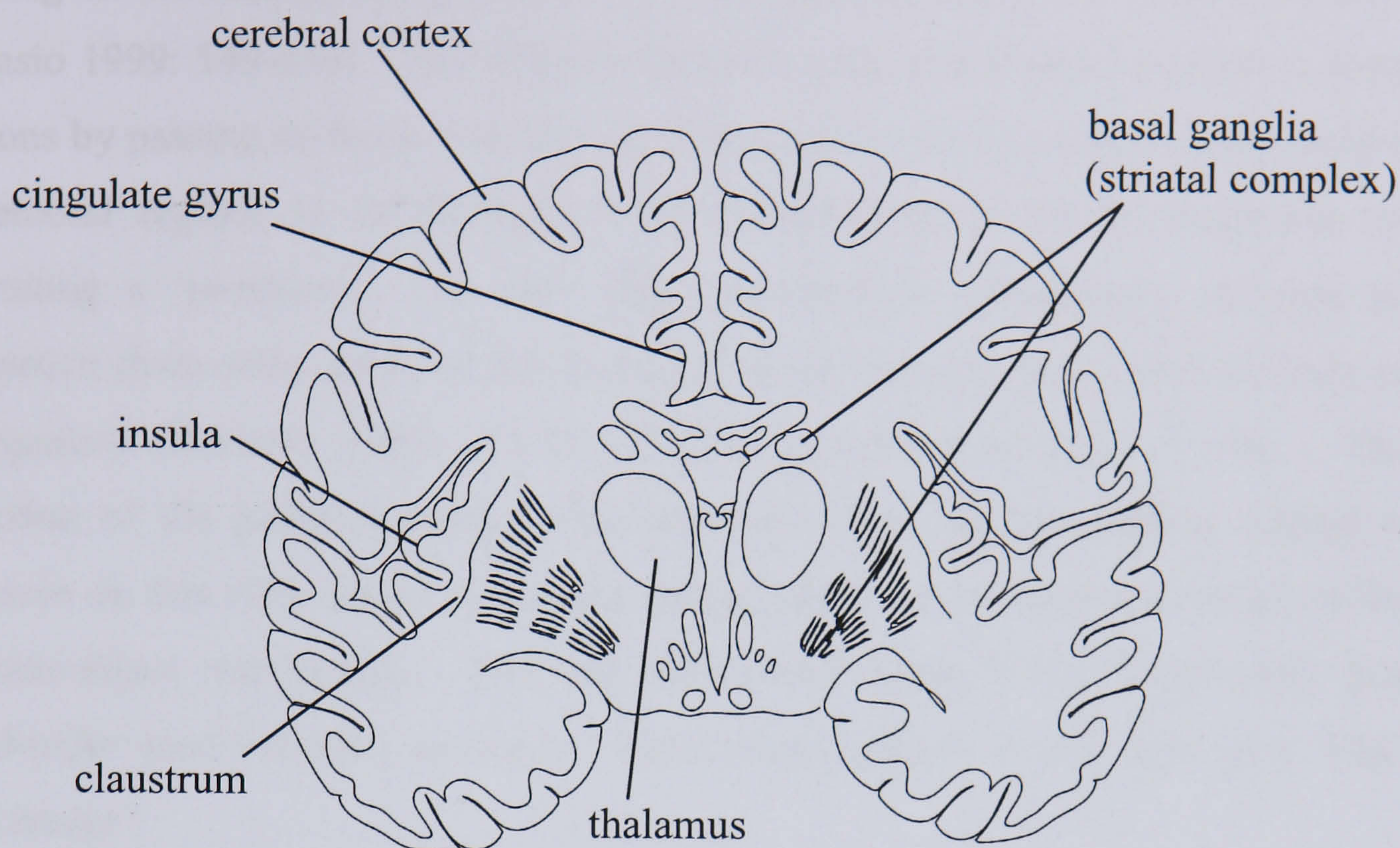


Figure 5 - Coronal section through cerebral hemispheres



The thalamo-cortical origin of self

In comparison to other animals, the two hemispheres of the cerebral cortex are greatly enlarged in humans. It might be assumed that these structures are solely responsible for the development of consciousness, yet the explanation of consciousness presented by contemporary neuroscience is not a 'top-down' model focussed on the complex cognitive abilities of the cerebral cortices, but a 'bottom-up' theory based on the regulation of bodily homeostasis by the brainstem.

...emotion, feeling, and consciousness – depend for their execution on the representations of the organism. Their shared essence is the body (Damasio 1999: 289).

Although consciousness is a unified experience, it is integrated from many parts: thought, types of recall to memory, attention, self-awareness, feeling, emotion, and so forth. Many parts of the brain may be involved in the production of consciousness, but trauma to the reticular formation, which runs through the core of the brainstem up to the midbrain, is known to cause loss of consciousness. Damasio hypothesizes that ascending pathways from reticular nuclei not only inhibit and activate consciousness, but that other nuclei in the brainstem have a vital role to play in the constitution of

consciousness by modulating the activity of interconnected neuronal processes occurring in the thalamus, hypothalamus, basal ganglia and somato-sensory cortex (Damasio 1999: 149-156). The reticular formation and the brainstem perform these functions by passing on basic sensory information about bodily states, which enables the cerebral regions to continuously map 'neural patterns' of the organism, so constituting a 'proto-self'. In turn, this proto-self is continuously affected by information from other nuclei in the brainstem about 'objects' that affect the state of the organism (Damasio 1999: 159-161, Parvici and Damasio 2001: 37-38). The interaction of the pattern related to the organism state and the pattern related to influences on that state results in another neural pattern, a 'second-order map' of the organism-object relationship. Like the 'first-order' map of the 'proto-self', this second-order map becomes an act of 'core-consciousness' in the form of a 'non-verbal image'.

...the essence of consciousness is a continuously generated image of the act of knowing relative to the mental image of the object to be known. The image of knowing is accompanied by an enhancement of the images of the object. And because the image of knowing originates in neural structures fundamentally associated with the representation of bodily states, the image of knowing is a feeling.

In its normal and optimal operation, core-consciousness is the process of achieving an all-encompassing imagetic pattern which brings together the pattern for the object, the pattern for the organism, and the pattern for the relationship between the two...the functions hypothesized here are not located in one brain region or set of regions, but are, rather, a product of the interaction of neural and chemical signals among a set of regions (Parvizi & Damasio 2001: 139-140).

There are three main elements to Damasio's hypothesis. Firstly, the creation of consciousness is an event which requires cooperation between the brainstem, the thalamus and other basal parts of the forebrain, and the sensorimotor regions of the cerebral cortex. Secondly, occurrence of consciousness begins with generalised awareness of the state of the body, and an awareness of effects on the body by external 'objects'. Thirdly, consciousness is not just a result of higher-level, neocortical processes. In this scheme, the neural patterning of awareness of the body constitutes the 'proto-self', and the combination of that pattern with object-relation neural patterns constitutes 'core-consciousness'. It is on the basis of this awareness of bodily (somatic) feeling that consciousness is enriched by emotion through the

mediation of limbic structures, and enriched by cognitive manipulation of sensory information and logico-linguistic capability through the operation of neo-cortical structures. This cognitive enrichment constitutes human 'extended consciousnesses', which utilises enhanced powers of recall from memory to constitute an autobiographical self. Damasio's theory is a 'bottom-up' characterisation of the arising of consciousness, which emphasises the necessary role of the brainstem as conveyor of the bodily bases of feeling.

Panksepp's explanation of the arising of self-consciousness is broadly in agreement with Damasio's, but places more stress on the motivating and modulating role of emotion. Instead of the 'proto-self', Panksepp refers to the 'SELF' as the 'Simple Ego-type Life-Form'. This simple form of self depends on primordial sub-cortical neural circuitry, which '... "bind[s]" many other brain processes' and constitutes 'the mother of all higher forms of consciousness' (Panksepp 1998: 311, 308). While not denying the relevance of sensorimotor connections between the thalamus and the neocortex, Panksepp is interested in the enrichment of these connections *via* input from forebrain and limbic nuclei responsible for the motivation and expression of feeling and emotion. Like Damasio, Panksepp's approach to consciousness is 'bottom-up', reversing the emphasis of 'top-down' theories that portray emotion as arising either cognitively, out of conscious awareness of changes in the body subsequent to the initiation of reactive behaviour, or socially, out of external imitative learning of emotional behaviours (Panksepp 1998: 56). None of these theories are exclusive, for sufficient feedback mechanisms occur in the human brain to provide each with some support (Panksepp 1998: 44-45), but the bottom-up neuro-scientific approach provides greater insight into the evolution of consciousness. Neuroscience identifies a functional role for emotion in the neurological processes occurring prior to further emotional interaction in response to cognitive processes, and prior to the learning of socially appropriate responses.

Overpowering emotions tend to be categorised according to the feelings invoked, but these feelings are conscious expressions of the underlying functional role of emotion in the motivation of basic behaviours. Panksepp identifies 'seeking', 'rage', 'fear' and 'panic' as the basic emotional repertoire in all mammals, including humans. Seeking is a reward reinforcement system, rage is a response to frustration, fear and

panic assist in avoidance of pain and threat to life, and also initiate signals of distress to the social group. At some time in mammalian evolution motivations also developed of lust, sorrow, care for others, and an impetus to play (Panksepp 1998: 52-54).

Neurotransmitter interaction is as important as functional anatomy to the modulation of emotions (Thagard 2002: 429-446), but is too specialised a topic for brief description here. Motivational seeking systems are complex, dependent upon arousal-based ‘dopamine circuits arising from the midbrain nuclei’, and the reinforcement of ‘consummatory behaviours’, mediated by circuits passing through the lateral hypothalamus (Panksepp 1998: 144-146). Rage circuits pass through the amygdala and the hypothalamus. Fear and panic systems relate to areas in the brainstem associated with pain responses, but have differentiated during evolution to include limbic areas also involved in sexuality and maternal instinct. The anatomy of social bonding and sexuality is complicated by structural differences between male and female brains, but again nuclei in the hypothalamus are involved (Panksepp 1998: 236). Rough play, which is predominately somato-sensory, involves the thalamus and the somato-sensory cortex more than do other emotional urges, but also involves the hippocampus and associated nuclei (Panksepp 1998: 291). In sum, many areas of the brainstem, midbrain and limbic system are activated during heightened emotion (Panksepp 1998: 291), but with the particular involvement of the amygdala and the hypothalamus in the limbic system and the peri-aqueductal gray (PAG) in the brainstem (Panksepp 1998: 144, 195, 208). The PAG receives emotional inputs from the limbic system and inputs from the bodily viscera, and is located close to the reticular formation. That Damasio should stress the reticular formation, while Panksepp refers to the PAG, does not constitute a significant difference in their theories of consciousness, for many of the brainstem regions close to the reticular formation are cooperative in homeostatic monitoring (Parvizi and Damasio (2001: 137, 151-153). Parvizi and Damasio have reassessed the anatomy of the ‘centro-medial’ brainstem, and conclude that all the anatomically-differentiated nuclei therein play a role in the generation of the ‘proto-self’ (Parvizi and Damasio 2001: 147-153).

The remarkable overlap of brainstem functions revealed by Parvizi and Damasio might be a fortuitous combination of anatomical units, or might indicate a useful anatomical and functional integration engendered by evolution. In fact, these functions – wakefulness, basic attention, and emotion – are interrelated and all aim, in one way or another, at achieving homeostatic balance (Parvizi and Damasio 2001: 152).

To summarise, consciousness does not begin with thought but with feeling, as a prototypical awareness of self constituted from variations in feeling tone produced by approximation to bodily homeostasis. Core consciousness becomes extended and enriched in the course of evolution by emotionally driven action responses and by increases in the cognitive complexity required to co-ordinate complex behaviours.

Qualities of consciousness

To locate the origins of the sense of self in awareness of bodily sensory information relayed from nuclei in the brainstem does not amount to a full explanation of the processes underlying consciousness. In particular, Parvizi and Damasio's explanation that in the mechanism of 'core consciousness' the '...continuously generated image of knowing...is a feeling', stands in need of justification as to why knowledge of information should need to take a conscious qualitative form. Llinás (2001) attempts to answer that question. He rejects the contention that the phenomenal 'qualia' of subjective conscious experience are of comparatively recent origin, or that consciousness is an emergent accident that is pointlessly epiphenomenal, and only properly a matter for psychological and philosophical inquiry (Llinás 2001: 201-202).⁴

On the contrary, he explicitly adopts the mind/brain identity view that 'neuronal activity and sensation are one and the same event' (2001: 218). He therefore embraces the implication that qualia must be an 'intrinsic aspect' of the brain:

...qualia are functional electrobiological events supported by particular sets of neuronal circuits and related to the activation of some neurons and the silence of others within a network (Llinás 2001: 210).

Qualia facilitate the operation of the nervous system by providing well-defined networks, the simplifying patterns that implement and increase the speed of decision and allow such decisions to re-enter (the

system) and become part of the landscape of perception (Llinás 2001: 221).

Llinás bases his theorising on an evolutionary perspective, which envisages neuronal systems evolving to enable multi-cellular creatures to coordinate the ‘irritability’ and ‘motricity’ (mobility) of individual cells (Llinás 2001: 58-59, 212). In the course of single to multi-cellular evolution, creatures handed over the control of motricity from individual cells to specialist nerve cells, which developed specialised sensory sensitivity to the ‘universal’ properties of the world, and ability to coordinate reflex responses to harmful or beneficial events (Llinás 2001: 60-64).

Despite the importance of the reflex response, Llinás argues that complex nervous systems developed for predictive, not reflexive purposes, for otherwise such systems would be incapable of responding to scenarios with sufficient speed to ensure survival (Llinás 2001: 21-29). Complex brains respond to sensory information with motor commands that must be fine-tuned to real-time changes in circumstances (Llinás 2001: 26). In many situations of defence and attack, decisions made by the brain could prove fruitless, as motor signals to muscles would be too slow to ensure survival or success (Llinás 2001: 24). The brain therefore gains time by predicting events, and having at its disposal a reflexive repertoire of prior planning, a ‘reality emulator’ in order to expedite response by simplifying processes of assessment (Llinás 2001: 39). Damasio’s ‘extended consciousness’ is for Llinás the self as the ‘centralization of prediction’; at its disposal are a suite of reflexive assessments of reality, expressed in ‘premotor’ emotional patterns which release a suite of motor responses, which Llinás calls ‘fixed action patterns’, or ‘FAPs’ (Llinás 2001: 134).

Llinás’s view does not diverge from Damasio and Panksepp with regard to the anatomical causes of consciousness, but his fixed-emotion-initiating-fixed-action account provides a functional explanation of the emotional mediation of the activity of the main sensorimotor pathways. Emotions are pre-determined ‘neurobiological *a priori*’ (Llinás 2001: 58), which speed the selection and initiation of FAPs. Emotions arise in response to sensory input, mainly in the cingulate cortex and hippocampus, in the amygdala, and under the control of the hypothalamus. Emotions trigger FAPs via connections between the hypothalamus and the basal ganglia. The basal ganglia maintain FAPs in a state of inhibition, awaiting immediate release into the thalamo-

cortical system in response to emotions, and in synchronicity with hypothalamic-induced endocrine alterations to bodily preparedness for action (Llinás 2001: 155-164).

Qualitative emotional feelings are the conscious expression of the unconscious simplification and initiation of fixed motor responses to sensory input.⁵ Feelings are events ‘intrinsic’ to nervous systems, usually occurring after sensory initiation, but also occurring without direct external cause. An exemplary case is long-term physical and psychological pain, for both of these sensations are typically generated in the cingulate cortex, and it is possible for both sorts of pain to be felt without any direct causal event at a bodily location (Llinás 2001: 159). Llinás’ argues that sensations are intrinsic, demonstrably isolable from peripheral bodily causes, and capable of separate occurrence in dreams, for ‘the sensations we feel during the course of a dream are a complete fabrication on the part of our brain’ (Llinás 2001: 160). Thus, while FAPs are momentary neuronal initiations of external motor events, their initiating emotions are entirely intrinsic to the brain, but are consciously sensed during the self-monitoring of bodily homeostasis.⁶

In sum, in broad agreement with Damasio and Panksepp, Llinás suggests that fully developed consciousness arises from the ‘radial communication’ of the thalamo-cortical system to the cerebral hemispheres (Llinás 2001:126), but adds the interpretation that the function of consciousness is to provide predictions that are necessary for rapid choice amongst a plethora of possibilities:

Given the complexity of the decisions and the speed at which the nervous system must implement a given global strategy, the only solution that will work is one in which the animal is *conscious* of the particular emotional state. Why? Because consciousness has the great ability to *focus* – this is why consciousness is necessary. It is necessary because it underlies our ability to *choose* (Llinás 2001: 168).

Emotional pathways facilitate rapid comparison between external sensorimotor information and the internal state of the organism, choice amongst a FAPs and fine-tuning to circumstances. Llinás thinks that the expression of emotions as feelings, that is, as components of qualia, is functionally purposive and is the origin of consciousness, which focusses attention on matters vital to assessment and prediction.

Llinás argues that the neuronal bases of qualia are functional groups of neurons oscillating together. Qualia are evanescent, systematic, cooperative communications

between certain groups of neurons. Studies during brain operations (Penfield 1950: 6-7, 157-159) have established that such groups can be inhibited or activated by direct electrical stimulus to the neo-cortex. Such group communications can be anaesthetized (Llinás 2001: 204); they cease during deep sleep but they re-occur in dreaming during REM (rapid-eye-movement) sleep, and upon awakening (Llinás 2001: 218). Llinás identifies qualia with the frequency of oscillatory firing of neurons. During deep sleep, the brain as a whole electrically oscillates at .5-4Hz (Llinás 2001: 207), but in waking, neurons in the visual neocortex oscillate at around 40hz, and propagate the synchronicity of this frequency between nuclei in disparate regions (Gray et al 1989: 334-337, Crick 1994: 243-246, Llinás 2001: 122). Such simultaneity over distance is apparently enabled by a capacity for the speed of transmission of electrical signals along axons to be fine-tuned to accommodate delay along cognitive pathways (Pribram 1999: 22, 27).⁷

Other functional neuronal systems have different frequencies. In particular, the inferior olivary nucleus in the brainstem oscillates at 6-12 Hz, and imparts this frequency to the cerebellum, which co-ordinates movement and fine motor control. This frequency appears externally as the ‘physiological tremor’ of muscles at rest (Llinás 2001: 48). If such a tremor were not present the brain would be defeated by the task of integrating and controlling muscle activity. Only by simplifying the task into a discontinuous sequence of commands, synchronised to the physiological tremor, does the combination of conscious and unconscious fine control of multi-muscular limbs become possible; Llinás hypothesises that this requirement to control motor timing by oscillatory tuning ‘gave birth to the generation and nature of the mind’ (2001: 50).

Llinás argues 1) that functional neuronal group simultaneity adds an intrinsic temporal dimension to the internal mapping of the external world. 2) That despite sensory input and motor output, spatio-temporal neuronal integration forms a closed system. 3) That ‘global temporal mapping’ generates cognition. 4) That the thalamo-cortical system conducts the generation of ‘dynamic oscillatory states’ in response to sensory stimuli:

The thalamo-cortical system is a close to isochronic sphere that synchronously relates the sensory-referred properties of the external world to internally generated motivations and memories. *This temporally coherent event that binds, in the time domain, the fractured components of external and internal reality into a single construct is what we call the “self”* (Llinás 2001: 126, his italics).

Llinás, Panksepp and Damasio agree on the ‘bottom-up’ approach to understanding consciousness and on role of emotion in modulating the generation of a thalamo-cortical self, which has its foundation in the sensorimotor integrating functions of the brainstem. Llinás adds an oscillatory-synchrony theory of consciousness and conscious qualia, and embeds that theory in evolutionary processes that have facilitated the development of an intrinsically closed system that emulates ‘universal’ features of the external world. Conscious qualia, in his account, are necessary simplifications of sensorimotor information, which, like fixed action patterns (FAPs), are intrinsic and vital to effective brain function. This is because, in a welter of information and possibility, qualia organise and reduce the available input options, enabling swift prediction and so making survival possible.

Emotional controls

Llinás notes that emotions trigger fixed action patterns, and that the feeling-tone of emotions in sensory qualia helps to give rise to consciousness, but does not explain how emotional pathways can influence the cognitive detailing of conscious events. Panksepp notes that emotion and cognition are two different systems in the brain, which enrich the basic sensorimotor responses of the ‘SELF’. As a gross simplification, the emotional system is limbic and the cognitive system is neocortical, and ‘the goal of cognitive processes is to provide more subtle solutions to problems posed by states of emotional arousal’ (Panksepp 1998: 318-319), yet the subtlety of cognitive processes seems to be no match for the ability of emotional systems to exert diffuse control over all brain and bodily systems:

...one can ask whether the downward cognitive controls or the upward emotional controls are stronger. If one looks at the question anatomically and neurochemically, the evidence seems overwhelming. The upward controls are more abundant and electrophysiologically more insistent; hence, one would expect them to prevail if push comes to shove (Panksepp 1998: 319).

It might seem that the two systems work in opposition, if heightened emotion is capable of prevailing over more reasoned cognition. In his ‘somatic marker hypothesis’, Damasio (1995) argues that this is not normally the case. Although emotional arousal can overwhelm cognition, emotional pathways normally operate interactively with the ventromedial prefrontal cortex in order to constrain complicated cognition to a reduced set of logical either-or option judgements, so speeding up decision-making and enhancing survival prospects (1995: 1415-1416). Damasio deduces, on the basis of observations that damage to the ventromedial prefrontal cortex leads to impaired experience of feelings, expression of emotions, and decision-making ability, that cognition and emotion are interactive at this location (1995: 1414). The range of cognitive choice in the face of complex external and social scenarios is constrained to dualistic decisions between good (appetitive or attractive) or bad (repulsive) by means of a somatic marker – an affective or bodily state - associated with similar past situations. The job of the prefrontal cortex is therefore associative and dispositional; it associates a new situation with memories of previous instances, and on the basis of that memory is disposed to initiate a somatic marker in the form of a real state of the body, or a ‘vicarious’ or ‘as if’ state (Damasio 1995: 1414). The somatic marker initiation is, therefore, an actual reactivation or an approximate reconstruction of a previous set of emotional linkages between the ventromedial prefrontal cortex, the amygdala and the insula (Damasio 1995: 1415). If a real affective body state is initiated, the result may be sufficient to appear in consciousness with enough force to override cognitive decision processes. An ‘as if’ body state may or may not appear in consciousness; either way, it will function to constrain the alternatives presented for cognitive decision-making.

Damasio’s hypothesis has considerable explanatory scope. Firstly, it explains that emotional control functions to minimise cognitive delay by constraining choice. Secondly, it identifies one instance (there may be more) of the interactive organisation of top-down cognitive and bottom-up somatic or body-state information. Thirdly, it explains the use of ‘as if’ recall of past situations in the generation of predictive decision-making. Fourthly, because of the involvement of memory, Damasio’s hypothesis identifies cognitive and emotional processes that are not just phylogenetic and ontogenetic, but are developmentally acquired over the lifetime of

the individual, and may therefore be amenable to educational modification by psychotherapeutic techniques. Panksepp notes that emotional episodes linked to appraisal of learning converge on the amygdala (1998: 317), which Damasio implicates in his hypothesis (1995: 1415). This developmental cooperation between emotion and cognition may turn out to include other structures associated with the ventromedial area of the prefrontal cortex, and associated with the amygdala in the limbic system, for Lazar et al (2005) have observed increased cortical thickness in the prefrontal area and in the right anterior insula, in a study of practitioners of insight meditation (*vipassāna*).

It has been hypothesized that by becoming increasingly more aware of sensory stimuli during formal practice, the meditation practitioner is gradually able to use this self-awareness to more successfully navigate through potentially stressful encounters that arise throughout the day. This eastern philosophy of emotion dovetails with Damasio's theory that connections between sensory cortices and emotion cortices play a crucial role in processing of salient material and adaptive decision making (Lazar et al 2005: 1896)

Lazar et al observed alterations to the cortical anatomy of meditators who have practiced on average for no more than ten years and for no more than six hours per week. Their findings support Damasio's hypothesis, show 'cortical plasticity' as a result of psycho-educational practices over time, and observe cortical thickening when cortical thinning is expected as a result of age-related degeneration (Lazar et al 2005: 1895). Although these findings are statistically significant, they represent information from only 20 participants, and require further confirmation and further studies to determine the proximate causes, for increased cortical thickness and efficiency may be due to several factors, including 'greater arborisation per neuron, glial volume or increased regional vasculature' (Lazar et al 2005: 1895).

Neural correlates of consciousness

There has been much discussion of the implications of research into the temporal binding of distant neuronal groups by oscillatory synchrony (Crick 1994, Llinás 2001, Engels 2003). One criticism is that the temporal binding of neural synchrony may be a necessary but not sufficient cause of consciousness (Engel 2003: 137, 146-147), another is that postulating the cause of consciousness in third-person scientific terms

does not close the philosophical ‘explanatory gap’: it is not yet an explanation of the inherently private, first-person, subjective experience of ‘what it is like’ to be conscious (Nagel 1974, McGinn 1989, Levine 1997).

The first criticism, acceptance of necessity but doubt about sufficiency, has force. Synchrony alone cannot produce consciousness without the ‘bottom-up’ functional brain organisation described by Damasio and Panksepp. It appears that there must be both mode of operation and dedicated functional structure. Llinás’ speculative intuition, that where there is temporal binding by neuronal synchrony there are likely to be rudimentary qualia, is not supported by his own evolutionary example. The subcortical synchronicity between the inferior olivary nucleus and the cerebellum only contributes qualia to consciousness when it is externally expressed and externally sensed as the physiological tremor in a muscular system (Llinás 2001: 29-35, 42-51). It is counter-intuitive to imagine that qualia could become conscious events before the evolution of a thalamocortical ‘proto-self’ capable of initiating ‘wakefulness, basic attention and emotion’.⁸

The second criticism, the explanatory gap, refers to the existential block on direct experimental access to consciousness. For the believer in mind-brain identity this block is just a duality of access (Dempsey 2004: 234-240), which is not scientifically significant given the observation that some of the contents of consciousness can be manipulated by stimulation experiments (Penfield 1950), so demonstrating correlation between parts of consciousness and their neural substrate. Against that view, Nöe & Thompson argue that precise ‘neural correlates of consciousness’ (NCCs) cannot be found (2004). They dictate that neural correlation requires an isomorphic, one-to-one match between the content of a conscious experience and its neural correlate: this is their ‘matching content doctrine’. They further dictate that neural correlation implies that a perceptual input must have a neural substrate, which is sufficient in itself to give rise to the phenomenal experience: this is their ‘minimum substrate thesis.’ Asserting that there are ‘no known examples of the right sort of content match’, they argue that the matching content doctrine and the minimum substrate thesis cannot be fulfilled, and they further argue that the idea of NCCs depends on an ‘internalist’ view of the mind that is now philosophically challenged.

It is not clear that neural correlation of content must depend upon isomorphic one-to-one matching between a percept and the ‘receptive field’ of one particular group of neurons. Baynes suggests that while perception has *content*, the receptive field of any one group of relevant neurons is a *vehicle*, so the isomorphism demand is inapplicable (2004: 32-37). Against Baynes, the content/vehicle distinction is itself inapplicable if Llinás is correct in asserting that ‘qualia are simplified constructs on the part of the intrinsic properties of the neuronal circuits of our brains’ (Llinás 2001: 222). If consciousness depends on a multiplicity of feedback systems it would be naïve to expect a particular consciousness to be isomorphic with the activity of a localised group of neurons, and naïve to expect a specifically isolable neural correlate or a specifically isolable conscious quale. It is not that NCCs do not exist, but that they may not exist at discrete locations with respect to discrete percepts.⁹ It is in this regard that Llinás cryptically suggests that the doubly-disjunctive world-percept-brain correlation is not isomorphic, but *homomorphic* (2001: 65). Homomorphism means ‘resemblance of form, without structural affinity’ (OED). Llinás’s point appears to be that although there is correspondence between the world and its neuronal representation, groups of neurons are implicated in many different spatial and temporal ‘coordinate system reference frames’ (2001: 64-67), which thereby conceal the isomorphism that underlies correspondence. Homomorphic processes are therefore analogous to encryption.¹⁰

I interpret Llinás to mean that sensory signals are highly amended by ‘top-down’ cognitive systems before they reach the ‘global workspace’ of the neocortex (Dahearn and Naccache 2001: 26-29), where many of the experimental correlations between experience and neuronal activity have so far been observed. It would appear that current qualia are constituted as much by feedback operations of stereotypical fixed actions, emotions, and past qualia, as they are from the initiating information from the senses. The sensed properties of the world are extensively modulated and transformed, as they are encoded to spatially, temporally and functionally separate sites in the neocortex (Varela Thompson and Rosch 1991: 93-98). Once information from all the senses is combined, processed and synchronised into the emotionally-mediated qualia of consciousness, explicit isomorphism may be rendered undetectable in practice, having been homomorphically rearranged in the creation of

‘extended’ consciousness as a global property of the whole neuronal system. It is by virtue of this global dispersal of interconnected feedback processes that, as Nöe & Thompson suggest, *precise* ‘neural correlates of consciousness,’ have not been found.

Notwithstanding Nöe & Thompson’s strictures about ‘matching content’ and ‘minimum substrate’, it can be argued that imprecise neural correlates of consciousness have been found for the genesis of consciousness in the monitoring of bodily homeostasis (Damasio 1999), and for gross alterations to aspects of consciousness, in clinical trauma and stimulation studies (Penfield 1950). What neuroscience has yet to identify are not precise correlates, which can be deferred for investigation after future improvements in real-time imaging techniques, but enabling mechanisms for the qualitative enrichment of experience that Damasio refers to as ‘extended consciousness’. These mechanisms are likely to be multiple interconnections between neuronal pathways, otherwise there could be no homomorphic dispersal of sensorimotor information, and no synchronous binding of disparate information into a unified consciousness that is capable of ‘first-person’ subjective appearances in the form of integrated successions of phenomenal events. Dehaene and Naccache argue that phenomenal consciousness depends on massive interneuronal connectivity, creating a ‘global neuronal workspace’ (2001: 1, 26). Crick and Koch characterise such a hypothetical connectivity as:

...a large array of unconscious specialized processors running in parallel from a unified, limited capacity ‘workspace’ that allows the local processors to exchange information (Crick and Koch 2005: 2).

Crick and Koch argue that the most likely anatomical structure responsible for such exchange and integration of consciousness is the claustrum, because of its overlapping connectivity to and from most cortical and many non-cortical regions:

...the claustrum may contain specialized mechanisms that permit information to travel widely within its anterior-posterior and ventral-dorsal extent to synchronize different perceptual, cognitive and motor structures. This postulated intra-claustrum mixing of information would make it quite different from the thalamus, a subcortical structure that also enjoys widespread and reciprocal connections with most cortical regions, but that does not possess any obvious mechanism to directly link its various constitutive nuclei (Crick and Koch 2005: 6).

...the neuroanatomy of the claustrum is compatible with a global role in integrating information at the fast time-scale. This should be further experimentally investigated, in particular if this structure plays a key role in consciousness. What could be more important? So why wait? (Crick and Koch 2005: 7).

The posthumous publication of Crick's hypothesis that the claustrum facilitates consciousness is his final contribution to the understanding of human biology. He indicates an area for future research, not just for neuronal correlations, but for necessary proximate causes of consciousness.

Summary

The brain has sufficient capacity to control and guide the course of embodiment in the world over a lifetime. Researchers referred to in this chapter have been selected because they all comment on the wider implications of basic neuroscientific research. They are interested in explaining consciousness by reference to associations between brain functioning and conscious events. They hypothesise that when a brain event becomes globally-available across the majority of the neuronal system it becomes 'overt', or 'minded' (Damasio 1995: 1414). Thus consciousness is a synonym for mind in neuroscientific discourse. These neuroscientists attempt to explain why consciousness has arisen, how qualia can model or represent the world, and how specific sensory, emotional and cognitive modalities become unified into conscious events forming ongoing experience. There is agreement that consciousness originates in the requirement to maintain bodily homeostasis, and that the development of consciousness depends on the evolution of brainstem-thalamo-cortical pathways. Basic maintenance of bodily homeostasis is an unconscious process, but homeostasis could not be maintained over the orderly pursuance of life in an external world without the rapid predictive capacity provided by the conscious focussing of sensorimotor information. Possible neural mechanisms for the experiential integration of consciousness are now the object of active research investigation.

Several issues emerge from this neuroscientific investigation of the origin of the self and of consciousness, which will be compared with other points of view in the course of the thesis:

1. Synchronised electro-chemical events along the neuronal structures of the central nervous system are sufficiently complex and functionally ordered to correlate with mental events.
2. By virtue of its origin in synchronisation, consciousness is an inherently temporal process.
3. Neural events form a 'closed' system. Sensations are intrinsic to that system. As a property of the system, pain is only representative of its proximate cause.
4. Self-consciousness originates in the requirement to modulate bodily homeostasis in the presence of external destabilisation. The nervous system is, therefore, only 'closed' with respect to mechanism, not with respect to function: self-consciousness is a response to embodiment under the influence of an external world.
5. Basic self-consciousness is a middle-level event, that is to say, it arises as a result of the interrelation of incoming sensory and outgoing motor information along brainstem-thalamo-cortical pathways (Jackendoff 1987: 286-301, Crick 1994: 205-207). Self-consciousness is not an intrinsically 'higher-level' or 'top-down' property of the computational complexity of the neocortex.
6. Extended consciousness is facilitated by the complex interconnectivity that allows information to be 'globalised' across neuronal ensembles throughout the brain. The most recent hypothesis, yet to be verified, is that the necessary connective functions for extended consciousness are located in the claustrum.
7. Consciousness functions to focus attention, whereupon its qualitative nature facilitates the rapid integration of many modes of representation, allowing the external world to be assessed for the purposes of rapid prediction and response.
8. The assessment of conscious and unconscious cognitive information is controlled by 'somatic markers', which are either real activations or 'vicarious' 'as if' reactivations of affective pathways in the limbic system.
9. From the above points it can be inferred that human consciousness is a qualitative form of a functional property that is not uniquely human. Even for less complex brains, basic conscious feelings are likely to represent the presence of homeostatic options. The increasing qualitative differentiation of those representations corresponds to the increasing neocortical complexity in higher mammals (Crook 1983).

10. The neuroscientific findings presented in this chapter reinvigorate the philosophical discussion of the nature of the self. In particular, there may be a parallel between Damasio's distinction between 'core' and 'extended' consciousness, and the distinction made by linguists between the 'subject' that attends to immediate experience and the 'self' that is historically constituted (Lakoff and Johnson 1999: 262-280).

Notes to Chapter 3

¹ Sources in this chapter are restricted to functional anatomy rather than to physiology, and to a selection from amongst neuroscientists who are interested in the nature of consciousness. In consequence, no information is presented about the sort of neurochemical imbalances that are implicated in mental illness, or about the internal and external chemistry of the cellular environment (Thagard 2002).

² For location of anatomical features see Figures 1-5 on pages 39-41.

³ Broca observed the ‘limbic lobe’ bordering the medial surface of the cerebral hemispheres in 1878. In 1937 Papez suggested that these structures formed circuits that were responsible for the expression of feeling and emotion. Maclean coined the term ‘limbic system’ in 1952 (Maclean 1989: 247, 257)

⁴ The philosophical term ‘qualia’ refers to the subjective qualities of conscious experience, rather than to the qualities of any other thing. Llinás suggests that even single nerve cells are capable of ‘proto-qualia’ (Llinás 2001: 28) and mistakenly cites Crook (1983) as asserting that only higher mammals have qualitative experience. In fact Crook, who is one of the interview participants in this thesis, largely restricts his discussion to the conceptual difficulties attending the attribution of consciousness to animals (Crook 1983: 11-14). There is disagreement about the levels of complexity of a biological system at which the property of consciousness emerges, to be explicated later in the thesis with the aid of notions of ‘Empedoclean’ and ‘Democritean’ properties. It should be noted that qualia are theoretical constructs. Metzinger considers that qualia do not exist (2003: 69-86). They probably do not exist as quantifiable objects, but the term is useful for the description of dynamic combinations of phenomenal properties.

⁵ ‘Emotion’ refers to conscious awareness of the autonomic effects generated by electro chemical events along certain functional interconnections.

⁶ Emotions are intrinsic because they are expressions of a neurobiologically closed system. Llinás implies that, within biological closure, the interconnected activity of interneurons forms another enclosure, distinct from the activity of afferent and efferent neurons that carry sensory and motor information with respect to the world (2001:80-81). Varela Thompson and Rosch (1991), whose work is discussed later in the thesis, think that the totality of the central and peripheral nervous system marks the significant boundary of closure. I will be arguing, on the contrary, that although the neuronal system is biologically closed, it is not functionally or causally closed, for it forms part of a more encompassing, ‘holistic’ system of correspondence relations with the external world.

⁷ Rapid neuronal events terminate before they can be sufficiently distributed throughout the brain to coordinate with awareness. For Pribram, conscious awareness is a monitoring process which works ‘by inducing the delay in processing necessary for the signals in a circuit to engage extended parts of the synaptodendritic web’

(1999: 36). Thus, habit is rapid and unconscious whereas monitoring is delayed and conscious.

⁸ Panksepp asserts that ‘the indirect evidence seems overwhelming that other mammals do have basic forms of affective consciousness...but they do not seem to be able to reflect upon such feelings as we do’ (1998: 300-301).

⁹ The hypothesis of a particular ‘grandmother’ neuron that fires in response to each particular percept is a naïve response to dynamic complexity. If neuronal systems work in parallel there may be no direct correlation between a neuron and a concept that identifies a percept, for any percept may be the result of relations between many neurons and many systems (Freeman 2003: 47-53).

¹⁰ Pribram makes a similar point to Llinás’s homomorphism when he suggests that memories are ‘encoded’ in the hippocampus by holographic-like processes that are patterned in space and time, so allowing individual neurons to participate usefully in many different ‘frames of reference’ (Pribram 1999: 32-33).

Chapter 4

The Interviews

Introduction

This chapter consists of summaries of interview testimony provided by ten Buddhists of British ethnic origin. The interviews were undertaken in order to gather a range, rather than a quantitatively representative sample, of contemporary Buddhist ideas about the nature of mind, with the intention of subjecting those ideas to hermeneutic, philosophical interpretation. The inclusion of opinions representative of all Buddhist organisations active in Britain was not the intention and turned out not to be a practical possibility because several organisations declined to nominate interview participants. There was therefore no necessity to check the process of qualitative information retrieval against statistics generated from questionnaires or structured participant observation. I have, however, been a participant observer of the British Buddhist scene for 15 years, and am not aware of any Buddhist views of the nature of mind that are neglected in the course of the interviews.

The interviews are prefaced by some brief information about Buddhism in Britain and a review of some of the relevant literature, which serves to place the subsequent interview summaries in historical and geographical context, and to indicate some areas of academic contention. In the course of that review I note some caution amongst Buddhist practitioners about the utility of academic research, and agree with Morgan (1996) that the testimony of believers is an essential part of the overall picture generated by religious studies. I promote Pye's tripartite theory of the dynamics of religious change as a better alternative in the case of studies of British Buddhism to the more commonly used but rather static 'spectrum of adaptation' schema. Although Mellor (1998, 1991) demonstrates that the colonial encounter Buddhism encouraged a Protestant form of British Buddhist religiosity, I note some flaws in the 'Protestant Buddhism' thesis, and contend that such monolithic comparative theories are no longer capable of encapsulating the diversity of contemporary Buddhism in Britain or elsewhere. I expand on Gombrich and Obeyesekere's remark that 'the integrity of the Sangha is conceived to rest not so much on its orthodoxy as on its orthopraxy'(1998: 446), to speculate that it will be

possible for a diversity of views about the nature of mind to co-exist in contemporary Buddhism.

The participants and their interviews

The schedule of interview questions was designed to explore opinions about the historicity of traditional views of the nature of mind, the current opportunities for dialogue within Buddhist organisations about the nature of mind, the impact of neuroscientific and psychological accounts of mind, and about the philosophy of mind. No evidence is retrieved from the interviews to suggest that a significant level of discussion is occurring in British Buddhist organisations about neuroscientific explanations of the nature of mind. The only evidence of substantive discussion found during the data collection for this thesis was a debate about mind in the journal of the Western Ch'an Fellowship (Lyne 2004), a transcript on the New Kadampa Tradition website, now deleted, of a formal debate on mind at their Pocklington retreat centre (Madhyamaka Centre and Gyatso n.d.), and brief attention given to the issue by Sangharakshita (1998a) in a review of Batchelor's *Buddhism Without Beliefs* (1997).

The participants generally display a devotional attitude to tradition, and utilise tradition as a guiding resource in the acquisition of the transmissible craft skill of Buddhist practice, rather than treating tradition as a set of explanations amenable to historical and analytical critique. Tradition, therefore, is seen as requiring practical interpretation in daily life rather than cognitive reassessment on the basis of new information. There is some interest in the affinities and the differences between Buddhism and psychology, and two participants have investigated the relationship between Buddhism and evolutionary theory. These scientific interests do not extend to neuroscience, which is felt either to present 'bottom-up' explanation where 'top-down' cognitive explanation is more relevant,¹ or to be a completely separate, empirical discourse, relatively unconnected to more meaningful discourses about social, ethical and soteriological practice. Attitudes to the western philosophy of mind are various, depending on interest and knowledge, but there is a marked preference for the use of traditional Buddhist terminology. When that terminology is translated into western philosophical alternatives the participants could be

characterised as holding a range of opinions from realism to idealism. The meaning of key terms used in the interviews was not defined at the outset, to permit the emergence of meaning in the dialogue. The key term appearing in the dialogues is ‘mind’ rather than ‘consciousness’, although the two are roughly synonymous. The participants use the term spontaneously, without prompting, but they are not necessarily referring to a particular reified ‘thing’. They only rarely discuss unconscious mental functioning, but consider mind in sense of the primary (immediate) and secondary (remembered) awareness of conscious experience. They generally consider the subjective experience of awareness to be foundational for any other meaning for ‘mind’, and foundational for any conclusions based on observation, including scientific observation. They appear to be speaking in accordance with the common-sense view that the mind is qualitatively different from other phenomena, and the view that the difference is constituted by awareness itself: that mind seems to be some sort of ‘vehicle’ for phenomenal contents.

The participants display facility in the terminology used by their respective Buddhist traditions to refer to the mind, and a natural facility with western ‘folk’ psychological terms, but they are not completely conversant with the neuroscientific evidence that is presented in this study. None of the participants, myself included, have a full understanding of the electro-chemical and anatomical details of neuronal functioning, but all have the general understanding that is expected of a well-educated and informed lay person in a modern society with multiple communication media. There is some unavoidable interpretation involved in the summarising of the interviews, but an attempt has been made to present responses to the most important issues discussed as quotations, and to restrict interpretative commentary to subsequent chapters.

The interview participants, most of whom fulfil leadership roles or are senior members of Buddhist organisations, are as follows: Caroline Brazier, whose Buddhist name is Prasada, and David Brazier, whose Buddhist name is Dharmavidya (Order of Amida Buddha); John Crook (Western Ch’an Fellowship: WCF); Ken Jones (Engaged Buddhism, Kanzeon Sangha, and the Western Ch’an Fellowship); Jim Pym (Pure Land); Robin Cooper, whose Buddhist name is Ratnaprabha (Friends of the Western Buddhist Order: FWBO); Jonathan Shaw (Awakened Heart Sangha):

Bhikkhu Vajiro and Bhikkhu Gavesako (Theravāda: Amaravati Forest Sangha); and Andy Wistreich (Foundation for the Preservation of the Mahayana Tradition: FPMT). Caroline and David Brazier are hereafter referred to by their Buddhist names for ease of differentiation. Robin Cooper is also referred to by his Buddhist name, by which he is most widely known. Bhikkhu Vajiro and Bhikkhu Gavesako's original names were not ascertained. Bhikkhu Vajiro holds the status of an Ajaan (teacher).

Contemporary British Buddhism

History

Substantial European Buddhist scholarship was inaugurated in the 1830s by Burnouf, and begun in Britain in the 1860's by Müller. British scholarship was given significant structure by T. W. Rhys Davids' foundation of the Pāli Text Society in 1881 (Welborn 1968: 54, 101, 223). British Buddhist religious practice begins with the foundation of the Buddhist Society of Great Britain and Ireland in 1907 (Bluck 2006: 7), but member's interest in practice was peripheral to their interest in scholarship until Christmas Humphreys re-founded the Buddhist Society in 1924, initially as a 'lodge' of the Theosophical Society. The Buddhist Society was at the heart of a gradual development of interest, mainly in Theravāda Buddhism, up until the Second World War, after which its range of courses and 'Summer Schools' expanded to encompass Tibetan and Zen traditions, notably lectures given in 1953 by the influential lay Rinzai Zen Buddhist D. T. Suzuki. Following the Chinese invasion of Tibet, the Buddhist Society assisted in the formation of the Tibet Society, which continues to represent the political and cultural interests of the Tibetan Government-in-exile. During the 1960s the Buddhist Society's culturally conservative atmosphere became unrepresentative of the growing interest in Buddhism among the denizens of the burgeoning counter-culture. By the 1980s the Society had lost its central significance, as individual traditions consolidated in their main centres, retreat centres and urban groups, and as a greater variety of independent lineage variations began to appear. But the seeds of this late diversity were sown and encouraged by the typically English welcome offered by Buddhist Society under the judicious guidance of Christmas Humphreys (Oliver 1979: 49-64, Bluck 2006: 6-10).

Anagārika Dhammapāla established an indigenous Sri Lankan Buddhist *vihara* in London in 1928, and the indigenous Thai Buddhist Buddhapadipa Temple was established in 1966. The western bhikkhu Kapilavaddho formed the English Sangha Trust in 1956, which eventually established a monastery (*vihāra*) for westerners in the Thai Forest tradition of Ajaan Chah in 1977, with the American bhikkhu Ajaan Sumedho as Abbot. The FWBO was founded in 1967 by Sangharakshita, as a new form of Buddhist Sangha that was ‘neither monastic nor lay’ (Oliver 1979: 64-73).² In 1967 Akong Rinpoche and Chogyam Trungpa Rinpoche founded Samye Ling, the Tibetan Karma-Kagyu monastery in Eskdalemuir. Sōka Gakkai practice in the Japanese community became a convert pursuit after Richard Causton became leader in 1975, and expanded rapidly thereafter (Bluck 2006: 90).

This enumeration of historical milestones cannot capture the exponential growth of traditions and adherents during the 1980s and 1990s, such that British Buddhism now reflects the diversity of the wider Buddhist world in miniature. Most of the significant traditions have established a presence within this fairly small island nation, and several have affiliated groups operating in most major cities.³ This state of affairs is an indication of ‘globalisation’ in practice. The long-term consequences remain to be seen of this cohabitation of schools, which had become culturally and geographically distinct over the centuries. The location of religious traditions in close proximity within a pluralist society, where there is an open marketplace of philosophical ideas and cultural practices, might be expected to initiate rapid change on an evolutionary model as an aid to social relevance. Conversely, evolutionary processes might encourage retrenchment of traditional doctrine and practice as an aid to low-level, ‘niche’ survival as a romantic reaction to modernity. Particular views of the nature of mind may influence whether Buddhism, which encourages transformations of mind, will change or retrench in response to the globalized context. Of course, the globalized context is itself not static. The comfortable state of western societies may prove to be transitory as economic and environmental forces influence the development of India and China, and political interactions between nominally Christian and largely Islamic societies.

Buddhist affiliation

According to the questions on religious affiliation and ethnicity in the United Kingdom 2001 census, there are 152,000 Buddhists in the United Kingdom, constituting 0.26% of the population. This proportion is slightly lower than the case of Buddhism in America, where there are estimated to be 1.5 million Buddhists (Lampman 2006), or 0.68% of the population. Again according to the 2001 Census, 59,000 British Buddhists are of 'white' ethnic origin, 35,000 are Chinese, 15,000 are Asian, 5,000 are of 'mixed ethnicity', and 2,000 are 'black'. (Kennedy 2004: 155 n2, Bluck 2004, 2006: 13-15).⁴

The Buddhist organisations that are active in Britain today are broadly divisible into those that mainly attract support from the 'white' or 'convert' Buddhists who constitute 40% of the total number of Buddhists in the UK, and those that mainly support the cultural and religious practice of indigenously Buddhist immigrant communities. Although this division is evident it is permeable, and fraternal relations generally obtain. For example, the monks and lay supporters of the Forest Sangha at Amaravati Monastery near Hemel Hempstead, Hertfordshire are mainly convert Buddhists, yet the monastery has links with the immigrant Thai and Cambodian communities, and depended for its establishment on financial support from the Thai community. There is a marked difference in practice between 'convert' and 'ethnic' lay Buddhists, in that the former (with the exception of Sōka Gakkai members) have a tendency to engage in meditation practice, whereas the latter tend to be concerned with devotional and supportive relations with the monastic Sangha (Bluck 2006, Bell 1991: 197). In the case of ethnic organisations, Buddhism continues to be an integral part of cultural life and communal identity of immigrant communities. In the case of convert organisations, Buddhism may be an integral part of the personal identity of individual lay practitioners, but is not necessarily an integral part of their identity as members of secular society. Convert Buddhist organisations attract supporters who are higher-educated, middle-class, and in the 20-40 age range, although that demographic may be a temporary effect of the burgeoning of interest since the 1960's (Wilson and Dobbeleare 1973: 122-123), Kennedy 2004, Bluck 2006).

Group Affiliation

Waterhouse (1997: 16) notes that estimates based on the number of traditional organisations and their affiliated local groups have to suffice in the absence of accurate membership information. Three convert Buddhist organisations stand out from the rest by virtue of their greater size, tendency to proselytize, tendency to claim some degree of exclusivity as the most appropriate Buddhist path, and also by virtue of controversy surrounding the lineage legitimacy of their teachers.⁵ Although all three are estimated to have about 5,000 members each, Sōka Gakkai has the largest organisational structure, claiming 300 affiliated local groups. This international lay tradition, established in Japan in the 1930's and in Britain by the early 1960's, follows the example of the 12th century Japanese monk Nichiren by eschewing meditation in favour of chanting in homage to the Lotus Sūtra. Next in size is the New Kadampa Tradition (NKT), which claims 183 affiliated groups. This organisation has expanded rapidly since its foundation in 1991 by Geshe Kelsang Gyatso in a schismatic separation from the mainstream Tibetan Gelugpa tradition. Regrettably, neither Sōka Gakkai nor the NKT nominated a participant in this research. The Friends of the Western Buddhist Order (FWBO) is a syncretic or 'all schools' tradition, with teachings and practices that reflect the religious career and insights of its founder, Sangharakshita (Dennis Lingwood), who claims both Theravāda ordination and Mahāyāna empowerments. The FWBO has 78 groups in Britain, as well as affiliated centres in India, Spain, Australia, New Zealand, and America. Although the FWBO has fewer groups than Sōka Gakkai or the NKT, FWBO groups are well established in cities throughout the UK. Many Buddhists who eventually find a home with other traditions, or none, are first introduced to meditation by well-advertised and well-organised FWBO beginner's classes.

It is ironic that, as a result of the NKT schism, the Gelug-pa tradition that was dominant in Tibet should be eclipsed in Britain by the Karma Kagyu tradition, which has a large monastic institution at Samye Ling, near Langholm in the Scottish Borders, and is developing Holy Island off the coast of Arran as a centre for interfaith events, including psychotherapeutic courses associated with 'New Age' spiritualities, but has the primary purpose of facilitating traditional long-term solitary retreats. Again, this organisation did not nominate a participant in this study, but the

participant from the Awakened Heart Sangha does represent a combined Kagyu-Nyingma lineage.

Although Bluck records 111 Zen and 21 Ch'an groups they fall into many different lineages as an effect of association with individual indigenous teachers. They are generally small or even single-group organisations. The largest is the Serene Reflection Meditation tradition, a Rinzai Zen transmission through the westerner Peggy Jiyu Kennett, which is centred on Throssel Hole Priory near Carrshields in Northumberland, and has 32 affiliated groups. Thich Nhat Hanh's Community of Interbeing is located in France, presumably because of French colonial connection with his native Vietnam, but has 28 local groups in Britain. Although neither the Serene Reflection tradition nor the Community of Interbeing are represented in this study, smaller Zen/Ch'an groups are represented by Ken Jones, a leading advocate of engaged Buddhism, who chooses to practice eclectically, and by John Crook, who received transmission from the Taiwanese Ch'an abbot Master Sheng-yen and permission to found the Western Ch'an Fellowship in Britain. The Amida Trust, which nominated two interview participants, may represent a new form of Buddhist organisation. It is a socially engaged, dynamic, Pure Land group, which remains small enough to function by personal contact. It includes an ordained Sangha but does not emphasise hierarchy. It is trans-national, with four groups in Britain but six around the globe, and is transparent to outside observation by virtue of its open webpage and 'weblogs'. The Awakened Heart Sangha is more reserved in its dissemination of information, with barriers to entry on parts of their website, but it carries the transnational model even further, for it mainly functions by internet connection with the centre, rather than by the establishment of local support groups.

The most significant omission in this study is not the lack of representation from any particular organisation, but the lack of any representative from the cohort of self-certifying Buddhists who do not attend organisations. The existence of this cohort is inferred by Bluck from the discrepancy between the 2001 Census figures and estimates of organisation memberships. He concludes that 'many Buddhists in Britain have little formal contact with Buddhist groups, practising instead on their own...' (Bluck 2004: 3, 2006: 16-17). If Bluck's conclusion is valid, the normal academic practice of studying Buddhists according to their allegiance to organisations

is a practical convenience, which cannot be guaranteed to be representative of ‘convert’ British Buddhists (Bluck 2004: 3). Amongst the interview participants Jim Pym pursues a fairly solitary religious practice in retirement, which may be quite close to the norm for the unaffiliated cohort, but his role as an author, his nominal ordination for funeral purposes, his editorship of ‘Pure Land Notes’, and his long history of engagement with Zen and Pure Land traditions mean that he is not a typical representative of those who are sequestered from their peers and therefore inaccessible to research.

Research into British Buddhism

It was an interesting finding of this research that, despite or perhaps because of the higher education qualifications of the participants, there was a current of feeling that the academic study of Buddhism is not a worthwhile enterprise. This is naturally the case from a soteriological perspective, but the stress some participants place on the point gives pause for thought, for it implies unease about the relationship between Buddhist practice and Buddhist scholarship. It may, of course, be discomfiting for practitioners to discover that philologists have a more comprehensive knowledge of foundational texts. It may be discomfiting that the research standpoint of academic disinterest is not invariably accompanied by a clear statement about the religious affiliation of the researcher. Simply being treated as an object of study may be discomfiting, especially where there is little negotiation about the meaning and purposes of the research (Pawson 1996: 313). The participant’s caution about the utility of academic study has some justification in the case of the study of the transmission of Buddhism to the West, for the complexity of interactions between an old religion and a new context have proved difficult to characterise conclusively. It is salutary that Bluck reviews previous research and examines seven of the larger Buddhist organisations in great detail, yet concludes that ‘only tentative suggestions can be made about Buddhism’s specific appeal in Britain’ and that ‘an overall picture remains elusive’ (Bluck 2006: 190,191). The lack of an overall picture might be remedied by a critical review of the field and the establishment of compatibility between different research methodologies and their terminologies, but that task cannot be undertaken here. Because the methodological compatibility of previous

work is a peripheral question for this study, which is focussed on the very particular example of Buddhist responses to the standard scientific view of the nature of mind, I can only provide a brief review and make some brief suggestions as to why the characterisation of contemporary Buddhism in the West has proved elusive.

Pye notes a distinction between the broad reach of the historical method in the study of religion, which is liable to ‘obscure the complexities of things’, and the more localised application of abstract categories under ‘phenomenological’ theories that try to account for the dynamics of religious change (1969: 235).⁶ He accepts that in practice it may be difficult to distinguish between the two approaches, since phenomenological theories inevitably refer to historical data, but still he attempts to sketch the outlines of a phenomenological theory of the transplantation of religions. Under his tripartite theory, analysis is separated into the study of forms of *contact* between the religion and the new context, into forms of *ambiguity* resulting from ‘a degree of acceptance of factors prevailing in the new situation’, and finally into forms of *recoupment*.

[Recoupment]...will involve the reassertion or reclarification of that which was being transplanted in some adequate way. On the one hand the new expression of the religion will have a reasonable claim to identity with that which gave the impulse to the transplantation; but on the other hand it will not be simply identical to the older forms since it has expressed itself in terms of the factors of the situation which it has entered. The recoupment aspect is the most difficult to evaluate because it involves some sorting out of heresy and orthodoxy (or similar), that is, some attempt to elucidate the essential characteristics or content of the religion concerned, which is frequently a theological problem (or similar) for the adherents of the religion themselves (Pye 1969: 237-238).

The ambiguity involved in the dynamics of transitional processes is one reason why overall characterisations may prove elusive: analysis may indicate ‘the unresolved coexistence of elements belonging to the transplanting tradition and to the situation which is being entered’ (Pye 1969: 237), but conclusions must await firm evidence of recoupment, for example the appearance of clear Buddhist statements about the nature of mind in the light of neuroscience. It is interesting that Pye considers the essential characteristics of a religion to be a matter for the adherent rather than the analyst to decide. The study of religion should be as much a hermeneutic dialogue as a phenomenological analysis, for: the religious practitioner is

not just a thing-in-itself or phenomenal object, but a human thing-in-itself possessing the personal authority of an interlocutor.

Morgan (1996) notes that explanations of religion based on the authority of scholarship can appear overly descriptive and monolithic when contrasted with the more diversified and experiential accounts that are commonly provided by 'believers'. She cites the work of W.B. Kristensen in support of her contention that, 'as a principle', the testimony of believers should always be considered authoritative 'as a constant check on and challenge to the data we collect and the ways we present it' (1996: 3). The authority of believers is particularly liable to be discounted when reference is made to unobservable features of personal experience. The reason for this behaviourist bias is the inherent difficulty in verifying phenomenological accounts, which has already been discussed with respect to Wallace and Varela in Chapter 1. The countervailing difficulty is that when the testimony of religious experience is ignored then Morgan's principled attention to the authority of believers becomes a rather shallow exercise.

Not all testimony should be sacrosanct (Morgan 1996: 3). In particular, Sharf (1998) argues against unthinking acceptance of testimony about mystical experience, on the ground that such experiences are subject to prior influence by religious terminology and may even be motivated by the language of religious explanation. But mystical experience is an extra-ordinary case at the limits of communicability, whereas much religious testimony is concerned with fairly ordinary psychological changes to personal experience, which are commonly indicated by everyday terminology (Kennedy 2004: 152-154). Ordinary interpersonal human behaviour, including facial expression, gesture and language, developed in order to communicate experiences and intentions with varying degrees of honesty or deception. A valuable source of data is neglected, if scholars of religion exempt themselves from the pragmatic, 'folk' phenomenological interplay of interpersonal communication about experience, on the grounds that the probity of testimony cannot be verified. When the authority of 'believers' is elided by the authority of the scholar, an appropriate characterisation of a religion in the course of dynamic change is likely to prove elusive.

Pye's tripartite framework, with the caveat about the outsider (scholarly) usurpation of insider (practitioner) authority, can be illustrated with respect to studies of the introduction and growth of Buddhism in Britain. Pye imagined contact to be 'a very simple matter involving the means of communication...these means bear some relation to the factors of the situation into which the religion is being transplanted'. Contact between Buddhism and western civilisation was not at all simple, for the salient situational factors were complex colonial power-relations. Post-colonial studies, taking their lead from Said's critique of 'Orientalism' (1978), argue that colonisation was not only a geographical, but an ideological form of imperialism, which has led to the reconstitution of Buddhism in a western form (Almond 1988: 33, 140, King 1999: 148). Colonialism facilitated the expropriation of artefacts and texts for collections in the West, where oriental scholarship could study Buddhism as a purely historical, rational textual tradition (King 1999: 62, 145-146). This portability made Buddhism amenable to translation and interpretation at home, without the inconvenience attending the study of a living social practice attuned to the needs of an alien agrarian society under the influence of animism and Hindu polytheism.

The post-colonial critique of 'past masters' is slightly churlish, for the early translators had no option but to work within the horizon of their time, yet several, such as Burnouf and T.W. Rhys Davids, responded with enough academic disinterest to place the continuing philological study of Buddhism on a sound footing. Welborn makes it clear that the interpretations of these early translators were situated responses. Although their own views intruded into their interpretations they were not blinded by self-interest, as the colonialist and Orientalist labels suggest (1968: 53-57, 223-226). However, King notes a tendency for textualists to interpret Buddhism as a Protestant form of eastern religiosity (1999: 145), and Almond notes a Victorian antipathy to similarities between Mahāyāna monasticism and Catholicism (1968: 123). Such comparative metaphorical seeing of one religion in terms of another may be illuminating but may also obscure the essential features of the religion in question.

With respect to Pye's scheme, studies may inaccurately represent processes of ambiguity and recoupment if the urge to generalised comparison means that insufficient attention is paid to the object of study. That does not happen in Gombrich and Obeyesekere's study of religious change in Sri Lanka (1988), where

comparison is a feature of their object of study, rather than a major characteristic of their analysis. They find that the colonial example of efficient administration, economic reform and Christian missionary activity created an indigenous middle class that actively participated in a western transmogrification of the Dhamma. The outcome was a mimetic form of Buddhism (King 1999: 143), which was ‘Protestant’ in its rejection of the ritualised social roles and merit-making practices that maintain the relationship between Sangha and laity, and ‘protestant’ in its anti-colonial nationalism. The consequent devaluation of the authority of the Sangha gave encouragement, mainly among the lower class, to an emotionally-charged involvement with spirit cults, spirit possession, and *bhakti* devotional attitudes towards deities derived from Hinduism. These practices were quite the reverse of the Protestant attitude (Gombrich and Obeyesekere 1988: 445-456).

Mellor’s study of *The Cultural Translation of Buddhism* (1989, 1991), demonstrates a clear genealogical link between the Protestant style of middle class religiosity in Sri Lanka and the establishment of an individualistic, Protestant style of Buddhist practice in England, *via* reciprocal Theosophical influences operating through the seminal figure of Anagārika Dhammapāla in Sri Lanka and through the early history of the Buddhism in England. This influence extends to include the constitution of the FWBO by Sangharakshita, who had previously been associated with Dhammapāla’s Mahabodhi Society in India. The case for a similar influence on the Thai Forest Sangha is not so persuasive and nor is it certain, as Mellor contends, that British Buddhism as a whole is a western Nonconformist form of religiosity in Buddhist guise (1991: 89). Because he looks for similarities between eastern and western religious forms and, rather than the usual phenomenology, deploys a methodology of ‘Foucauldian’ discourse analysis (Mellor 1989: 10-11, 59-65), Mellor places less emphasis on the parallel translation of devotional, liturgical and hierarchical aspects of Buddhism, all of which are more reminiscent of Catholic than Protestant styles of religiosity, but which originate in practice rather than discourse.

Mellor argues that Ajahn Sumedho’s Thai Forest Sangha and Sangharakshita’s FWBO are Protestant forms, because they cut away significant cultural accretions in search of the essence of Buddhism. That analysis produced a polemical refutation from Sangharakshita (1992). The Mellor/Sangharakshita disagreement turns on

confusion about the difference between a Platonic *essence* and an *essential characteristic*. As Bluck remarks, it would be paradoxical for a religion purporting to uphold the selflessness of things to assert a Buddhist essence (2006: 185-186), but it seems reasonable that the adherents of a religion should talk about essence in the more metaphysically innocuous sense of a list of characteristics that define or redefine its prototypical identity (Pye 1969: 238). This is precisely the sort of ‘theological problem (or similar)’ that Pye envisages when translation of a religion to a new situation moves from the stage of ambiguity to that of recoupment. Referring to Troeltsch’s maxim that ‘to define a religion is to shape it afresh’, Pye suggests that in Buddhist terms redefinition is ‘skilful means’, and in western terms it is hermeneutics (Pye 1980: 25-30). Recoupment is therefore an attempt to understand the ‘cardinal meaning’ of a religious tradition in the context and the time, and is far from being an exclusively western pursuit. Citing the example of the Platform Sūtra, Pye argues that ‘the question about the ‘essence’ of Buddhism is not just a western importation, but is a thoroughly Buddhist and Asian question’ (Pye 1980: 29).

Waterhouse worries about the lack of attention to fieldwork in Mellor’s methodology (1997: 24-25) but she accepts parts of his argument as ‘axiomatic’, and describes the Protestant label as ‘a useful analytical tool not a suggestion that British Buddhism is inauthentic’ (1997: 24 n67). I agree that parts of Mellor’s analysis are apposite, but do not agree that it is invariably useful to characterise the features of one religion by comparison to the features of another. Firstly, the similarities Mellor identifies between British Buddhism and Protestantism are not all genealogical continuities; secondly, Mellor’s location of English Buddhism ‘in a liberal Protestant trend, albeit one of a ‘pan-religious’ kind’ (1991: 77) *does* confer the negative implication of inauthenticity. That negative association is compounded by the wider implication that Protestantism is to blame for the social ills of the modern West, which hangs on the Weberian thesis that western modern individualism originated in Calvinist ‘this-worldly asceticism’. I prefer a more causally balanced view, under which Catholicism is responsible for inaugurating the moral separation of individual selfhood, but its development has been influenced by both Protestant and secular forces. The western discourse on individuality originates in Augustine’s reversal of the neo-platonic location of person and world within the compass of Divinity, a

reversal that isolates the previously theologically-embedded personality within an individual, internal state of mind, separate from the impurity of the material world, yet still liable to contamination (Cary 2000: 31-44, Augustine 2002). From this Augustinian perspective the seeds of contemporary individuality are have a Catholic origin. The secular influence arises *prior* to the appearance of Protestant religiosity, out of modernising forces unleashed by the technological conquest of the ocean on the eastern seaboard of Europe (Toynbee 1954: 114). On this account, the individualism inherent in western modernity has a secular origin in the seafaring mercantilism that also enabled the expansion of European colonialism. I incline to the view that the potential for the individualisation of personality is inherent in human embodiment and therefore likely occur in all cultures, including feudal cultures, but that the subtle manifestations of individuality in other cultures may be unobservable without close ethnographic examination.⁷

Whoever is to blame for the modern individual, Mellor rightly indicates the inconsistency between the western psychological discourse on individual selfhood, which is prevalent in the FWBO, and the Buddhist doctrine of *anattā*. Theories of self are a short metaphysical step away from theories of soul, and Sangharakshita's evolutionary notion of the 'true' individual, which he acquired from Nyānaponika, a German Theravāda monk (Bell 1991: 200), can be misinterpreted without much strain to represent a soul-theory rather than an account of psychological achievement.⁸ Until that metaphysical interpretation is explicit, the FWBO's evolutionary discourse remains a case of ambiguity rather than recoument, and only marginally detracts, by implication, from their general orthodoxy. Although there is no requirement for clear expressions of orthodox belief in the FWBO, provisional acceptance of traditional doctrine is advocated, is a tacit prerequisite for group assimilation, and is subliminally inculcated by shared participation in the devotional language of the 'sevenfold *pūja*' (Tejananda 1987). It is notable that Sangharakshita mounts a defence of what he considers to be traditional orthodoxy in his review of Batchelor's *Buddhism without beliefs* (Batchelor 1997, Sangharakshita 1998).⁹

Sangharakshita's rational, polemical prose style reflects his sense of significance as a Buddhist of importance, but is not indicative of the FWBO style of religiosity. The FWBO engages with ritual in a devotional, even an emotional manner that is as

more reminiscent of Catholic than of Protestant behaviour. Far from being intellectually-oriented, FWBO practice offers lapsed Catholics and agnostic Protestants access to vivid imaginative, ritual and devotional opportunities that have been foreclosed by their Christian apostasy.

Mellor (1989) accurately traces the genealogy of British Buddhism in the first half of the 20th century, but he does not account for the arrival of diverse traditions, beginning in the 1950s but occurring mainly in the 1970s and 1980s as a consequence post-war recovery in the world economy, the growth of air travel, and the attention directed onto the Buddhist world by conflict in Tibet, Vietnam, Cambodia, Burma, and Sri Lanka. Since the 1960s these factors have precipitated a *direct* rather than a *genealogical* engagement with eastern religious traditions, as the Grand Tour to the East became a 20th century rite of passage and as indigenous teachers came West as refugees from conflict, or on a mission to spread their variety of the Dharma.

To summarize, Mellor's 'Protestant Buddhism' thesis is an important theoretical contribution to the study of Buddhism in Britain, but is too monolithic a characterisation to function as a useful analytical tool. The theory depends on the questionable notion that Protestantism was mainly responsible for the development of modern western individualism, without the aid of Augustinian Catholic initiation and secular mercantile sustenance. If Catholicism and secular mercantilism did play a part in the development of the modern individual, then western influence on contemporary British Buddhism cannot be characterised solely by comparative reference to Protestantism. Mellor's argument that the doctrine of *anattā* is incompatible with the western psychology of the self is apposite, but his wider theory now stands in need of reassessment. Contemporary Buddhism is a global set of religious phenomena that needs to be studied with methodical attention to all its manifestations, if the meaningful lineaments of ambiguity and recouplement are to be clearly identified in each tradition and in each cultural situation.

That task is work in progress, with notable examinations, in the British case, by Green (1989), Bell (1991, 1997,) Batchelor (1994), Waterhouse (1997), Henry (2006), and Bluck (2006).¹⁰ Following Green (1989), the field is normally described as the study of a 'spectrum of adaptation' to western circumstances (Batchelor 1994: 338-340, Waterhouse 1997: 25-27). Adaptation is a blunt reference to the same

phenomena indicated by ‘contact’ ‘ambiguity’ and ‘recoupment’, but Pye’s terms throw more light on the process of change. ‘Contact’ can be used to indicate the conditions pertaining at the start of the process, ‘ambiguity’ more accurately describes intermediate situations where issues have yet to be fully articulated and where the final outcome is unresolved. ‘Recoupment’ more accurately indicates the recursive process of initial change and subsequent incorporation of change within tradition in a hermeneutic sequence of reparation.¹¹

In his analysis of socially-engaged Buddhism in Britain, Henry (2004) argues that the study of ‘globalized western Buddhism’ is now a distinct sub-discipline of Buddhist Studies, alongside the philological approach to the translation and interpretation of traditional texts. He notes that the issue lurking behind the study of adaptation is still the monolithic question of definition: ‘...at what point is Buddhist tradition stretched beyond recognition by institutional and conceptual change?’ (2004: 10). That there is disagreement about the location of particular traditions along a spectrum of acceptable adaptation may indicate that traditions can be orthodox on some measures and heterodox on others, or that the factors determining the location of a tradition are dependant on the commentator’s prejudices. If Buddhism is indeed polythetic, in that it fulfils a variety of social functions and satisfies a variety of needs, then a variety of interactions are likely to occur between contextual influences and issues of doctrine and practice. That being so, the study of Buddhism, West or East, is not so much a matter of formulating a monolithic theory, of locating ‘essential features’, or of locating traditions along a spectrum of adaptation: the task is to study the continual operation of factors influencing the turning movements of contact, ambiguity and recoupment that represent the initiation of religious change, the indeterminacy of change and the incorporation of change. It is a matter for Buddhist individuals and traditions, rather than academic commentators, to tolerate or oppose internal diversity with respect to a prototype, just as they can choose to ignore or engage with the implications of the evident diversity of secular and religious doctrine in a globalized world.

Pye’s tripartite theory does not address the role played by authority in the management of religious change. Waterhouse takes up this issue in her study of *Buddhism in Bath*, noting that ‘one of the circumstances in which religious authority

is most consciously invoked is when changes need to be made'. Discussing the ambiguous remarks on authority ascribed to the Buddha in the *Kālāma Sutta* (Waterhouse 1997: 33-34, 222-223), she observes that the text advocates both the authority of personal experience and the authority of 'wise' persons.

The [experiential] validation of the truth of Buddhism is preserved as an ideal within all traditions but until a state of Buddhahood has been realized 'internal' personal experience cannot be the sole authority for practice (Waterhouse 1997: 223).

Despite Sharf's criticism of the authority of 'private' experience in Buddhism, Waterhouse notes that '...authority has to be recognised as well as claimed'. That being so, the continuing authority of the tradition ultimately depends on personal experience, though the experience in question is likely to be a conscious or unconscious assessment of the qualities and expertise of the claimant to religious authority.

The meticulous fieldwork in Bluck (2006) provides a wealth of information for further theorising, but because he orders that information under Smart's 'dimensional analysis of world views', he struggles to interpret the temporal dynamics of change within dimensional categories. Bluck does not attempt to negotiate the problems of method associated with analysis of the 'experiential dimension', beyond remarking that: 'It is almost impossible to discern any meaningful adaptation in the important but problematic experiential dimension, due to its highly personal nature and the wide variety of emotional responses shown by individuals' (Bluck 2006: 182-183). I hope that the discussion of experience in Kennedy (2004) and in this thesis demonstrates that the task of analysing the testimony of personal experience is not insuperable.

Apart from the difficulty of analysing experience, and the diversity of Buddhist traditions practicing in Britain today, the accelerating dynamism of social change under globalized modernity is the contextual reason why an overall characterisation of British Buddhism may prove elusive. If Buddhist doctrine and practice continues to respond to context under the influence of authoritative individuals in the diverse way that has happened over the 20th century, then no monolithic theory is likely to account for the diversity of western Buddhism. I have in mind the very different expressions of the Dharma represented by the life of the Pure land Buddhist, Dharmavidya (David Brazier), who is socially active in the world and at large on the

internet, in comparison to that of the late Luang Phor Pannavaddho (Peter Morgan) who spent the greater part of his life as a Bhikkhu in monastic sequestration in Thailand.

Theories can, however, account for discrete factors that are present to varying degrees throughout diversity, for example the use of ritual. Bell (1997) presents an application of Tambiah's performance theory of ritual practice to the particular case of the Thai Forest Sangha monastery at Amaravati (Tambiah 1981).¹² The life of the monastery is characterised as an on-going symbolic performance, 'which exists solely for the performers' (Bell 1997: 3), within which participants act out ideal moral relationships, 'as if' they exemplified the axiomatic intentional attitudes advocated in the *vinaya*. Bell notes that:

The performance analogy actually articulates a fundamental assumption of Buddhism that the moral transformation of outward interpersonal behaviour can purify the mind of the individual...Behaving 'as if' something is the case is quite permissible in Buddhism and does not lead to questions about authenticity as it can in Judeo-Christian moral theory (Bell 1997: 16).

Bell's paper is exemplary in the account taken of the insider's perspective, and as an interpretation of the dynamics of discrete changes to practice in judicious response to context.

Discretion in the alteration of practice is necessary because, as Gombrich and Obeyesekere remark: 'the integrity of the Sangha is conceived to rest not so much on its orthodoxy as on its orthopraxy' (1988: 446, see also Bell 1991: 285-289). It is not invariably possible to divorce doctrine from practice, for much doctrine is concerned with the meaning and guidance of practice. But the central point, that institutional Buddhism attaches greater importance to the observance of practice than to doctrinal inquisition, rings true with respect to the Forest Sangha. It can be derived from the *suttas*,¹³ can be applied to the continuing integrity in diversity of the Buddhist tradition as a whole, and ought to temper intemperate attitudes towards doctrinal innovation in British Buddhism. Crook notes that:

...when disagreement arises and cannot be resolved in assembly, then the Sangha is to split with each party going its own way and developing its own view without rancour. This "Law of Schism" (*sangha-bheda*) was the device that maintained the structural unity of

local communities of monks through a mechanism of splitting (Crook 1990: 388).

It can be argued that schismatic disputes are rarely about heterodoxy, but employ heterodoxy as a surrogate in order to disguise the ‘greed, hatred and delusion’ of worldly ambition. Thus schism becomes more likely when economic, political and associated psychological factors come into play, whereupon heterodoxy becomes a handy charge against the opposing side. The controversies over Sudden and Gradual Paths at the Council of Samye in Tibet and between Northern and Southern Ch’an schools in China are prime examples. In Britain the English Sangha Trust’s apparent rejection of Sangharakshita as a future leader was probably based on an assessment of his fitness to practice, rather than an assessment of his beliefs. The NKT’s secession from the mainstream Gelug-pa tradition is more like a genuine schism, but is an anomalous example, because it represents a personal response by Geshe Kelsang Gyatso to a 20th century continuation of ancient Tibetan political, religious and mythological disputes.¹⁴ The outcome of this schism is that the NKT has relinquished its allegiance to the mainstream Gelug-pa FPMT (Bluck 2006: 131-132). These examples suggest that, as a consequence of the globalization of gossip, it is no longer possible to hide the mercenary reasons behind schismatic arguments that are ostensibly about orthodoxy. That fact alone *might* prevail against human nature to reduce schismatic tendencies in contemporary Buddhism.

In sum, there have been disputes in Buddhism about orthodoxy, and disputes where orthodoxy is used as a surrogate to disguise the politics of power relations. Preference for the avoidance of schism allows room for a divergence of views, and may allow ambiguity and recoument with respect to traditional doctrine, including doctrine concerning the nature of the mind, as Buddhism encounters change in the context of globalization. In search of these factors of change, but with a minimum of commentary, the interview summaries that follow will present a range of attitudes towards the issue of the nature of the mind, and a range of views about the nature of the mind. Subsequent chapters will present a hermeneutic interpretation in response to those views and attitudes.

Prasada and Dharmavidya

Dharmavidya is the leader and principal teacher of the Order of Amida Buddha, a socially-engaged Buddhist organisation in the Pure Land tradition, comprising twelve ordained members, a community near Leicester, and an affiliated network of supporters and groups in London, Newcastle, Antwerp and Hawaii. As part of their orientation towards compassionate practice, the community runs courses on Buddhism and Buddhist psychotherapy, and offers individual psychotherapy. The community responds with active pacifism to international political events. Dharmavidya has a PhD. in Buddhist Psychology and is a registered psychotherapist. He has published several works on psychotherapy and on contemporary Buddhism (Brazier 1995, 1997, 2001). Although he is cited as the ‘spiritual’ head of the Amida organisation, the movement is egalitarian and cooperative, allowing the ordained members and supporters to utilise their talents and develop their interests without restriction.

Prasada, also a member of the Order of Amida Buddha, was Chair of the (British) Network of Buddhist Organisations from September 2002 to March 2006. She is a practising psychotherapist, and has published a detailed therapeutic interpretation of the traditional Buddhist psychological typology of mental events (Brazier 2003). Prasada and Dharmavidya chose to be interviewed together, although it turned out that discussion of Prasada’s work occupied the first section of the interview, after which she was called away, and Dharmavidya was interviewed in the second section.

Prasada - Interview Summary (with contributions from Dharmavidya)

Prasada considers that since Buddhism is about training the mind, the conduct of life, and ways of perceiving the world, there is not that much difference between Buddhist psychology and the practice of Buddhism itself.

...I think perception is particularly important in Buddhism, but it is also the roots of how happy we are, the kind of relationships we have, the way that we live our lives in practical ways. That is the stuff of therapy as well, so I do not make a great distinction, but obviously [there is] the distinction of form: a therapist is not going to be preaching *sūtras* at their clients, I hope (Prasada).

The normal therapeutic form is the one-to-one interview, whereas Buddhism tends to involve communal practice, but these are formal rather than absolute

differences. The significant difference is that Buddhist psychology has a particular concern to examine reactions to the external world.

...even in a Buddhist community, having periods of intensive one-to-one interview – like the spiritual interview – is an important part of the process because it does pin you down, and it makes you actually think about what you are doing in a way that maybe you don't when you are just going about life in the community. On the other hand I think that Buddhist psychology is very much about the way that the conditions that we live amongst affect our mental states... (Prasada).

Buddhist psychology is concerned with the process, the encounter, the meeting. It is very much concerned with what is other, not so much with what is self...it is just a reflection of the paradigm, rather than the need to apply it in this, that, or the other way (Dharmavidya).

There are difficulties with the translation of 'self' between Buddhist and western contexts, for while Buddhism denies a fixed, soul-like self, it does not deny self in terms of the momentary awareness of embodied experience.

I think one has to be careful about these terms. You can bandy about terms like the 'self', but there are many different definitions of the 'self'. The way that I tend to use it is for that accumulation of habit-energy that we think of as a self. I do not think that Buddhism denies the embodied experience; in fact it is the opposite; that is something that is very much valued...but that is really perceived as *other* – this is not-self. There are many *sūtras* in which the Buddha says: 'This is my arm. It is not me, it is not my self'. So I think the experience of feeling our bodies is actually the experience of feeling something which is not-self in Buddhist theory. The self is that accumulation...of often quite negative things. I think this is where people quite often get bogged down...actually they have a very strong sense of self, but it is a negative sense of self. So Buddhist psychology is really about getting beyond that sense of self which is negative into a proper relationship with the world [and] with experience, including bodily experience (Prasada).

Like 'Self' (*attā*), 'body' (*rūpa*) is a term with several meanings. The correct translation largely depends on context in which the term is used. Prasada and Dharmavidya consider that the proper translation of *rūpa* in a psychological context refers to phenomenal object-perception, rather than embodiment. This yields a wholly psychological interpretation of the *khandhas* rather than an ontologically-dappled psycho-physical interpretation.

I think it sits very well; the idea [of] the form that we see being the thing that is coloured by the mind. This is really what Buddhism is

about, and people have really not grasped that, and have taken the *khandhas* to be the constituents of the person, and then said *rūpa* must be the person's body in the physical sense. There is a perfectly good other Sanskrit word for the body: *kāya*. When you look at the *skandhas* as a process and you understand *rūpa* as being like the perception of the object: you perceive the object, then you react to it and build up mental formations (Prasada).

It does give a coherence to the teachings [that] are often presented as: 'Buddha had a teaching about the *khandhas* and he also had a teaching about dependent origination and he also had a teaching about the Four Noble Truths.' If you take them the way they are taken in [Prasada's] book, they are...different packagings of one theory and that is rather intellectually satisfying...The Buddha does tend to say; 'I only teach one thing' (Dharmavidya).

Prasada's unifying interpretation of the 'different packagings of one theory' in *Buddhist Psychology* (Brazier 2003) describes attitudes in ordinary life as a 'psychology of addiction'. On her account, the *khandhas* are not merely a description of a person, but a description of an addictive process of attraction, self-formation, and self-alienation, which, according to Buddhism, can be voluntarily relinquished.

...Basically I would see the three key teachings: the Four Noble Truths, the *khandhas*, and dependent origination, as all mapping onto each other. So, one encounters *dukkha* and then *samudaya* [response], the Second Noble Truth, and I would see that as the choice point. Either one has the choice of running off into the *khandha* process, because things come up in response to...(dukkha) at the point of *samudaya* and at that point there is the temptation to hook into the sensory attachment and the self-formation and the destructive patterns – and this is really like going round the *khandha*-cycle. So, at that point of *samudaya* one sees the object and one hooks onto it through reaction and building up constructions that lead you to continue to see the object in that way and to continue to build it up. So, at the *samudaya* point you can hook onto the objects that become the *rūpas* that keep the *khandha*-cycle going. That's the unenlightened track; that's what most of us are doing all the time in response to the original *dukkha*...but at that *samudaya* point there is also the choice of unhooking from the object. That is what the Buddha tells us to do; to unhook from the object, and then one goes down the other track, which is to go (from) *samudaya* [to the Third Noble Truth] *nirodha*, which is like the containment of the (habit) energy that comes up (Prasada).

By 'hook', Prasada seems to be referring to 'attachment'. It is difficult to imagine how, of the 'three poisons,' confusion (or delusion) can be an attachment.

I think it is preoccupation we are talking about. Attachment is again a western word. I think it is a kind of ‘involvement with’: fascination, obsession. Basically the three poisons are three different valences of [involvement]...There are positive, negative, and alternating [‘ambivalent’: Dharmavidya]. I think it is quite neat[ly illustrated] in terms of eating disorders, and it is an area that I have worked in. You’ve got the hate ambience, which is anorexia: ‘I will not eat’. You’ve got the compulsive eating – greed: ‘I will eat’, and you’ve got the bulimic response, which is the ambivalent or confusion response: ‘I will/I won’t, I will/I won’t’. And that is the one that hooks people in most, so ambivalence is on that knife edge (Prasada).

Prasada’s psychological interpretation of *rūpa* implies that ‘leaving the *khandhas* behind’ does not refer to enlightenment as extinction or removal from this world. She refers to peak experiences in her writings, but is unsure of their relation to enlightenment.

Trying to define...enlightenment...is beyond me. I am not that enlightened to know what it is. To me its usefulness is as a direction. To me the concept of enlightenment is about sight that is not clouded by the kind of self-investment that we usually go round looking at the world through, so I tend to think of more or less filters between the person and the environment they are inhabiting. So I think these [peak] experiences can be of that nature - but not necessarily: we can also delude ourselves - the kind of experience where the scales suddenly drop away from our eyes and one is suddenly there in an environment. That does have something in common with what we think of as enlightenment (Prasada).

Dharmavidya points out that the teacher or therapist has a more pragmatic goal of helping to remove the blockages that are preventing a worthwhile life and spiritual progression

Restoring people’s trust, in the world around them, in the bigger picture, the longer-term perspective of their lives. If people can restore faith in that way, then they will find their own enlightenment. It is about the quality of encounter – what is other – and that requires trust or faith. So the business (we) are in is restoring that faith, or finding out where it was lost, and what delusions arose at that point, and what unhelpful vows were made implicitly by the person, that continue to dog them. Or, in a different language, consonant with [Prasada’s] book, [finding out] what *saṃskāras* were created at that point, that have been distorting everything ever since...If you think too much about enlightenment then there is a great danger that you can set up a kind of spiritual pride, and this is then counterproductive. A great deal

of Buddhist literature is written in the superlative and in the absolute, and most of us are not dwelling there (Dharmavidya).

He agrees that talk about encounter with the ‘other’ is reminiscent of the work of the Jewish theologian Martin Buber, although the similarity is inadvertent.

There certainly are points of parallelism between Christianity and Pure Land, for instance, and I suppose our interpretation of Pure Land Buddhism is fairly existential, so...we probably have a lot in common (Dharmavidya).

Dharmavidya – Interview Summary

Dharmavidya’s approach to Buddhism emphasises the practical use of devotion, community values, and active social engagement against injustice and suffering. From that perspective the nature of the mind is not a salient issue, and when presented with view that the mind has a physical basis in the brain, Dharmavidya does not accept it. He considers it to be ‘a very metaphysical sort of statement...’, and objects to the use of the word ‘basis’. He is more content if it is clear that the notion of emergence entails that the mind is not reducible to the brain.

I can take that, but then you would not use words like basis...You are saying it is a symmetrical relationship; you can not use a word that implies that one is primary and the other is derivative at the same time (Dharmavidya).

Certainly [that is] the way many westerners look at it, but that isn’t a symmetrical relationship. That is giving the brain and brain chemistry, and so on, the primary position, but whether that is true absolutely or not, from a practical point of view, at the very least it is going to be an extremely long time before we know enough about brain chemistry to explain thereby the plot of a Shakespeare play... The point is that to understand a Shakespeare play is a completely different discipline from understanding the brain. That is an illustration why, in the present state of knowledge, it is completely impossible to reduce one to the other (Dharmavidya).

It can be a condition, in a Buddhist sense, that some things can not happen without something else happening. But then, Shakespeare getting a decent dinner is a condition for him writing the play. There is a great difference between a condition, and a cause or a basis (Dharmavidya).

It is mystery. Clearly when people think there are changes in their brain activity, but what causes what, and what is exactly the

relationship between these different things, is a mystery, and if you want to understand what we usually call mind – like Shakespeare’s mind, for example, at the moment it is a completely separate discipline from understanding the brain. (Dharmavidya)

In ‘Buddhist Psychology’ (Brazier 2003), Prasada mentions that in the Buddha’s time people may have had a more ‘externalist’ picture of the mind.

...I’m quite chary of using terms like ‘inner’ because it plays into what I said earlier is the Western consensus. Buddhism is not primarily just an introspective turn. I just think the whole idea of ‘inner’ and ‘introspection’ has been carried too far in western Buddhism...so in my own writings I have become increasingly wary of using the sort of language that supports that trend (Dharmavidya).

The modern view of the mind, not the brain and stuff, the mind, [and] owing a lot to Freud of course, has a sense of the mind as a container with lots of contents. But I do not think that was anything like so much so in the Buddha’s day, and it is not so much so in a lot of cultures...Being modern people, we will tend to talk about dreams and we will say that a dream happens in your mind, but you do not experience a dream as happening in your mind, you experience yourself as being inside the dream, and you do not experience the characters who appear in your dream as being inside you. You experience them as visitations...The majority of cultures that have existed on the earth regarded them as visitations – they regarded them as outside...So, that kind of existentialist way of thinking of the mind – the mind not particularly having contents, but having an environment, and that environment being vivid, and related in some ways to what modern people think of as a spirit world and talk about rather condescendingly. But nonetheless for a lot of cultures what the modern thinks of as the content of the mind was the environment of the mind. It was what visited the mind; what appeared to the mind (Dharmavidya).

In *The New Buddhism*, Dharmavidya presents an interpretation of Buddhist history, which emphasises the ‘this-worldly’ character of the Buddha’s message (Brazier 1997). Without ‘the comforting rhetorical gloss’, and once ‘through the fat of religiosity down to the bone of the Buddha’s intention for this world’, Buddhism’s revolutionary social message is revealed (Brazier 1997: 61).

...my main purpose in that book was to counteract some of what I saw as a growing consensus in western Buddhism that I felt did not do the Buddha justice...that has led to a sense of Buddhism that I think is quite a distance from what old Śākyamuni was talking about (Dharmavidya).

A quietist Buddhism has its place as a sub-plot, but it is certainly not the primary thing that the Buddha intended. There will always be a place for hermits and contemplatives, but that's not the be all and end all of what Buddhism's about, and it is not consonant with what is going on in the Far East, where there is plenty of engaged Buddhism. So the book was intended to balance things up a bit (Dharmavidya).

Emphasis on the power of Buddhism to change social circumstances in this world does not mean that transcendental or metaphysical schemata have no purpose.

I am not against metaphysics, but I think it should be in its right place...metaphysics is often presented as some kind of absolute, which it can not be if it is some kind of human construct. As a human construct it can be very useful, rather in the way that a scientific theory can be very useful. A lot of people treat scientific theory as though it was some sort of absolute, but it's not. It is a useful thing and metaphysics is much the same; it occupies the same sort of level of significance. So I am not against metaphysics; I am in favour of it being put at the right level of significance. A lot of people nowadays think that they live without metaphysics, but they don't. There is just as much metaphysics wrapped up in modernism...than any other creed (Dharmavidya).

Dharmavidya argues for the development of a new, 'Liberation Buddhism' that encompasses both western and eastern Enlightenments (Brazier 1997: 54, 78-79). For that to happen, the purpose of both modernity and *nirvāṇa* must be properly understood. Any attempt to understand Buddhist Enlightenment is complicated by the simultaneous availability of differing interpretations from a multiplicity of traditions. In *The New Buddhism*, Dharmavidya describes and criticises eight different versions of the Buddha's original Enlightenment.

In a way, they [the eight enlightenments] point out that there is metaphysics in Buddhism, there is no pretending we can have Buddhism without metaphysics. Not only is there metaphysics in Buddhism, there is a whole load of different metaphysics in Buddhism, and logically they do not fit together...it does not matter that they don't all fit together. They are skilful means. They are there for a purpose...to orientate you in a way suitable to the practice, and a particular school will have its metaphysics to help orientate people in a particular way. But what is happening at the moment is that all this stuff comes into Europe from America; because of our Christian background we tend to assume this is teaching of the same type of validity as Christian teaching, so then you get into silly discussions about the absolutist dimensions of it (Dharmavidya).

Dharmavidya's interest is in this-worldly rather than other-worldly or absolutist dimensions of the Buddhist message. He therefore considers that for normal purposes, the physical world can be taken to be real, and our relation to the world as dual.

A lot of western books on Buddhism take non-dualism to be what Buddhism is all about, and it is one of those 'can mean anything'-depending on who wants it to mean something - type teachings, which is very unscientific in a sense: I mean non-demonstrable. What does it mean? It means all things to all people [and] some absurd derivative ideas have gained some hold in the western Buddhist world, some of which are pernicious, because they lead to you not being able to make a choice, because a choice is always between dualistic options. So it is quite corrosive and undermining of ethics, and I do not think anybody who reads the Buddha can have any hesitation in thinking he was concerned about ethics (Dharmavidya).

Prasada and Dharmavidya - synopsis

Prasada's Buddhist psychology takes a purist view of the self, as a negative accumulation of habit energy. She interprets the *skandhas*, including *rūpa*, as a cycle of distorting perceptions motivated by obsessive preoccupation with their object: Buddhism thus advances a 'psychology of addiction'. She sees enlightenment as more a direction than a goal, involving the progressive removal of these preoccupations, so allowing a more direct encounter with the world.

Dharmavidya criticises the scientific imperative to reduce mind to brain chemistry. The relation between brain and mind remains mysterious. One may be a condition for the other, but neither is evidently the cause or basis of the other. Brain explanations contribute nothing to the complexity of human concerns. He takes issue with the western view of the mind as being a container for 'inner' mental contents, in contrast to the ancient and eastern view of the mind as a point-instant within an environment which is both real and psychologically inhabited. An internalist, quietist view of the mind can lead to other-worldly, introspective non-dualism, which he argues was far from the Buddha's intention, for Buddhism balances introspection with social engagement in the external world. The logically incompatible metaphysics to be found in different Buddhist traditions are skilful means intended to orient towards practice.

John Crook

Dr. John Crook is a biologist by training, but a polymath by achievement, for although his research has been foundational for the academic discipline of social ethology (the study of the social behaviour of animals in natural environments) he has also made contributions in psychology (2002 a,b), and the study of Drukpa Kagyu and Nyingma Buddhism (1997). His fifty-year interest in Buddhism has informed his academic work, both in his fieldwork study of peasant farming communities in Buddhist Ladakh (Crook and Osmaston 1994), and in his evolutionary study of consciousness (1980), which examines the development, out of social behaviour and organisation, of human minds distinguished by self-processes and occupied in a search for meaning and purpose.

Crook is only 'retired' in the sense that he is no longer in full-time academic employment. He continues to reflect and to publish on ethological issues, and to lead trekking expeditions into China and the Himalayan region. After receiving dharma transmission from Master Sheng-Yen (Sheng-yen et al 2002: 28-34), he established and became the principal teacher of the Western Ch'an Fellowship in the U.K., and has assumed responsibility for the well-being of some Buddhist groups in Poland and in Norway.

Crook described the Buddhist project succinctly as 'trying to understand the mind in order to go beyond suffering'. As such, it is a 'soteriological phenomenology'. In a restricted, special sense, he considers Buddhist methods to be scientific. He characterises the 'hard problem' of the relation between subjective experience and objective brain functioning as a paradox or as a *kōan*, which is irresolvable by means of discriminatory analysis. Crook is aware of difficulties in the interpretation of subjective experience, and in the interpretation of a, synchronic 'Buddhist point of view'. However, in the case of *tathāgata-garbha* doctrine, he does advance a synchronic interpretation, which unifies Madhyamaka and Yogācāra perspectives that might be otherwise be antithetical. He directs questions about the embodied basis of mind to the exposition in his book on *The Evolution of Consciousness* (1980).

Interview summary

Crook describes Buddhist methodology as a form of ‘subjective empiricism’. He considers Buddhist meditation methods to be experiments that are not replicable in a strict scientific sense, because ‘in subjective empiricism n is always 1: the individual is unique’. Yet some experimental replicability is possible, based on the mutual acknowledgement by teacher and pupil of the meditative experiential attainment.

...it does seem...that the human mind is very much similar from one person to another. Of course, I have to be careful about that, but there is probably a basic human characteristic of mind, which enables it under certain conditions to replicate the experiences of others, and it is on this basis that one could say that the meditations we do now and the results that are achieved are probably the same as 2,000 years ago (Crook).

As a biologist by training, Crook is used to scientific paradigms that portray experience as contingent, not just upon brain mechanisms but upon all the mechanisms of embodiment, and upon contact with the outside world. Given that experience is an integration of the subjective and the objective, he suggests that it might be better to think of mind and world as continuity, rather than set up a firm division between the two.

...my interpretation of recent evolutionary theory is that we have to get away from this strict dualism of mind and matter towards something that is more holistic. For example, we are sitting here now and it appears that we are looking out of this window, and ‘I’ this object in here, and my brain, interprets the picture out there: there is this ‘in here’ and that ‘out there’. A more holistic view would notice that actually there is a continuum...Of course there are different levels going on here. Like going up and down stairs there are different levels but the whole process is one thing... The problem with a holistic vision is that you cannot do an experiment on the whole...thing at once! You have to take it apart and identify units and identify experiments; to do part experiments. But if one does that in forgetfulness of the continuity of the whole thing, I think one is selling science short, actually. You are making it into Cartesian reductionism, which is getting ‘old hat’ (Crook).

Crook is conversant with the philosophical ‘hard problem’ of the relation between subjective and objective brain events: ‘what is called *qualia*, the quality of experience, and how these arise from the activity and chemistry of neurons’. One approach to the problem, suggested to him by Rom Harré, is to treat talk about

experience and talk about brains as different Wittgensteinian language games. Attempts to ‘cross’ from one game to the other establish ‘a paradox or a *kōan*’. However, appreciation that the problem involves incommensurability between discourses does not lead to an automatic resolution.

[It is] easy to say all that but we still have the ‘hard problem’, we still don’t know. My own intuition is that there is one phenomenon going on in the brain, and this phenomenon gives rise to a situation, which is objectified by the mind in some sense, so that the mind can create an image: it is a process of image production (Crook).

Crook arrives at an understanding of the problem of incommensurability between discourses through an examination of the process of meaning formation and modulation. He cites Saussure and Derrida, in his description of what the mind does with language. As a first step, Saussure shows that words have meaning by marking the difference between things and kinds of things. Derrida takes another step, showing that the meaning of words is arrived at by a process of deferral (*différance*) that allows time, not for independent analysis, but for mutual negotiation in a play of signification with others, until the meaning of a word is agreed as part of an evolutionary process of meaning creation, which in turn contributes to the evolution of cultures and discourses. Thus, meaning is determined by negotiation about the reference of language and the extension of words, not by a definitive relation between certain words and certain parts of the world.

With reference to Buddhist tradition, Crook wonders to what extent experience affects interpretation, and interpretation affects experience. He implies that difficulty arises when doctrinal interpretations become overly analytical. He suggests, firstly, that there are difficulties in representing how Buddhism *as a whole* analyses anything, let alone the mind/brain dilemma, because Buddhist psychology has undergone considerable historical development between, for example, the *Abhidhamma* and the *Avatamsaka Sūtra*. Secondly, analysis cannot encompass experience, if experience is a negotiation *with* the world, rather than analysis *of* the world; thirdly, analysis cannot satisfy the Buddhist imperative ‘to understand the mind in order to go beyond suffering’, for discriminatory analysis has a markedly different motivation:

It implies a desire for certainty. What does a desire for certainty imply? It implies that we are missing God...as post-Christians, as David Loy has argued very effectively, we have lost our point of reference: God, and so when we are faced with a religion, which by and large does not bother about these things, namely Buddhism, people will say ‘ah but, ah but, ah but’, and they’ll query it because they are trying to push that religion to some place of certainty, which Buddhism never claims (Crook).

Why is certainty unobtainable? Crook responds with a Kantian interpretation of the *Heart Sūtra* dictum that ‘form is emptiness and emptiness is form’:

What it means is that every form we look at, whatever the nature of that form, it is *empty* in the sense that whatever appears to us is not the actual form; it is an appearance to us. Being an appearance to us, it is empty of any imputed reality. We cannot impute a reality to it; it is empty of that. But at the same time this empty unknown reality is appearing as a form (Crook).

Crook reverses the internalist emphasis of the ‘hard problem’ of the difference between third-person and first-person access to the mind: it is the world, not just the mind, which can only be experienced subjectively. This is an unsurprising reversal if mind and world are indeed to be thought of as a continuum. Because the world can only be experienced subjectively, through human powers of perception and innate categories of mind, the Kantian things-in-themselves (*Ding-an-sich*) must remain mysterious and therefore uncertain.

He suggests that the Ch’an response to questions about the paradox of the nature of mind with respect to its material embodiment, and to the inaccessibility to experience of anything beyond appearances, is exemplified in Hui-Neng’s enlightenment line: ‘let the mind arise, but don’t attach to anything’, and in the Buddha’s and Kāśyapa’s mutual understanding of the significance of the flower. If persons are not attached to a need for an analytical explanation of the meaning of the universe (world and mind), the meaning then becomes apparent: ‘the meaning is given to you’ as the continuity of the human relationship with the world.

It might seem paradoxical that Crook should argue that Buddhism never claims certainty, and that Buddhist psychology has undergone too much historical development to be expressible synchronically, yet he also begins some statements with: ‘Buddhism says...’. His position is defensible in three ways. Firstly, his remarks were locutions in the course of an interview, to be qualified on reflection.

Secondly, there may be some synchronic statements that can be made about Buddhism. For example, if the desire for certainty is a prime cause of suffering, any form of Buddhism that affirmed certainty would itself be a cause of suffering. It therefore can at least be *said* that Buddhism holds, synchronically, the view that certainty is not to be desired because it cannot be found. Thirdly, Crook speaks for Ch'an Buddhism, which is a broadly syncretic tradition, with roots in *Madhyamaka*, *Yogācāra* and *tathāgata-garbha* thought. Crook is aware that Ch'an synthesises these ideologies, alongside influences from Taoism, and his discussion of suchness and emptiness in the context of *tathāgata-garbha* gathers the philosophical strands underlying Mahāyāna practice together in a single interpretation.

I have thought a lot about *tathāgata-garbha*...It is part of the Cittamātra [Yogācāra] idea that psychologically we have a basis of mind which is pure. It is a psychological view. Whereas the opposing Madhyamaka view is about emptiness, the *Lankāvatāra* and this school argues for there being a basis in mind...It is a ground, and the fact that there is an assertion that there is a ground has been the origin of a number of criticisms...Westerners have argued, as well, that this looks like harking back to Hinduism. But I think that is quite wrong. Take the word *tathāgata-garbha* and take it apart: *garbha* means either womb or embryo, so what this basis of mind *is*, is the womb or embryo of what? The *Tathāgata*, and what is the *Tathāgata*? It is *tathāta-gata*. *Gata* is going...going of *tathāta*. What is *tathāta*? Suchness. So it is the *womb of the coming and going of suchness*. What is suchness? Emptiness. So it turns out that what we have as the basis of our being is the embryo of the mobility of suchness: awareness.

Nothing absolutist about that, in fact from that line of thought you find that Cittamātra and Madhyamaka come back to the same point of origin. Why have they diverged? The Madhyamaka is a very philosophical line of thinking; the Cittamātra is very much more psychological, it builds up a psychological model of mind and uses that as a basis of meditation, whereas the other one leads to Hui-neng; direct cutting, direct seeing: let the mind arise but don't put it anywhere. No philosophy about that, but...it *is* based on the emptiness philosophy (Crook).

The remark that suchness is emptiness can be understood by noting that suchness is part of psychological discourse, while emptiness is part of philosophical discourse, but in Crook's exposition the two discourses are commensurable. Suchness denotes an experience; emptiness denotes an explanation of that experience. The simplicity of Crook's exposition belies the scope for misplaced influence between experience and

interpretation, for a mis-identified experience will affect understanding of a particular explanation, and an erroneous explanation may foreclose access to an experience. Crook's preference is for experience over analysis, yet in this case his analysis both takes account of experience and offers a resolution to two opposing tendencies, either to take *tathāgata-garbha* and *śūnyatā* as incommensurable explanations, or to equate them as one inherent absolute. *Tathāgata-garbha* designates an experience psychologically, *śūnyatā* designates it ontologically; since they are both indicative explanations, neither is the process-in-itself.

The Evolution of Human Consciousness

In the interview, Crook referred questions about the mind/brain relation to the explanations given in *The Evolution of Human Consciousness* (1980). There he identifies the increasing complexity of cognitive capabilities as the factor which allows the evolution of vertebrates to be described as directional, rather than purely the product of chance in natural selection. Cognitive development begins in lower vertebrates with the identification and rectification of dissonance between internal metabolism and environmental fluctuations, proceeds to the development of learning and recall of past coping strategies, and then gives rise to the development of representation and symbolic communication (Crook 1980: 384). In parallel with a graduated development of cognitive functions describable as forms of objective or task-oriented consciousness, the socio-biological processes of reciprocal altruism between individuals in groups facilitates the development of autonomous personal expression during interaction with others, giving rise to developed forms of subjective consciousness which become increasingly apparent in social mammals such as monkeys, baboons and apes (Crook 1983: 11-14), until, in hominids and tribal humans, consciousness acquires characteristics similar to contemporary self-awareness, yet not wholly identical, for human personality evolves in relation to cultural context, and in tandem with cultural complexity (Crook 1980: 389).

Crook reviews the twentieth-century research which has 'exploded' the European philosophical concept of mind as an entity existing in disjunctive relation to its embodiment (1980: 14). He describes the exploded concept as the 'Cartesian dogma' that mind and body are 'two...distinct properties and function as discrete

entities'. He also observes that, after the behaviourist attempt to refer only to externally-observable stimulus and response, 'mind' has undergone rehabilitation as a useful collective term for a variety of embodied cognitive functions that process information from and for external relations to the social and natural environment (Crook 1980: 20, 27). He concludes that:

There is no doubt that information is held and manipulated in cytochemically encoded structures. Information is physically represented. The mind is thus *materially* present in the world. The problem of dualism seems to arise from the way in which we experience ourselves...Consciousness...comes into being when information is represented to a monitoring faculty under deliberative attention...Only as attending proceeds, however, does it become possible to describe the immediately antecedent experience of a conscious episode. In fact mental experience can be consulted only retrospectively and such experience, as evidence for the existence of mind, can appear only as an introspective report of past events.

By contrast, if one seeks in the present continuum for 'that which exists', nothing is to be found...It is because the attender is unobservable and can only be inferred from retrospective description that mental experiencing includes a strong tendency to dichotomize the 'I' (attender) from the 'me' (self-description)...which, on analysis, simply appear as inherent properties of the human cognitive process. The philosophical splitting-off of mind from brain arises mistakenly from the necessity of retrospective insight in the affirmation of the mind's existence.

This is not to deny...that information processing leads to decisions that have 'downward' psychosomatic effects. Of course it does. It is the function of the cognitive analyser to perform in exactly this way and thereby to relate the organism more closely to the environment and social change. There is no case beyond this for some *mysterium*, an agent of non-material origins, unless information processing is itself is given that status (Crook 1980: 28-29).

Mind as a collective entity notionally-distinct from embodiment is, therefore, a consequence of the functional properties of human consciousness. Crook gathers a number of definitions of consciousness which indicate its properties:

1) Consciousness as being and having.

Consciousness is 'being'. Verbal thinking, by creating an object, is 'having' (Fromm 1979). About these polarities hang the various states of consciousness that can and do arise (Crook 1980: 30).

2) Consciousness as a form of present intentional attending modelled on the visual system.

Consciousness is intimately related to attending. Attention is the focussing of conscious awareness. This may involve a narrowing of consciousness, a division of awareness into a more- and less-focal area, a widening of consciousness until it has no especial object, or a flickering of consciousness when steady attention is for some reason precluded. Attention creates the foreground of consciousness, letting the rest slip into peripheral awareness. Gaining control of attending is to control the mind and states of experiencing. It is one of the main disciplines of spiritual training (Crook 1980: 30).

On this account, consciousness is 'patterned' after the fashion of the visual sense that is dominant in humans, in that it has a 'panoramic' peripheral attention, an intentional arena or 'focus' of attention, and is linked to memory recall and 'concerned with the attempted resolution of unfinished business' (Crook 1980: 30).

3) Consciousness as a set of properties that construct an interior analogue or picture of the world.

Crook cites Jaynes (1976), who describes the properties of consciousness as the invention of a spatial world on which to plot experience, the selection or 'excerption' of relevant scenarios, the creation of a temporal narrative, and the 'conciliation' of concepts to produce a consistent world-view.

[These properties] are not the immutable basis of our world but rather the constructs we create to produce a stable world of subject and object within which to act (Crook 1980: 31).

For Crook, the biology, socio-biology, and ethology of the evolution of the conscious mind are prerequisites to the understanding of personal identity acquisition and meaning-creation, *and* prerequisites to understanding the development of person-centred therapeutic strategies for alleviating common ailments of the self-process. Identity-formation is a universal process which produces individuals by means of a sequence of reciprocal transactions with the human social community and particularly within families, as the child constructs identity by practising autonomous roles and expressing meaningful attitudes in an environment that provides more or less supportive feedback (Crook 1980: 265-266). Since it is a temporal social process, the development of personal identity is vulnerable to untoward events that can only be unconsciously assimilated in early life, and which have ambiguous consequences in later life.

...most adult human beings actually comprehend few of their sources of action and impulse and are often far from knowing consciously what they are about; what we profess to know is usually a rationalization of what has impelled or directed us from within (Crook 1980: 283).

Crook is not content to remain within the restrictions of one scientific discipline, and expands his study of the socio-biology and ethology of human consciousness to include psychological strategies for coping with the lack of mental well-being, which build upon the inherent structural feature of consciousness, as an enactment of Fromm's polarity between 'being' and 'having'. This polarity is re-configured by Duval and Wicklund (1972: 2), as 'subjective self-consciousness' ('being' as the conscious subject directing attention away from itself to the world) and 'objective self-consciousness' ('having' as consciousness which has itself as the object of its attention), (Crook 1980: 313).

The problem with objective self-consciousness is that its occurrence during socialisation leads to comparison of self with others and a consequent sense of inadequacy. Subjective self-awareness, on the other hand, is task-oriented, free from concern about the adequacy of the ego, and often inherently satisfying (Crook 1980: 317). Although Crook finds it inconclusive, research into cerebral hemisphere dominance suggests that consciousness is 'bi-modal', either objective, propositional, linguistic, concerned with relationships, and therefore prone to anxiety and neurosis, *or* subjective, playful, 'autotelic' and self-fulfilling (Crook 1980: 318, 335, Csikszentmihalyi 1975:10, 22)

Briefly, Crook's thesis is that objective self-awareness produces a concern for the ego that is constricting, defensive, and characteristic of alienation in contemporary, largely western, civilization. He locates a remedy in eastern meditational practices which re-connect restrictive self-identity to the peripheral breadth of world experience. Such practices are normally embedded in hierarchically-structured religious meaning-systems, but have lost some of their collective coherence as religion in modernity becomes a matter for individual choice. In such circumstances:

Contemporary systems of meaning are shifting strongly in the direction of what I call a 'transpersonal humanism'; that is to say a value-system based firmly in the realization that experience stems

from within man and cannot be attributed to supernatural intervention, a value-system that none-the-less questions the values of the assertive egotism at the roots of modern life and seeks to move to a deeper understanding of the personal or self-process and its relation to the perceived world (Crook 1980: 361).

Crook appreciates the practice of Buddhism because it lacks ‘metaphysical and ethical dogmatism’, is based on ‘experimental study of experience, is phenomenological rather than intellectual, has an underlying unity based more in individual practice than on doctrine, and is ‘as much concerned with social issues ...as with self-salvation’ (Crook 1980: 362-363). The conclusions he reaches in *The Evolution of Human Consciousness* are factored into his humanistic perspective on Buddhism and his Ch’an style of practice. He revisits the issue of consciousness as ‘being and having’ with a more detailed argument, in Crook (1992, 2002b).

Synopsis

Crook considers that the human mind has not changed significantly since the time of the Buddha, therefore the experiences mentioned in the early Buddhist tradition are replicable. He prefers to define mind as a holistic continuity with the world. He does not consider current evolutionary science to be reductionist: it merely interrupts holism in order to do part experiments. He has a representational view of the mind: its role is that of image production. He does not consider that there can be one syncretic Buddhist dogma about any subject because of the diversity of tradition, because experience is negotiation with, not analysis of the world, and because Buddhism, unlike analysis, is not motivated by a desire for certainty.

Having wondered to what extent interpretation and experience affect each other, in an unrelated part of the interview he provides an example of how different interpretations can be reconciled to one experience, by paying close attention to the etymology of words, rather than to their place in doctrinal argument. As an example he provides a consilient view of the problematic notion of *tathāgata-garbha*; a view enabled, I suggest, by the broad antecedents of Ch’an thought in the Madhyamaka, in Yogācāra and in Daoism.

In *The Evolution of Human Consciousness* (1980), Crook finds sufficient explanation for mind in embodiment in the world, without resort to mysterious non-material agency. The notion of a mind/body split arises with the difference between the subjective ‘present continuum’ of the ‘attender’, the ‘I’, and the objective ‘retrospective insight’ of the self-descriptive ‘me’. Crook characterises consciousness in three ways: as being and having, as intentional attending modelled on the visual system, and as the provider of a representational analogue of the world. The evolution of consciousness is a prerequisite for the social development of self-identity, but alongside the development of identity the possibility arises of mis-assimilation of emotionally-significant scenarios in early life, with ambiguous consequences that become unconsciously rationalized in later life. The self-constitution of identity is an objective or ‘having’ mode, as opposed to the ‘being’ mode of attention to the world.

Ken Jones

Ken Jones is a Zen and Ch’an Buddhist practitioner, living in active retirement. He is the founder of the U.K. Network of Engaged Buddhists, practices with the Western Ch’an Fellowship and the Kanzeon Sangha, and leads independent retreats. He has published on socially-engaged Buddhism (2005), on Buddhism and ecology (1997), as well as original works of *Haiku* (poetry) and *Haibun* (poetry/prose combinations) (2002).

Interview summary

Jones considers the development of tradition as ‘not replacement views; they are more sophisticated views’. Thus he holds the Theravāda to be true, but ‘not sufficiently subtle, not sufficiently ambiguous’ from his own Mahāyāna perspective. Ambiguity is the key to his approach to Buddhism.

The whole thing really is about ambiguity. Jung said that if a spiritual practice is not ambiguous it is not authentic. It is absolutely vital - and there is no logical way you can express ambiguity (Jones).

Ambiguity is almost a tool, or a reminder, directing attention away from intellectual reification, towards concentration on practice and experience.

...my own orientation is not towards scholarship, but towards my practice and that of my fellows...so it is more experiential. If it is not to do with the work, I am not usually very interested in it and consider it positively dangerous for practice to dabble too much in this kind of intellectual fascination. It is the biggest problem we have. The whole history of Buddhism can be seen as a conflict between the experience of practitioners and the constant tendency to ossify that tendency into intellectual structures and the institutional structures that go with them...We see Buddhism as the way but also as the problem. It is the biggest problem Buddhists have. Some of them have gone along quite well in getting rid of the other *klesas*, but Buddhism is the last one - it's the cow's tail - waiting for it to go past the window, and the rest of the cow has gone (Jones).

Even the distinction between mind and matter is a reification too far. Such a radical separation of one thing from another is essentially dualistic, and dualism is a root cause of the suffering (*dukkha*) that Buddhism tries to get beyond.

You can feel the pain of dualism. *Samsāra* is in essence the pain of dualism. That is what drives people to the Dharma, or to dope or whatever. But oneness of course is also dualism. Most of what I think is wonderfully [expressed in] the only Buddhist scripture I've learnt by heart, and that's Seng Ts'an's *Hsin Hsin Ming*. [It is] a wonderful statement of my kind of Mahāyāna Buddhism, and a very important scripture in the Zen tradition. It keeps the balance; it does hammer this paradox (Jones).

The paradox of the ambiguity of dualism is expressed in the *Heart Sūtra* statement that 'form is emptiness, emptiness is form'. Although not explicable logically, the formula can be approached metaphorically.

There are a number of ways in which you can explain emptiness without getting into paradox. This room can be explained in a number of ways depending on which perspective you are using: structural engineering, impressionism, medieval art without perspective, chemistry. But what is this room?...it is empty of substance (Jones).

But emptiness is not a thing, but a dependent relation between things, and when those things are a person and a world, emptiness is the *suchness* of experience.

I would say that a person experiences emptiness [when] they experience life free of the self-need to fill this strange nebulous mysterious self and make it into a somebody (Jones).

There is a self of course. You and I could not be talking to each other if there was not a self. The only reason why the Buddha said there wasn't a self was because everybody was so...convinced there

was...but then we are back into ambiguity because there isn't a self either, in the sense of a permanent self, and in the sense that this isn't all a dream between us. In a way we are dreaming. You only have to do a little bit of meditation to see that. We have got the whole thing constructed so that it will make sense...Only because we share a whole lot of constructs can we get on with it...we share a conventional construction of reality (Jones).

The way beyond that conventional, dualistic, self-needy construction of reality is through the practice of mindfulness.

Mindfulness is an interesting way to understanding 'suchness'. If you look at something when your mind is in a state of 'emptiness'...then there exists only the lamp - you see it in itself. When you see things with that kind of vividness you are not seeing it in terms of comparison with anything else. That implies emptiness, because form...is philosophically about how one thing defines another. One thing isn't defining another when it exists in suchness, and some of our most profound experiences, whether spiritual or not, are received with extraordinary authenticity when we see their emptiness, see their suchness...Dōgen wrote a wonderful fascicle: 'All the universe is one bright pearl'. If one is totally absorbed by *that* thing it is the whole universe (Jones).

For Jones, one consequence of an insistence on taking an ambiguous approach to traditional doctrine and to conventionally constructed reality is that there are no moral certainties to fall back on.

...the desire to be right [is] back to dualism again. When one works with people on Buddhist ethics we all have the feeling there is some right and wrong *up there*, and if we could get in accord with that we would be good people. There isn't. It is quite scary. There is nothing, absolutely nothing. It is very difficult for people to understand this. You can understand it intellectually, but you assume there is something up there...It is dualism again...it is conceptual Buddhism, dogmatic Buddhism...The Zen view tends to be dangerously antinomian, because the precepts come at the very end of your practice, by which time you are assumed to be a very ethical person without thinking about it. Of course that is questionable. I think one needs the precepts as a reminder, and as something to play with (Jones).

Despite that pragmatic use of precepts, the lack of metaphysical moral certainties means that ethical practice depends on relinquishing the grasping of a reified sense of self.

...in socially-engaged Buddhism emptiness is the skeleton in the cupboard, because one can be effectively changing the world only when the self isn't in the effort. The only way the self is not invested is when there is this sense of emptiness. Sometimes one takes oneself too seriously...I'll express it in a Zen way: nothing is worth taking seriously and therefore everything is worth taking seriously...If we are no longer driven by self-need there is nothing to do but helping other people. Engaged Buddhism in its purest form is where we will all end up (Jones).

In the interview, Jones's answers often went against the run of the questions, and can be seen as a characteristically Zen expression of the Mahāyāna. That perspective yields a philosophically 'externalist' view of the mind as 'a mutual event between world and brain'

What interests me is the way that the subject, person and the object that is out there interact to form a relative experience in the subject and in that sense everything is mind. What I find particularly fascinating is the discovery that we are free to create whatever reality we like within certain limits, and that the needs of the self, its cultivation and personality, carries [us] into particular channels of experience. *Dharma* is about being able to transcend these experiences. It is quite extraordinary the extent to which we can transform the perception of what is reality.

...I think that is straight-forward Mahāyāna Buddhism, beautifully expressed in the Hsin Hsin Ming (Jones).

Jones is not concerned with the investigation of the nature of mind from a philosophical point of view.

I am a bit suspicious about differentiating between minds and bodies...cautious in that I do not like to see a strong duality set up...We are back to form and emptiness again, an ambiguous situation, and once we set up these situations we create these impossible questions for ourselves (Jones).

...we are not interested here in the logical mind. It has its value but often it is just another way to enable a certain kind of personality to secure its...existence (Jones).

...there are some questions to which there are not any clear answers, and that raises the question as to what their meaning is as questions...[with] all these things we are involved in structuring the formless (Jones).

However, he is prepared to consider the psychological effect of Buddhist practice, which leads to a reduction in intentionality.

Someone who is on the cusp of the human condition is inevitably intentional in their stance, because they just want to do something about it because they suffer. They may move to *Dharma*, therefore, intentionally, and they want to be relieved of their suffering. If they stick with it; they enter through a long process, whereby ultimately the intentionally falls away...the other-power we talked about (Jones).

That reduction in intentionality does not entail that Buddhists become unfeeling ‘zombies’.

We have our moments of calm presence of course, which is very important to inform our lives, but what strange desiccated individuals we would be if our emotions were somehow eliminated!...That’s an interesting *kōan*: that our passions are our Buddha-nature (Jones).

Jones observes a complex relationship between Buddhism and psychotherapy.

A starting point is that Buddhism is concerned with a person’s existential predicament as a human being, and psychotherapy with more specific dysfunctions that make it difficult to operate what you would call a normal life. But beyond that the overlap is extremely complex. For example, if you go on a retreat and you conduct interviews with students as a teacher, most of the stuff that comes up has to do with dysfunctions in the course of life...inadequacies as a human being...because you cannot separate these from the existential problems...So in this sense so-called spirituality and so-called therapy intertwine the whole time.

...One cannot, as some Americans did, suggest that people who want to undertake spiritual practice [should] go into a preliminary period of therapy and when they are “clean”, go into these great existential questions. I think that is extremely naïve, but it is put forward in all seriousness because it is very good business for the professional psychotherapist (Jones).

Avoidance of the resources provided by logical deliberation and overt intentionality opens the possibility that self-deception might pass unrecognised, particularly with regard to meditative experience, but Jones finds an external (other-power) source of confidence or validation in the ‘facticity’ of experience, which has enabled him, after many years of Buddhist practice, to be reconciled to the indigenous religious tradition.

...all I can say is that when we experience structure in mind it comes with a certain facticity. It is just how things are. I prefer to trust that, whatever that means...I am not bothered about certainty...One can distinguish between notions which the self develops, and these things which seem to be given from somewhere, and this is something in all

the great spiritual traditions...[from] my own experience as a Buddhist and the experience of many other Buddhists, it has given them an understanding and empathy for the idea of God. This Other is given, and one can see how in certain cultures this Other is personified. All this Other is of course one's self that is ignorant, which one has then divided. All this connects quite nicely with the whole gamut of inner path Christian mysticism, which is why so many older Buddhists, in my experience, have felt they have come home in later years to Christian mysticism. Buddhism has given them the key to empathise with [and] to come home, back to their own culture (Jones).

With regard to the future of Buddhism in the West, the area where Jones does anticipate real change, as opposed to reinterpretation, is in hierarchical social organisation and in the well-springs of social activism.

[Buddhism in western context]...certainly means changes to social organisation, because...[the West] is such a very strongly developed social culture, in terms of issues such as hierarchy. One has to ask oneself what is the nature of that hierarchy, because...[the West] is quite an egalitarian sort of culture. How do...[Buddhist groups] respond to this? Do they attract people who want security and want father figures? That would not be the case in a culture which is naturally hierarchical, and [where] no-one says it is hierarchical because that is the water in which they swim...another important issue is that of social activism. We live in a culture in where the general approach to a problem out there, whether it is global warming or the threat of war in Iraq, or rheumatoid arthritis, or a bad marriage, is to fix it. We have resources and technologies and money to go out and fix it out there, or we think we do, whereas in traditional cultures the emphasis is on changing the way you experience it. That is what spirituality is traditionally about. So what happens when you have a traditional spirituality in the context of a culture which is obsessed with fixing it out there, and that is *not* what spirituality is about? That raises questions, of course, for socially-engaged Buddhism, which has to find a way of combining inner and outer work, and undertaking an inner work of personal change in order to be socially more effective (Jones).

This discussion of social organisation and social change gives rise to the question of who effects change in a world of selfless persons, how change is effected, and what is changed in enlightened persons.

Of course it's other-power...When for example we have an insight it comes with a sense of facticity, rather than an idea that I've got. (Such as,) when we are moved to help someone and are able to act in a critical situation, and afterwards we say 'Who did that?' So in a sense it is other-power, and it might look like superhuman power - so I am

happy with that. Beyond that you are touching on the whole question of enlightenment, which I think is a big issue in the West.

By enlightenment, the belief that if one practices long enough, skilfully enough, one will be reborn with a fundamentally changed personality; this becomes the object of one's practice. This I think is a hugely destructive notion. There are three delusions involved. The first one is that someone who admits that they are deluded can imagine what this situation would be. The other [second] delusion follows from that. This is simply inflated desire. The whole point of enlightenment is getting rid of desire or seeing it fall away. The third delusion [is that] it is always something that is going to happen in the future, it is not something that is happening now. You get this all the time. People sit [in meditation] and they are waiting for something to happen. We get the dualism again that becomes all this misery. 'I'm here - I want to be there.' 'Other people have this experience, so why can't I?' Whereas the whole point of meditation practice is to accept what comes up. It is actual acceptance of one's inadequacies, of one's hopelessness. That is liberation: a total acceptance of it... You are just accepting your inadequacies and the world as it is. Then you are free to do something about it, because you act out of total acceptance, [which] implies that the self-serving self has shrunk very significantly. When we accept totally, the self has almost abandoned its project, and can start to address the needs of the world instead of own needs (Jones).

Jones is not daunted by the possibility of dialogue with traditions and perspectives from outside Buddhism.

...I regard outsiders' criticism [as beneficial]. If they are serious and thoughtful criticisms one can respect them. They are like gold, much more [helpful] than from someone who is anxious to embrace the whole lot (Jones).

He thinks that the possibility of dialogue between Buddhists is limited by practical considerations. Firstly, Buddhism in Britain suffers from sectarianism, 'using that word in the technical, not the derogatory sense'. Secondly, although there is a central forum – the Network of Buddhist Organisations – there is no central journal. Thirdly, the present need is to 'build up trust on a personal level' therefore 'the last thing you need is to talk about doctrine'. He also senses that Buddhists are characteristically wary of entering into debate on divisive issues:

In my experience Buddhists are afraid of conflict, because they are afraid of stirring up things - other beasts that live deep down. It is a controversial view but I have the feeling very strongly, and do not think Buddhists are any better than anybody else at handling conflict... Buddhist organisations tend to have the same organisational

problems as any other...Spiritual people can get very wary about exposing themselves to conflict and the powerful emotions that come up, not realising that if one can open to these without taking them personally, these strong feelings that flow can have a warmth to them as well. As long as we do not take ourselves too seriously, and of course, what can be more serious than spirituality? That's the problem (Jones).

Synopsis

The development of Buddhist Mahāyāna tradition represents increasing doctrinal sophistication, and increasing ambiguity. Emphasis on ambiguity enables Buddhism to avoid ossification in logical, intellectual and institutional structures. The experience of emptiness as *suchness* is a way to avoid the construction of a world on the basis of self-need, and to avoid continually assessing one thing comparatively in terms of another. As well as the absence of doctrinal certainties, there are no moral certainties, but an ethical system arising naturally from self-relinquishment is the well-spring of socially-engaged Buddhism.

Everything is mind, in the sense that 'subject, person and world interact to form a relative experience in the subject'. Usually that experience is channelled by the needs of the self; with the relinquishment of self-need perception can be transformed. The division of mind and body is the kind of logical dualism that Jones abjures, a 'structuring of the formless' out of a search for certainty. With mindful attention to other-power, selfish intentionality falls away, but that does not mean that what remains is an emotionally 'dessicated' non-intentionality.

There is some overlap between religious and psychotherapeutic practice. Religious practice is warranted by experience, and confidence in experience comes from 'facticity': the sense that, although experience is 'structure in mind' it has an external source, describable as 'other-power', and more trustworthy than 'self-power'. The 'other' is 'our own self divided'. Appreciation of the facticity of other-power in experience has reconciled Jones to Christian culture, mysticism and divine personification. He makes a general distinction between the western tendency to resolve problems by material change, and the eastern tendency to resolve problems by experiential change. He is critical of the notion of enlightenment as a future state of profound personal change in another lifetime. That enlightenment is imagined at all implies inflated desire; that it needs to be imagined implies that it is to be found in

the future. For Jones, enlightenment is just as likely to be found in acceptance of the present.

Jim Pym

Jim Pym has worked as a publisher, author, assistant manager of Watkin's Bookshop in the West End, London, and manager of the Quaker Bookshop in Euston. He first encountered Buddhism in his 20s, and later began Zen meditation in London with a former monastic who taught a few friends informally. After his death, Pym practised with Rev Jack Austin, who was at that time a Zen priest. Austin came to feel that progress in Zen meditation was not possible without the influence of an enlightened teacher, and he started to investigate the Jodoshinshu or Other-Power tradition, where progress is considered to be empowered by Amida Buddha, the Buddha of Infinite Light and Life. He passed his discoveries to Pym, who recognised that this was also the right path for him. Together with Hisao Inagaki, an ordained Jodoshinshu priest who lectured at SOAS, they established the Shin Buddhist Association of Great Britain. This association later became the Pure Land Buddhist Fellowship, which is more a network of like-minded practitioners than a formal organisation. Pym is the editor of its quarterly journal: 'Pure Land Notes'.

Pym was ordained into the Japanese Seimeizan School by the Rev. Tairyu Fuwakawa. The Seimeizan School is outside the mainstream of Jōdo Shinshū tradition, but appealed to Pym by virtue of its interest in ecumenicism and social engagement. Rev. Fuwakawa had Zen as well as Jōdo Shinshū transmission, he cooperated in joint Buddhist/Catholic retreats, and his home temple enshrined a relic of Albert Schweitzer. The Seimeizan movement campaigns for the abolition of the death penalty in Japan, and is supported by Sister Helen Prejean, whose similar work in the U.S.A. was featured in the film *Dead Men Walking*.

Pym has taken up the Seimeizan emphasis on ecumenicism in the British context, rediscovering an interest in Christian spirituality that was overshadowed by his youthful rejection of Catholic upbringing. He suggests that Shin Buddhism and the mystical traditions of all world faiths are fundamentally compatible (Pym 1998: 14-28). He has written on Quaker spirituality and on the relation between Quakerism

and other faiths, and in *You Don't Have to Sit in the Floor* (2001: 7), argues that Buddhism can be undertaken without engaging in culturally-specific practices.

Interview summary

Pym's attitude to tradition is informed by his first encounter with Buddhism, when he attended a lecture on the *Kālāma Sutta* (Woodward 1932: 170 [AN III. 7.65]), 'where the Buddha says, "Believe only things that are helpful to you"' (Pym). This advice informs his practical approach to ecumenicism, and to obscurities in historical transmission:

The teaching in the Pāli Canon was recorded and remembered orally for over 300 years by monks – no recollection at all of it being recorded by lay people, so consequently what came over in the Pāli Canon was for the benefit of the Sangha. Now we all know the game of Chinese whispers...I am not saying any serious thing of that [nature] happened, but human memory is a fallible thing. In addition to that it was recorded, probably, and remembered, in verse form. To put into poetic verse form in that Indian tradition meant that you used rather flowery language. So all that means that for me that the Pāli Canon is not as much solidly 'gospel' as some people would have it to be (Pym).

...many of the Mahāyāna *sūtras* were written down so long after the Buddha and were not historical in their setting...so you have to look at those and say 'this is the language of myth'. I like D.T. Suzuki's definition, (in *Buddha of Infinite Light*) where he says that myth can often be more powerful than fact because it touches deeper levels. That is certainly true of the three Pure Land *Sūtras* (Pym).

I do not find scripture as important as experience. For me it is the experience of people who have chanted the name of the Buddha, who have experienced *Shinjin* or have practiced *vipāśyanā* or other forms of meditation – the cumulative experience of those people coming down to the present day...so my attitude towards scriptures is much the same as my attitude towards the gospels. There is much that is helpful and much that is totally unhelpful (Pym).

Pym considers that the complexity of tradition has obscured the simple message of the Buddhist teaching that there is suffering or 'unsatisfactoriness', a cause of suffering and a way out of suffering. Complexity developed as a negative consequence of inter-denominational philosophical dispute, but simplicity re-emerged in the twelfth century Pure Land tradition of Hōnen and Shinran, who democratised Buddhism by providing practices that were accessible to illiterate non-

professionals such as farmers and fishermen, who were prevented by law from becoming Buddhists because of their occupation. The simple practices of chanting the name of Buddha as advocated by Hōnen (*nembutsu*), and cleaving to the state of mind that accompanies the chant, as advocated by Shinran, enables access to the experience beyond words that *is* the essential Dharma.

It is the sense of presence, sense of being, that which is beyond words...but it takes form, and it takes form in three ways: in action, particularly compassionate action, it takes form in words, and it takes form in presence or being...there has to be a form, as with one of the *skandhas*: a form has to be there (Pym).

There is, for Pym, an intimate link between the priority of the present and *Dharma* as a sense of presence. Enlightened actions are just actions, not reactions out of, or towards, the past or future:

...the word presence is of course closely linked to the word present, which is the eternal now, so in a sense everything that we do in terms of expressing things...putting it into words or whatever, is all related to the past, or possibly related to the future, but there is a sense of presence, a sense of being, a sense of nowness, which is that essence out of which all this comes. I might be wrong to speculate, but to me the enlightenment of the Buddha...is that he always spoke from a sense of now...I have met this with other, what I call, spiritual beings – people who are totally with you at that moment. They are not thinking about the past, they are not thinking about the future, they are not thinking about anybody else (Pym).

As well as in the *Kālāma Sutta*, Pym finds this emphasis on the present in the *Hsin Hsin Ming*. The emphasis in that text is on action rather than reaction, and on non-discrimination. This attitude informs Pym's desire that religion be 'a circle that includes everybody', his preference for positive rather than critical dialogue, and for religious practice as a 'life-teaching that does not fit into one of the faith pigeon-holes'.

Pym considers Buddhism to be scientific. Buddhist practice is the 'experimental observation of experiments...you do certain things and certain things will happen'. He does not understand, or think that anyone understands the mechanism of rebirth, but he does not doubt rebirth, for otherwise 'there can not be any real justice around'. For him, the fabulous details of eventual rebirth in Pure Lands are 'boring' if taken

literally. He considers that these details constitute a symbolic system for which the interpretation has now been lost.

...but the important thing about rebirth...is that...we are born where we are born. In other words, wherever you are born and whatever circumstances you find yourself in: that is something that you have to deal with, there and now, and not be forever running off on retreats or going off to foreign climes or following this teacher around or that teacher around, to the extent of neglecting what is under your nose (Pym).

Pym's view of the mind is experiential rather than scientific or philosophical. He gives a detailed account of 'going beyond the mind to the unborn', an introspective or *vipaśyanā* method of practice:

You observe the way thoughts arise and thoughts drop away, so there is an observer to observe those thoughts and there is a space in which those thoughts arise and fall away. It is almost like a cinema screen: the thoughts get projected on it and they go away. So Buddhism looks towards helping you understand or discover or even live within that awareness of the space. That is what I understand Buddha to mean by the Middle Way. There is a space, a point of balance between past and future, between positive or negative, or whatever: that point of balance which is the space within which the thought arises. But we see the thought as *not us*. That is what I mean by 'going beyond the mind', because there is no word within western psychotherapy or psychology, that I know of, to describe that space, and yet the experience of meditation tells us that is there...Now, what Buddhism is trying to say is, what is the screen [space] and more important, who is the watcher? And that, then, is clearly taking you beyond your thoughts, because you are observing a thought, and so you observe the nature of your self – not in terms of saying there is a self or there isn't a self, but in terms of being able to observe the nature of the self by being it...it is becoming the self, and it is becoming the self that observes, and the nature of that self is not-self. In other words the nature of self is that any thoughts or concepts that we project onto that [space] are only thoughts. They do not have any impact upon the observer or watcher...you might even call it the *unself* (Pym).

Pym is describing an experience that may be thought to be psychotherapeutic in the technical sense that it is a reworking of habitual mental functioning, but actually goes beyond the usual psychotherapeutic concern to reconfigure the normal social functioning of the self. He is aware of the Jungian view that westerners need to first find a way through their unconscious dispositions to coherent sense of self before the self can be transcended (Jung 1958: 537, 553), but his description is of a movement

from duality, in the form of the concept of self, to ‘mystical oneness’, better described as *anattā*. He stresses that this experience is accessible to everyone, and that it can lead at least momentarily to a radical change of vision, as the recognition of separation from one’s own thoughts, emotions and feelings suddenly causes transference beyond the ‘circumference’ of subjectivity.

...[This experience is] there and you don’t recognise it...We expect enlightenment to be flashing lights and beautiful visions and beautiful music...but it isn’t. It is actually the acceptance of the ordinary in the here and now, but free from time. That’s all...the illusion we have [is] this vision that enlightenment is going to be something wonderful...yet I suspect...from glimpses that I and many other people have had that it is a beauty here, it’s finding the kingdom of heaven, or the path home, here somehow, and it is real (Pym).

Pym expects this experience to be accessible through any form of religious practice. He compares this to *Shinjin*: the generation in the Pure Land tradition of the ‘entrusting mind’ of enlightenment when the recitation of the *nembutsu* (or any other mantra) becomes instinctively internalised, and metaphorically transfers from the head to the heart. He points out that the term ‘mind’ has several meanings in Buddhism:

Some teachers will talk about ‘all is Mind’ in the same way as Christian mystics will say ‘all is God’, and mind is capitalized to indicate this...almost the idea that mind is seen as ultimate reality...[The capitalized mind] is Buddha-mind, is the divine in a sense. It is mind that is all-embracing. It is the substance, the essence of everything... (Pym).

Capitalized mind, Pym considers, is also used to denote the Tao in Ch’an, where writers did not wish to import a term from outside Buddhism. Capitalized ‘Mind’ is thus a term for the divine, for the essence of all, for the Tao, and also for the kind of ordinary/extraordinary experience that Pym describes. Although he does not specifically say so, my impression is that, by virtue of his focus on experience, Pym is untroubled by philosophical distinctions between these different meanings.

What Kind of Buddha?

Because his primary concern is with Buddhism as religious experience rather than as scriptural tradition, Pym thinks that Buddhism should be explicable in language enables westerners to practice effectively. In *What Kind of Buddha, What*

Kind of God? The language of Western Mystical Theology as an aid to understanding the Shin Buddhist experience (1998: 14-28), Pym asserts that *Dharma* is universal, therefore present in western life, religious practice and literary expression.

Buddhism and Christianity may or may not lead to the same goal. It would require someone who had walked both pathways *and arrived* to say whether the Pure Land and the Kingdom of Heaven are the same or different. Perhaps it is best to take the Buddha's advice, and avoid speculation (Pym 1998: 24).

To be universal, *Dharma* must be discernible in Christian discourse. Pym finds its traces not so much in theology or philosophy as in the poetic language of the mystics of all faiths.

...the written word can only express the full range of meaning when it is *not* used literally. Words placed together can convey more than the sum of the individual words. The language of the spirit is not the language of the dictionary: it is the language of poetry (Pym 1998: 22-23).

...we need the experience first, and then we can find the language (Pym 1998: 24).

For Pym, commitment to *Dharma* as a universal experience entails that mystical explanation in any religious tradition can be a guide towards that experience. This commitment colours the way he evaluates both Christian and Buddhist doctrine.

When I wish to express [my] experience in words I would like to be free to use without prejudice the language which gives me the words that come closest to that experience. I am grateful to Buddha, Amida and my teachers who have shown me the *Dharma*. I am also grateful to my parents, to God and to the religion of my childhood, without which the *Dharma* would always have been something foreign (Pym 1998: 25).

Pym justifies a life spent variously in Catholic, Zen, Quaker, and Shin Buddhist practice, because from all he receives the message that 'we can all surrender our lives to the Infinite, but we cannot do it by ourselves' (Pym 1998: 26).

Synopsis

Pym describes himself as 'a mixture of a traditionalist and an anarchist'. Underlying this statement is his belief that experience is more important than scripture, and the experience that matters is 'the people's experience'. His emphasis is on actual experience in the present rather than exemplary experience in the past,

and this emphasis informs his attitude to tradition, to the *Dharma*, to other faiths, and to the philosophy of mind.

Pym only accepts that which is useful to his religious life, and is therefore able to be ecumenical, and unconstrained by a specifically Buddhist identity. He is not concerned with the literal truth of scripture produced by and for the *Sangha*, rather than the laity, and in any event, he holds that the poetic language of myth is more powerful than fact. The urgency of the Buddhist indication of a way out of suffering has been obscured by interdenominational philosophising: the Buddhist way indicates the essential *Dharma*, which takes the forms of action, words and being in the experience of presence.

He considers Buddhism to be scientific because its practice proceeds by experiment. The kind of dialogue he finds productive is non-confrontational. He does not understand the mechanism of rebirth, but accepts it on the basis of the justice argument. However, what matters is this rebirth now, and the circumstances in which we find ourselves. His explanation of mind is experiential, taking the form of a description of *vipaśyana* practice of the observation of awareness. He believes that enlightenment is accessible through this, or any other kind of religious practice, as ‘acceptance of the here and now, but free from time’. He gives the example of the metaphorical transfer of the prayer ‘from the head to the heart’, in the Russian Orthodox faith, which he compares to the generation of ‘entrusting mind’ (*shinjin*) as the nembutsu becomes internalised in the Pure Land tradition. Pym is well aware that mind has several meanings in Buddhism, from reference to individual mental events to the ‘essence of everything’. Literal meanings, however, do not communicate the full range given by the other-power of experience. ‘Essentially, it is the poet who gives us insight into the depth of religious experience’ (Pym).

Ratnaprabha

Ratnaprabha (Robin Cooper) is a senior member of the Western Buddhist Order, the ordained community around which the FWBO is focussed and organised. He has been the Chairman of Cambridge Buddhist Centre and part of the team responsible for the ordination process at the Padmaloka retreat centre near Norwich. He now works with Windhorse Trading in Cambridge, involved with applying Buddhist ideas

to the work environment, and to international trade. He trained as a physicist, and has taught and researched in environmental physics. He is the author of 'The Evolving Mind: Buddhism, Biology and Consciousness' (Cooper 2003), and continues to write about connections between Buddhism and Science.

Interview Summary

Ratnaprabha considers that there is a basic unity to all forms of Buddhism, and a sense of unity between all Buddhists: 'on an intuitive level we are doing the same thing'. He is aware that the tradition has its discontinuities, and some interpolations from other traditions, but feels that the significance of these aporias depends mainly upon the 'interpretative weight' given to them. He has no objection to the philological investigation of canonical texts, finding it 'fascinating, usually helpful...sometimes sterile'. He considers the continuing oral transmission of enlightenment experience to be more important than the textual transmission of tradition. Ratnaprabha is aware of the problems that can arise in interpretation, either in the translation of terms, or of instructive examples:

...it can be very easy to think you have understood or explained something within a particular framework when actually it did not quite fit...traditions of thought take certain things for granted (Ratnaprabha).

Since what matters about tradition is not whether it is adhered to but whether it continues to be useful, Ratnaprabha considers that contextual interpretation is necessary. Contextual problems motivate the interpretation of textual tradition under the guidance of oral tradition; in this way the explanatory act is warranted by the personal experience of the original author, of the teacher, and of the practitioner.

...in my case and that of a great majority of Buddhists, ...contact with Buddhism has come through the human beings I've met and through what they have transmitted to me of their own experience on all sorts of levels...So when I start reading the Pāli canon I interpret in the light of what I have learnt through my experience and what I have learnt through my own teachers...so I would say oral transmission is still very important (Ratnaprabha).

Since Ratnaprabha has a background in science education it is unsurprising that he takes scientific findings seriously. He agrees that an understanding of scientific

explanation is one component of seeing things as they really are (*yatha-bhūtam*) but he does not presume that all scientific explanation will have relevance for Buddhism.

With regard to the mind, Ratnaprabha is not persuaded by computational models of mental functioning. He considers the neuroscientific account of mind/brain identity to be ‘not a dogma, more a slight impoverishment of thought’. The problem is not that mental phenomena might have a material base, but that explanations of mental functioning should be reduced to terms that are only relevant to that material basis. He does not argue for a particular belief about the nature of mind.

My starting point for all these things is to say that first of all I am immersed in consciousness, so there is nothing nearer to me or [more] familiar to me but nothing more mysterious either. I want to avoid as much as I can, thinking that I’ve actually grasped it, and...come to conclusions, even logical conclusions, that say - ‘it depends upon the brain, and therefore without the brain it can not possibly exist.’ I would rather say that I do not know...and use the whole conditioned co-arising approach (Ratnaprabha).

His preference is for an externalist view of the mind, which stresses the mutual constitution of mental and physical events. That externalism does not entail idealism: mind and world are mutually constituted in the world of experience, but there remains an objective world beyond experience. The consequence of such a view is that, in contrast to the ‘eliminative materialist’ philosophical perspective, he holds that the investigation of conscious experience remains a valid topic.

How do you investigate the subjective pole? ...you can not investigate it objectively because you are taking it as an object, so it is no longer a subject. Presumably all you can do is be present in it...as yourself as a subject, which is what meditation is in a sense...What then may happen is that, according to the traditions – and this would go along with my very limited experience – is that the sense of there being a split between the object and the subject starts to attenuate, so it is not so much that you rise above the objective and go off into the subjective, it is more that you realise that the split you made in the first place is only a provisionally helpful thing for dealing with sensory experience. So when you get into other forms of experience you do not have to make that split between subject and object and you simply have a unified experience of some kind, and that unified experience is what Buddhists refer to as the very subtle levels of consciousness and experience (Ratnaprabha).

He relates these experiences of the unification of subject and object to descriptions of ‘higher or formless *dhyaṇas*’ (meditative states, Pāli. *jhāna*), which

are achieved after the attainment of the four *dhyānas* of form. Such states are mentioned in the Buddhist canon but not emphasised, for they are not considered to be a necessary part of the path to liberation.

...if one takes rather intuitively what those things could be getting at, they sound like a great attenuation of the split between subject and object, so you have a very spacious experience in which there is no sense of there being an external side to reality. ...my impression of the formless *dhyānas* is that it is an oversimplification to regard them as four layers on top of the fourth *dhyāna*, but that they are more four ways of meditating in the fourth *dhyāna*, in other words ways of applying your attention... It seems to me to be rather a lost teaching, and the commentaries will therefore try to explain it away... (Ratnaprabha).

Nothing said thus far conflicts with the scientific notion that the material basis of brain is causally-necessary condition for mental events. Ratnaprabha is, however, prepared to envisage this condition not being necessary. Despite strong circumstantial grounds the mind/brain causal relation remains uncertain, and Ratnaprabha is suspicious of certainty, in Buddhism as much as in science. If science is never certain, it remains possible to conceive of mind continuing without dependence on physical embodiment, even if science cannot (yet) explain how that could occur.

... there is a great network of conditionality that goes into this instant of consciousness...one of these, and a very important one, is...the nervous system. If someone [suggests] that it is possible for consciousness to be differently embodied - not embodied in a material way - I might at first say that I do not understand how that could be, but I also realise there are so many conditioning factors of consciousness that maybe it is possible for it to continue with that one particular conditioning area being removed, because I know it can continue with some of the other areas removed (Ratnaprabha).

...if I look at my experience either in deep meditation or in dreams I can see that experientially I seem to continue without any reference to my physical body - so if I have a dream I do seem to be undergoing experiences that still are embodied, I am still able to look and touch and so on, but I'm definitely not doing it with my physical body...it went to some other place in time and space entirely, at least in my imagination...that helps me to imagine what it might be like to be living a non-physically embodied existence. So it is imaginable, but that does not necessarily mean that it is explicable (Ratnaprabha).

Ratnaprabha's suspicion of certainty allows him room for mythological interpretation and flexibility of thought about specifically Buddhist issues that influence views of the nature of mind, such as disputes about absolutism, between the sudden and the gradual path, and the problematic notion of innate enlightenment.

...I would look at [disputes] much more charitably and say that there are different ways in which one can approach one's own spiritual life; different helpful pictures and images or models to use...so you can have the model:...just let go of all this [rubbish] that I am producing at the moment, then there's an underlying awareness which is very pure. And it is *here* – you do not have to go anywhere else for it, you do not have to add anything to it. In a sense you could already argue it is already enlightened...but then, to live life as [one] was living before [is] not living life in accordance with that underlying awareness...because a lot of what [one does] is in accord with all sorts of ego, self-interest and all sorts of mistakes...So even if I do believe [in innate Enlightenment] that does not give me an excuse not to follow the gradual path. If on the other hand my favourite metaphor is of the gradual path, moving towards a very distant goal...that is O.K...but I have got to realise that if I did not in a sense already have [Enlightenment] within, then how could I possibly produce it? If it was completely foreign to me how could I get there? You get into the same problems [as] the theistic religions, of God being completely divorced and separate from His creation...If you go for the Buddha-nature or the gradualist approach, in both cases there is a danger of tipping over into something that will prevent effective practice, and the other approach may well bring in the cure for that... (Ratnaprabha).

Employing similar flexibility, he has a preference for the doctrine of rebirth, based on some confidence in traditional accounts, and on the grounds that the end of consciousness, at death, renders life meaningless. However, he agrees with Sangharakshita that lack of belief in rebirth is no barrier to Buddhist practice.

...previous accounts, because they seem to be reliable in other ways and because they seem to be almost unanimous on the issue of rebirth, it must make my doubting side stop for a while and say, 'Well, it's interesting, here are some very intelligent and highly realised people who did not just take it for granted, but even say that this is part of their experience, or this is true, including the Buddha himself...When Sangharakshita was asked about it once he said, 'Well, if you don't believe in rebirth you have got to go for Enlightenment in this life, haven't you? So you must work very hard.' So in a sense, not believing in rebirth will give you an even stronger incentive (Ratnaprabha) (see Sangharakshita 1998: 38-42).

The Evolving Mind

In *The Evolving Mind: Buddhism, Biology, and Consciousness* (Cooper 2003), Ratnaprabha develops Sangharakshita's view that, with the development of self-awareness, physical evolution gives way to 'Higher Evolution', as persons actualise their potential as 'True Individuals' in the course of religious progress.

...inevitably I was taking a Western idea, the idea of evolution and I was saying can we fit Buddhism into that? There are dangers in that and I am sure that in the long term that will not be the way that it is done, but it is worth playing around with it and seeing what happens, and there are also great advantages in it because people are not particularly wanting to educate themselves completely in a non-Western way of looking at things in order that they can practise the *Dharma* (Ratnaprabha).

The key terms that Ratnaprabha uses to link Darwinian evolution to Higher Evolution are of concepts of levels, of transcendence, self-awareness, self-reflective consciousness, and of inner and outer worlds of experience. His hypothesis is that evolution by natural selection is a process of change (self-transcendence) to another level of response to an environment (Cooper 2003: 18-18). Self-transcendence in humans was carried a step further by certain Axial Age sages, including the Buddha, when they developed techniques of self-reflective consciousness that enabled them to transcend nature and become 'more fully human' (Cooper 2003: 126-130). It is not clear that self-reflective consciousness is an environmentally-transcending or solely a self-transcending response, but it might be both: with the development of agriculture, urbanisation, and complex social and cultural structures, the concept of an environmental niche can be interpreted widely for theoretical purposes as the total environment of an individual or society, providing the leisure and impetus for radical reflection on the human predicament in its relation to the world.

The concept of evolution was used before Darwin to indicate ordered growth unfolding towards some teleologically-necessary completion. In both the pre-Darwinian and the Darwinian sense the prototypical meaning of 'evolution' derives from the observation of biological events. In the case of Buddhism, however, Ratnaprabha uses 'evolution' to refer to mental events that can only introspected, not observed in the world. He therefore comes close to the conflation of two different mechanisms of evolution, one biological and the other mental, one other-power and the other self-power, with each mechanism having a different epistemological status,

one empirically observable, the other introspected. It could be argued that the difference leads to category confusion, but it is precisely Ratnaprabha's point that empirically-observable natural selection processes in humans have been overtaken, transcended, and even cancelled-out by empirically-unobservable mental conditioning processes of 'Higher Evolution'. He is not saying that the two processes are identical, but that evolution by natural selection loses efficiency as humanity uncouples itself from environmental pressures, and that humanity has reached a point beyond which mentally transformative self-reflective processes begin to take over the leading causal role in determining human individual and social change.

As with all accounts based on introspection, there is no evidence for 'Higher Evolution' other than testimony, whereas the wider theory of natural selection is warranted by an accumulation of empirical evidence, including the fossil record. This indicates the general problem faced by religious explanation: it largely depends for verification on the testimony of private introspection and personal realisation. Ratnaprabha tacitly accepts the point that there can only be inferential evidence for the depth of sanctity or level of mental attainment of particular practitioners in any religious tradition, when he mentions the possible existence of an unknowable number of 'undercover Bodhisattvas' (Cooper 2003: 207).

Although both evolution and Higher Evolution are progressive accounts, natural selection does not *depend* on progression. Darwinian theory simply observes current complexity of adaptation accompanied by evolutionary dead ends, species extinction and stasis, as well as examples of the emergence of the new capabilities that Ratnaprabha refers to as 'self-transcendence'. Higher Evolution, on the other hand, is an inherently progressive evaluation, yet the theory is incomplete, for it does not predict how mental transformation could transcend the cognitive re-arrangement of individual personality to progressively affect society as a whole.

The Evolution/Higher Evolution combination is rhetorically effective, because it aligns religion generally and Buddhism particularly within evolutionary theory rather than against it. The two theories become complementary rather than competing explanations of 'the way things really are'. Buddhist soteriology loses some of its mystery in the process, becoming a practical matter of psychological change, based

on the traditional teachings of the ‘three trainings’ of ethical action (*sila*), sustained self-reflection (*samādhi*), and wisdom (*prajñā*) (Cooper 2003: 167).

Ratnaprabha’s theory is a controversial but defensible view that self-awareness constitutes a natural limit to physical evolution, as individual self-awareness becomes a matter for individual development. He accepts that the notion of the ‘True Individual’ is controversial, but defends it with an argument reminiscent of Jung’s view that westerners interested in eastern practices have first to find the self, before they can transcend it (Jung 1958: 537, 553).

...when I consolidate my sense of myself I am not speaking about my *ātman* or anything like that. I (mean): do I know what I am doing and who I am? Have I got any kind of continuity of awareness in what I am doing? (Ratnaprabha).

In his book, Ratnaprabha is concerned to present a positive interpretation that is accessible to westerners. He lays no claim to a definitive interpretation, and on reflection he wonders if terms like transcendence and *nirvāṇa* should only be used verbally, with reference to a process rather than a goal.

Synopsis

Ratnaprabha is aware of problems with the translation of discourses into new contexts. He considers that inconsistencies in tradition are less important than the motivations behind interpretation, and that adherence to a doctrine is less important than its effective use. In this way he accounts for problematic issues in Buddhist philosophy that impinge on mind-theory, such as absolutism, sudden and gradual approaches to enlightenment and the doctrine of innate enlightenment, by a charitable attitude to mythological interpretation. He is content with the historical and philological analysis of texts, but finds that the link to experience makes oral transmission as important as textual transmission of the *Dharma*, enabling interpretation to be triply-warranted by the experience of author, teacher and practitioner. He considers science to be a valid contribution to the explanation of the ‘way things really are’ (*yatha-bhūtam*), but that the notion of mind/brain identity is a ‘slight impoverishment of thought’. He accepts that mind has some material basis, but rejects explanations seeking to reduce mind to that material basis. He prefers an externalist view of mind, as the ‘mutual constitution of mental and

physical events’, and considers the introspective investigation of conscious experience to be a valid endeavour, scientifically and otherwise, which he characterises in relation to the traditional typology of meditational states (*dhyānas*). As a scientist he is suspicious of certainty, and is therefore able to conceive of circumstances where the brain is not a necessary condition for mind.

Jonathan Shaw

At the time of interview Jonathan Shaw was the administrator of the Awakened Heart Sangha. This organisation provides graduated access to Mahāmudrā and Dzogchen teachings in the Kagyu-Nyingma tradition, as interpreted for western sensibilities by Shenpen Hookham, the Sangha’s teacher. For several years Shaw has been personal assistant to Shenpen Hookham, as well as producer and manager of the Sangha’s website and online distance-learning courses. Shaw’s education in philosophy and psychology enables him to supplement a practice-based approach to Buddhism with an uninhibited and speculative approach to issues of doctrinal explanation. Since the interview took place he has embarked on a prolonged period of meditation retreat.

Interview summary

Shaw considers Buddhism to be a positive path of practice, experience, and realisation. He approaches tradition accordingly, seeking guidance rather than opportunities for analysis and critique. He has faith in the ‘immediate Buddhist tradition’ and is ‘open-minded about the Buddhist tradition of earlier times.’ Within that earlier tradition he detects ‘a core practice lineage in all schools at all times.’

...I once thought of calling it ‘the natural mind tradition of Buddhism’...that centres around instructions to look at the nature of one’s experience and to relax into the nature of one’s mind. The idea of clarity and awareness as being the essential nature of one’s being (Shaw).

This positive tradition can become submerged by the concerns of doctrinal scholarship.

If we are to talk about subtle things wrong with our experience, about space, time, self, other worlds, definitely we should be looking to see what wrong ideas we have. But does going away and studying mind-

bending texts for 13 years really help you to look at these facets of...experience? I am not convinced it does undercut my worldview (Shaw).

In keeping with his orientation towards practice, Shaw reflects on how doctrines are assimilated before they are understood.

I do find I have assimilated vast tracts of ways of thinking. The classic case is always things like rebirth, but there's a whole host of Buddhist ways of thinking, without any divine revelation giving me unconvertible evidence of their truth, or indeed of a great deal of thought on my part...I simply came to assimilate them. Now this is obviously disturbing for one's perception of oneself as a reasonable person...is it an example of our delusion, or is it merely because these things are true, so one's intuitive wisdom will eventually shine through?...so, even if one has not got real realisation, still it is possible that this process of gradually falling into it - this other way of seeing - one could not rule out the possibility that it is good and true and wise and real, rather than simple delusion, but one has no way of knowing...one is left in a rather uncomfortable position, discovering one is falling into a position without knowing what's real (Shaw).

Subscription to traditional beliefs is not necessary for Buddhist practice; a mind that is alert to the attitudes that reinforce a belief might be more beneficial than the belief itself.

How much belief in the issue of rebirth do you need to engage in Buddhist practice and Buddhist meditation and to get good results? I would say none. Would some help? Not necessarily. Could there be other beliefs you have in your mind?...maybe you have some subtle other belief about how you end at death. Could that actually be some other belief about the nature of your mind? [If] you have a fairly fixed idea of who you are, could that be an obstacle to your meditation and Buddhist practice? Probably, but in some sense anything as gross as a belief is not subtle enough to have a powerful obstructive effect or a powerful helpful effect on your Buddhist practice...But gross beliefs could reinforce or signal the presence of more subtle attitudes that could be problematic...you [do not] need the answers, you need to be looking in the right place, and a certain world view could conduce you to look in the right place (Shaw).

He concludes that *śraddhā* or conviction is 'the same as realisation'.

When they say you need certainty, [that does not] mean you need to have defined your idea extremely clearly and have a tightly held belief with it, more just that you need to become it so totally that that is simply how it is for you...but it does help to have the right ideas pointing you in the right place (Shaw).

Given his mistrust of scholarship, it is natural that he should consider that oral transmission from teachers and the benefits of connection with teachers (*adhithāna*) takes priority over texts, although text may also partake of the nature of speech.

...but fundamentally one is talking about a direct contact with a reality. Given the delusions we have in place we might be only able to get such direct contact by meeting someone face to face... (Shaw).

When faced with the characterisation of tradition as essentially a collection of views, therefore possibly falling within the right view/wrong view paradox, Shaw suggests that only the person who is enlightened possesses right view. He finds the dilemma of views to be ‘not philosophically hardcore - it just requires some disambiguation.’ He does this by means of the Sanskrit terms *prapañca* and *upadeśa*. *Prapañca* is elaboration or proliferation, and can also be thought of as ‘structures of delusion or grasping’. *Upadeśa* means ‘instruction’ or ‘whispered words’. Shaw interprets this to mean ‘words that are said to convey an effect on the listener - particularly to convey them to a place in their experience.’

...*prapañca* that I exist or *prapañca* that there is a world, or *prapañca* that there is time. You could call this *prapañca* of views, meaning you should have no views, meaning you should not have this fixed structure of grasping. You should dissolve them all, but then that is not the same as Buddhist teachings. Are they a view? Are they right or wrong?...Firstly there’s the trivial observation that you shouldn’t cling to them...you can generally condemn clinging to anything in Buddhism...but there’s a subtler question about: are they actually true? (Shaw).

Words must have their meaning as part of some public context, otherwise you can’t really make a theory of language. I do not contradict that [with his interpretation of *upadeśa*]...maybe you can’t really apply the word[s] ‘true meaning’...here, but the simple fact is whenever you utter words they do have an effect, so what we are concerned with is not whether they are true but what effect they have...does it convey to you the characteristic of your experience that I am trying to convey, and does it have an interesting effect?...that accounts for an awful lot of Buddhist doctrine. It is non-literal language... (Shaw).

Two questions...how do you apply that to things less obviously experiential, to Buddhas and Bodhisattvas, Pure Lands, etc.? Secondly does that leave Buddhism willing or able to say anything that it would say was literally true?...Firstly it would not surprise me if the domain

of literally true things was limited to the domain of the natural sciences and mundane life, but nothing of any concern or value to human beings...or what the basis of the world was, or what the bases of the natural sciences were...they might all fall outside the relatively narrow bubble of what could be spoken about with literal truth...my second point would be that there might also be a non-literal theory of truth around...with another meaningful thing pointed to by the word truth...that there is actually some feeling of rightness which might be pointed to by the word truth, which is why we cared about truth...There is some feeling about trueness, so what we actually mean by truth and trueness is not the same as the formal semantic meaning of truth...[then] there is the whole question of the Buddhas, Bodhisattvas, *prañidhānas* and Pure Lands, all this esoteric stuff. Is it true? I don't know if they are going to fall into the domain of things that are literally true like the natural sciences, or whether they are going to fall into the experientially true like the good *upadeśa* (Shaw).

His analysis amounts to the development of two orders of what the word truth might mean in traditional Buddhist discourse; although '...in a traditional Tibetan context it is all bog-standard traditionally true' (Shaw). He observes that tradition evolves slowly as it assimilates cultural and contextual changes, whereas the transmission of Buddhism to the West has been rapid, over not much more than a single generation of Buddhist teachers and students. He thinks that informal dialogue about change within Buddhism might occur naturally as boundaries between groups and affiliations become more permeable. With regard to dialogue between Buddhist and scientific views about the nature of the mind, even if it is not taking place formally, it is occurring informally.

What is really productive from my point of view is that Buddhists are forced to think about both ordinary western conceptions of the mind and western scientific neurological work and psychological work. Not because of encountering dialogue with representatives of these so-called traditions but simply, one, because they are representative of the common-sense tradition by their very location and birth, and two, because science has such tremendous [status] in our culture, and rightly so, amongst Buddhists even, that we are normally inclined to think about and attempt to reconcile scientific positions that we can read about and may have even studied at university...with Buddhist stuff. You can have an interaction between Buddhist views of the mind and Western common sense and scientific ones without Buddhists ever sitting down and talking to non-Buddhists. Buddhists are so embedded in the non-Buddhist world that that will happen...any time a Buddhist is talking to another Buddhist about mind they are both speaking in the common sense assumptions of their language and

culture, so it is kind of bound up in the intra-Buddhist discourse (Shaw).

However, for those who wish to develop a specifically Buddhist realisation out of their own innate understanding, some of the egocentricity that is involved in egalitarian dialogue needs to be relinquished to enable a hierarchical dialogic relation to an experienced teacher. As an interesting comparison, despite careerist egocentricity in the academic study of Buddhism, Shaw detects a marked reluctance to confront tradition.

I guess Buddhist Studies is the study of a dead religion, in a sense...They tend to go on: 'This Buddhist says this, this Buddhist says that.' I am much more interested for them to say: 'This Buddhist says this, *and he's wrong*'...[they] are not actually advancing the debates in the texts, [or] concerned with the truth of them. They are simply reporting on the debates, which is boring. It is like the history of philosophy rather than actual philosophy (Shaw).

Shenpen Hookham uses the term Awakened Heart to refer to the core of being, the Buddha nature (absolute *Bodhicitta*) that is always present, to be revealed fully at Awakening. She also uses the term to indicate 'complete perfect enlightenment'. The idea of the heart as location of the mind appears to be a Vedic importation into Buddhism (Sugnasiri 1995: 423), but Shaw is not concerned to distinguish his school of Buddhism from any other school or tradition, including Hinduism, 'because there aren't that many ways to skin a meditation cat.'

...it is in Longchenpa - absolutely definitive Nyingma thought. Heart-stuff is very important in the Awakened Heart Sangha...the first course book, 'Discovering the Heart of Buddhism' talks a lot about the words heart and mind...basically the idea that we can use our heart language that we have in our culture, and when we use that we have a certain feel for that, or it conveys a certain meaning to us...heart language points to what is the most important thing about our experience (Shaw).

There [are] various things we think about the heart...we talk about a steadfast heart - a lot of words to do with a sense of stability and groundedness - then we have words to do with essentialness, like the heart of hearts at the core of our being. Then we have words to do with sensitivity and feeling. So various different loci of meaning all converge on the one word, which makes it a quite powerful word...guiding us in our experience to the place where those things converge, which is the Awakened Heart (Shaw).

If you said Buddhism is all about the mind you are giving people a really dodgy idea of what Buddhism is all about...very intellectual and rationalistic...if you are thinking about the heart then you are probably closer to where you should be from a practising Buddhist point of view (Shaw).

Given his caveats about scholarship, intellection and rationality, and his lineage's preferential use of heart-language, Shaw has good reasons to find the term 'mind' to be equivocal, and he is prepared to express uncertainty about the precise extension of its meaning. He uses the term, but in two markedly different senses, making distinctions between '...a kind of awareness as the ground of everything, or just awareness or experience in general', and 'mental functions or mental operations'. Awareness as the ground of everything is Buddha-nature; it overflows the ordinary meaning of the term 'mind', to encompass all other appearances.

Technically in Dzogchen they say the nature of mind has three aspects: openness, clarity and sensitivity. Openness: spaciousness. Clarity: awareness. Sensitivity: responsiveness...three qualities, three ways of pointing at the mind. The nature of our experience is openness, is clarity, is sensitivity...an actual description of Buddha-nature and how we are and how we will come to realise we are (Shaw).

Everything else is in experience. The body and the brain are in the mind rather than vice versa (Shaw).

Every [mental] term is problematic. It is almost like...I have no idea what the mind is. I know that the Buddhist idea of the experience of awareness is fundamental to everything, so that there might not be a thing called mind (Shaw).

By mental functions, Shaw means mind in terms of the six Buddhist consciousnesses.

...if you are asking about mental operations and what's the real nature of these, or indeed what's the real nature of sensory awareness, what's the real nature of body, I am going to have to say that is a really esoteric question and I do not know the answer at all. It is simple enough to be able to conceive that awareness is the ground of everything and the world is just the kinds of things in it. But then to try and work that out? So everything in the world is then like that already, and actually our experience of it is a deluded reflection of what it is really like...if the difference between inside and outside is completely different to how we think it is, what is a sense impression? (Shaw).

I do not expect that this pseudo-idealism I am espousing as the Buddhist position is capable of defence or justification or even is conceptually meaningful. I guess it makes sense as *upadeśa*. What it is trying to do is not to be coherent in defence of a philosophical position, but...trying to convey something...existentially about the nature of my experience (Shaw).

His idealism dissolves many of the logical and conceptual difficulties in understanding mental powers and alternative realms, or worlds that are inaccessible to ordinary consciousness.

The kind of position I am talking from within...has all sorts of weird and wonderful things as being entirely possible. It is not the slightest bit metaphysically conservative! If thought is appearance and awareness you can have some quite strange appearances (Shaw).

On Shaw's account, unconsciousness or impairment of consciousness is not the interruption of a faculty, but an alteration in the manifestation of that faculty.

...these would be changes in the manifestation of one's world...unconsciousness is interesting because this kind of way it is projected does not really believe in the existence of unconsciousness, because consciousness is unbroken, so unconsciousness is simply a disjunction in the story, a kind of narrative disjunction in a thought (Shaw).

Shaw speculates that the brain might be 'somehow a critical control junction in the dream', but the fact that the whole world is structured through awareness, and therefore through persons, provides some insight into the quasi-divine nature of enlightened beings.

...if everything has a personal and impersonal aspect, that applies to the true nature of reality as well. The big God rears his head, but if you follow the logic of that principle you have got the big God back in there...I see the consequences of that principle as simply saying that there is this sentience, aliveness, awareness that pervades everything (Shaw).

Thus the so-called material brain upholds the mental functions of the person and is both within and implicated in controlling the structure of deluded awareness, yet the brain is itself a deluded reflection in the light of a more enlightened form of awareness. At least in the form of an instructive explanation (an *upadeśa*), *karma* is the mechanism that motivates the delusion of ordinary experience in an ordinary world. Shenpen Hookham has referred to 'reversing a mistake' in the ordinary view

of the world, an exchange perhaps synonymous with *parāvṛtti* (revolution of the seat of consciousness). It seems extraordinary that the ordinary consciousness of a natural world, normally related to by sentient beings through the filters of egocentric intentional attitudes, might be fundamentally an *error*. At the root of such error is the dual action of grasping at awareness and reacting towards it, so establishing a negative causal chain.

...emotion is the energy or just activity of awareness. The question is how [do] you relate to that?...every negative emotion has a positive counterpart. The more precise way of saying that is that every negative emotion originates in a particular aspect of awareness...when you have a rare intense moment of clarity you grasp onto it...you can't handle the intensity of that clarity so (you) grasp onto it as anger...which still has some of that flavour of precision and cuttingness as the clarity, but also quite a lot has gone wrong with it as well (Shaw).

...properly speaking [conditioned co-production] is actually talking about the arising of our deluded self from the ground of awareness. (What) it is actually talking about expressly is *error*. There is the original state...there is error, then gradually the process of that error then building and elaborating...we made a mistake and we got born into a world that reflected that mistake, or we created a world that embodied that mistake (Shaw).

It all depends on how much of a realist you are about this world...[Shenpen's] perspective hinges around the idea that the story of this world is not the real story of us, so that it means natural in the context of some bigger story of our ascent into Enlightenment rather than the story of the evolution of animals on this planet (Shaw).

The mistaken view of the world includes its *temporality*.

...it is important to understand about the world, that it is a-temporal. So that mistake is the same mistake that is being made in every second. That mistake is made with the birth of every thought...and it is only made once as well - the same once that is the birth of every thought. I think Dzogchen uses the term *the fourth time* to make that point, but it does not really help. [It is] the same process as birth...and rebirth. Taking birth starts with pure awareness, then some structure appears in that, then you [mess] it up by grasping onto the structure, then you get birth into a complicated world, or rather you twist up the world into which you are born. We twist up the natural structure, *samsāra* – there is no beginning point (Shaw).

The Buddha and the movement towards awakening constitute the link between the a-temporal and temporal worlds.

The Buddha career as a fully awakened Buddha marks the point of contact between the world of being in time and the totally outside time-world, and there can only be one such point of contact. That's it forever. The Buddha's cosmic career lasts forever (Shaw).

If a Buddha is aware of the temporal world from the standpoint of the a-temporal world, that Buddha's powers of memory could theoretically be immune from temporal attrition, so enabling full remembrance of past lives. From the a-temporal standpoint, Buddhas might also have beneficial access to, and influence on (*adhithāna*) momentary events in individual lives. Pure Land teachings are one form of *upadeśa*, used to explain the beneficial influence between the a-temporal, enlightened awareness that is the nature of the mind of a Buddha, and the temporal awareness of an embodied mind in a delusory world. Such teachings are skilful means, pointing from the temporal and the material to the a-temporal and immaterial nature of the enlightened mind.

In acting to help to clarify the awareness of beings, a Buddha is acting with spontaneous intentionality, without the egocentric cunning that tends to underlie ordinary human intentionality.

I do not think that a Buddha has no intention, or it is a flaw in his compassion if he does, and indeed [I think] that the word spontaneous should not be interpreted literally. It is...an *upadeśa*, a word that is pointing at some kind of arising of a quality without contrivance...you can do wrong with intention. You can also have a right intention and indeed a Buddha creates a Pure Land through his *prañidhāna*, his wishing spell, like a mega-intention that is focussed and arises so purely, through his connection with the nature of reality (Shaw).

Synopsis

Shaw's Buddhism is oriented towards practice, experience and realisation. He has faith in the immediate (contemporary) Buddhist tradition, and in historical tradition as a guide for that faith. He does not see tradition as an invitation to scholarly analysis and critique. He observes that he has assimilated doctrine as a 'way of seeing', and is unsure if that process is a matter of delusion, or of intuition. In any event, he considers that it is not 'gross' beliefs that influence practice, but the subtle attitudes that reinforce them.

His equivocal attitude towards doctrine emerges as a preference for oral rather than textual transmission, for ‘whispered words to convey an effect’ (*upadeśa*) rather than proliferation of views (*prapañca*). Direct contact with a teacher is qualitatively different from indirect contact through a text, for it establishes a more effective communicative and beneficial connection (*adhisthāna*). Shaw wonders if, alongside the literal theory of truth that accounts for empirical things and kinds in the natural world, there might not be a non-literal theory of truth that accounts for the non-empirical things of human meaning and value. He does not know, but surmises that Buddhas, Pure lands and Bodhisattvas may fall within the category of things that are non-literally true.

He does not like the notion of organisations sitting down to formal dialogue about doctrinal issues. With respect to the mind, it is unsurprising that such dialogue is not happening, because of the rapid transmission of traditions to the West over a single generation. He expects informal dialogue between groups to happen, because group boundaries are becoming more permeable in the multi-cultural West. He considers informal dialogue between individuals about scientific perspectives to be an inevitable consequence of their immersion in the prevailing social milieu.

Shaw’s Nyingma tradition uses heart-language to explain mind-events. He finds that ‘mind’ has overly-intellectual connotations, whereas ‘heart’ more effectively communicates ‘experientially true’ meanings about the feeling-tone at the core of being. He suggests that ‘mind’ has two distinct references: to mental functions, but also to awareness as the ground of everything. This latter meaning can also be characterised as Buddha-nature (*tathāgata-garbha*), and qualitatively described as: ‘Openness: spaciousness. Clarity: awareness. Sensitivity: responsiveness’ (Shaw).

Shaw considers philosophical clarification of his view of mind to be fairly irrelevant. His extension of the meaning of the term ‘mind’ beyond reference to mental functions is externalist, but because he is unsure of the nature of materiality and thinks ‘there might not be a thing called mind,’ he characterises his view as ‘pseudo-idealism’. There is a paradox here, which he feels no need to resolve intellectually because the brain is not as it seems: the brain in some way upholds mental functions, and perhaps the structure of awareness, yet is itself part of the structure of deluded awareness.

Following Shenpen Hookham, Shaw holds that karma motivates delusory awareness; his tradition seeks to ‘reverse that mistake’, by reversing the tendency of ordinary consciousness to set up a negative causal chain by a grasping, reactive response to awareness. He considers that the mistake is temporality: the world is a-temporal, but the process of grasping ‘twists up’ that natural structure and initiates the structure of time.

Bhikkhu Vajiro and Bhikkhu Gavesako

Bhikkhu Vajiro and Bhikkhu Gavesako are members of the ordained Sangha of the Theravāda Thai Forest tradition. They live at the Amaravati monastic community, which is situated at Great Gaddesden near Hemel Hempstead. Bhikkhu Vajiro is an *Ajaan* (teacher). His personal appreciation of the monastic code (*vinaya*) as a way of life informed his response to questions, a response that was both practical and grounded in practice. Bhikkhu Gavesako, who is of Czech nationality, had philosophical training before ordination. They decided to combine their different talents in a joint interview.

Interview summary

Bhikkhu Vajiro and Bhikkhu Gavesako accept the Pāli *suttas* as the actual teaching of the Buddha, and as directly addressing the reality of the problem of suffering (*dukkha*). They feel that other texts and commentaries, such as the *Abhidhamma*, (and even more so the Mahāyāna *sūtras*) have a subsidiary status as interpretations that refer back to the earlier *suttas*, whereas the only interpretation that is actually required is application in daily life. As Bhikkhus, they accept the strict regulation of daily life according to *vinaya* rules, but rather than stressing their normative aspect, Bhikkhu Vajiro values their usefulness as the means by which the teachings can be realised. Bhikkhu Gavesako highlights the difference between practising according to the *sutta* teachings as opposed to just understanding them intellectually:

I originally came from the scholastic point of view, looking at texts and trying to understand them in that way. I also looked, at that time, at some of the teachings of the Thai Forest tradition and [they] seemed to me very unclear and chaotic, kind of unsystematic, and I could not figure out how [they] fit within the scriptures...later, when I made the practice part of my life, I kind of learnt this art of interpretation...it is also how we live, what

we do practically with our bodies. That affects how we interpret people's words, people's messages, so then later on I realised they [the practices] actually make sense...like a key to unlock the *suttas*, because [when I] approach[ed] them from abstract understanding I did not get the full meaning of them; it's very superficial. Now I can understand them on a deeper level through the practice (Bhikkhu Gavesako).

This 'deeper level' is described by Bhikkhu Vajiro as 'the capacity for sensitivity that life brings'.

Contact with the rest of the Saṅgha can provide a sense of confidence in Buddhist practice, especially when others are observed to act in a way that is 'free from confusion, hatred and greed'. Another significant benefit of communal practice in the Thai Forest Tradition is access to the teaching style of a lineage extending back from Ajaan Chah and Ācariya Mun, through centuries of forest-dwelling *dhutaṅga* monks, to the Buddha's disciple Mahākassapa.

...(in) a sense it goes through a teacher, but if the teacher is any good they point beyond themselves...they do not say, 'I'm teaching you', they say, 'Look here: teach yourself. Look at this, look at this within yourself, and learn' (Bhikkhu Vajiro).

Given their belief that interpretation should be an existential, rather than an intellectual act, the Bhikkhus do not consider that the concept of evolution can usefully be applied to Buddhism, either in terms of an evolution of tradition, or in terms of an evolutionary development along the Buddhist path, for: 'the goal is not evolution, it's liberation' (Bhikkhu Vajiro).

Where I resist the word evolution is when people come up with these notions of how Buddhism has evolved and needs to evolve and modernise itself. Which is exactly what I do not agree with, because when the Buddha described his own discovery of the *Dhamma* he said, 'I have discovered an ancient path.' It is the same insight as the previous Buddhas had, and it's *akālika*: it is timeless at the [moment of] insight. It does not need more vehicles and more schools (Bhikkhu Gavesako).

Despite his orientation towards the *sutta* teachings and against the interpretation of tradition, Bhikkhu Vajiro is not averse to dialogue within certain constraints. Because their Saṅgha is not large and has other preoccupations there are limits to the amount of time that can be given to discussion. There needs to be an appropriate level of clarity and understanding of the relevant issues before dialogue can be useful or meaningful.

I do not mind debating with Christians, Hindus, whatever...if they are very sure about where they are coming from and they are not feeling I am trying to convert them, because personally I do not feel that is my role. Then I am interested in exploring ideas about the nature of reality, because there it usually comes down to the clarification of terminology; then things become purer. I do not have the confidence personally and I do not know many people who have...to debate in as clear and un-ambiguous and non-confrontational a way as the Buddha did. I do find that some people write polemics against things, and I do not find that energy is helpful. That is an awareness of my limitations (Bhikkhu Vajiro).

Meaningful dialogue is possible within the plethora of Buddhist schools by virtue of a common ground in the Four Noble Truths. From this grounding, discussion is focussed on the alleviation of suffering, rather than the explication of views. If a sharp distinction is made between the discussion of views about reality and the unsatisfactory nature of reality as *dukkha*, it might be concluded that no teaching can fully encompass reality, because any teaching, even a correct teaching, is at bottom a perspective, or a view: it is an explanation of reality, not the reality in itself. The Bhikkhus argue that the distinction is not relevant in the case of the *Dhamma*.

Dhamma refers to the way things are...but it also refers to the teaching...[the distinction] is not necessary for the cessation of suffering. People [do] not have to make that distinction...It may be helpful, it may not be helpful. It's how to use it. Do you use it to stab somebody or do you use it to chop vegetables? (Bhikkhu Vajiro).

Ajaan Chah used to say 'Read *Dhamma*, study *Dhamma*, put it into practice, and then finally you *are* the *Dhamma*.' There is no distinction between your views and things (Bhikkhu Gavesako).

The Bhikkhus are aware of some similarities of method between Buddhism and science, for Buddhists investigate themselves, to see if they get the same results that are referred to in the teachings.

...you can see the limitations of science, where the scientist has his instruments and does his research, and you have some objective, quantifiable data as a result. That's your research...you actually have to turn [to] yourself – your body and mind, your senses when you meditate, they become the tools, the measuring and the proof. You can see it in your own experience (Bhikkhu Gavesako).

But there are differences of purpose.

Maybe there is a bit of confusion between the Western scientific ideal of finding the ultimate nature of reality – then I think people confuse this ideal a bit with what the Buddha teaches about the truth, or perceiving the truth of the way things are. But I think they are talking about quite different things. For the Buddha it is seeing things in terms of one's experience as impermanent, unsatisfactory and not-self. That is an experience: when a thought of anger comes up, is one actually able to see it as impermanent and not identify with it? That is what the Buddha is concerned with. The scientist may have a really excellent understanding of the universe...but when the anger comes up, he is completely identified with it, and that's the difference (Bhikku Gavesako).

They are critical of science for straying beyond the constraints of its own methodology in an unwarranted search of certainty.

My concern is [that] if science is true to its real basis, it does not accept anything as final or absolute truth, but only as an explanation...it is always only going to explain things, and any explanation is only as good as until the next explanation comes along. If that [view] is held, then O.K., but it is not usually held like that [in the scientific community]...or within the lay community (Bhikkhu Vajiro).

Most science makes an absolute of that which is uncertain, so that it ignores one of the primary characteristics of any existence: uncertainty (Bhikkhu Vajiro).

I think there is a difference in the goal of science and Buddhism and in the objectives. [If] you ask does Buddhism ever come to an absolute truth or something, I think...that is exactly the purpose: the breakthrough to a dimension that is unconditioned, [which] I would call *nibbāna*, (an) unfabricated or deathless realm (Bhikkhu Gavesako).

Without having any personal knowledge of neuroscience, Bhikkhu Vajiro sees no reason believe or disbelieve the correlations scientists assert between mental events and neuronal events. The problem is that descriptions of neuronal events cannot perform the same explanatory roles that can be fulfilled by explanations of mental events:

You lose a lot when you reduce mental events to the behaviour of neurons, because certain 'ethical qualities' that you refer to when speaking about mental states: you cannot measure them in terms of what is a good neuron or an unwholesome neuron (Bhikkhu Gavesako).

Bhikkhu Vajiro believes in the power of mindful introspection to bring the whole of one's mental activity to consciousness. The possibility of self-delusion remains, but can be tested by searching for the continued presence of suffering (*dukkha*).

One can know for oneself what is happening in one's heart or one's mind or one's *citta*. That is something that one can directly realise for oneself... Is there more *dukkha*? The delusion is *dukkha*. One can be deluded to think there's not *dukkha* when there is *dukkha*. That is possible...one can go through the whole of one's life deluded. Most of us do a lot of the time; that is *puthujjana* [the worldly condition] (Bhikkhu Vajiro).

The Bhikkhus point out that the different explanations of the mind in the *suttas* are taught with different purposes. Thus the six-element doctrine might be used in meditative contemplation of bodily physicality, while the five *khandhas* would be used in the detailed analysis of mental events. They clarify the status of an 'element' in the *suttas*: it is either an experienced quality (property), or a conceptual category.

[Elements] are properties of experience. We are not trying to reduce this into earth water fire [and] air. One is experiencing one's experience of it in terms of earth water fire and air. In those terms they are brilliant...they are just metaphors for solidity, cohesion, temperature and movement – and mind, and space (Bhikkhu Vajiro).

If you read the Pāli Canon, then the word *dhātu*, element...in different contexts you will see that it does not refer to elements in the scientific sense. The Buddha, for instance, talks about three elements: of sensuality, of form and the element of cessation, which are more like mental categories, or more like conceptual categories if you like; it does not mean element (Bhikkhu Vajiro).

Whether property or concept, the reference with regard to mental states is to processes conditioned by *kamma*, not to things:

They are labels given to processes, so yes, they have existence, but for the sake of convenience, for the sake of delineation, one gives them names, and that gives them a sense of solidity which is not actual, because they arise dependent on conditions and they cease dependent on conditions (Bhikkhu Vajiro).

Processes are temporally successive and conditioned by *kamma*. The paradox of Buddhist liberation, from the standpoint of an unliberated being, is to understand how liberation is possible from this basis. Bhikkhu Vajiro considers it a mistake to think temporally at all in this context.

This idea that all sentient beings can be liberated is interesting, but where does that happen?... 'Where does that happen?' is a kind of *kōan* for me. It is not in the realm we see it in, where every blade of grass is liberated – every blade of grass is liberated in the heart of the Tathāgata, in the heart

of the Arahant, that is where every blade of grass is liberated. It is not something that is going to happen sometime in the future (Bhikkhu Vajiro).

Maybe [time is relevant] according to the conditioned realm. The Buddha says, ‘What is the characteristic of the conditioned realm? Arising, change, and disappearance. And the characteristic of the unconditioned realm is no arising, no change, no disappearance’ (Bhikkhu Gavesako).

I mention Johansson’s view that, in the *suttas*, matter is described as on a continuum with mind, from gross to subtle (1979: 32-34). Bhikkhu Vajiro thinks that any such description is an explanation of a structural pattern, not the pattern itself, and that explanation only adds another structural level to the pattern. The need to sort out the structures of reality is a byway on the pragmatic search for liberation.

I think the *suttas* are not concerned with what you would call the ultimate nature of reality, which is a separate issue to liberation. Liberation is more to do with skilful and unskilful *kamma* – these kind of things, but actually getting a precise description of the ultimate nature of reality and mind and matter – they are very pragmatic and the Buddha was very pragmatic. He just did not go into those areas...Certain [questions he] just set aside, and when the schools split up they started developing the later *Abhidhamma* because they thought, ‘Ah! The Buddha didn’t explain these things’ (Bhikkhu Gavesako).

Responding to questions about explanations of the metaphysical entailments of the view of the mind as laid out in the *suttas*, they point out that the ascription of omniscience to the Buddha occurs in the later commentaries, but not in the *suttas* themselves. The notion that a winged spirit (*gandhabba*) might be involved in the mechanism of rebirth is a simple explanation: ‘if you take it literally, you are lost’ (Bhikkhu Vajiro). Rebirth itself, until it is an experience, must be a belief:

It depends on how they hold the [idea of] rebirth. I do not know about rebirth from one life to the next because I do not have a faculty that has actually been developed that could know it for sure for myself. I have never ever had in my heart any doubt about it, ever since I heard about it. It just seems really sensible. *Kamma* needs some form of fulfilment, and *kamma* has consequences (Bhikkhu Vajiro).

I prefer the rebirth, which is the one that Buddhadasa would talk about, the moment by moment rebirth which is the self – which is an...interesting way to examine the self (Bhikkhu Vajiro).

Synopsis

The Bhikkhus do not interpret the teachings of the *suttas* intellectually, but through their practice, by following the *vinaya* and the renunciant tradition of forest ascetic (*dhutaṅga*) monasticism. From this perspective, Buddhist doctrines are not so much teachings as injunctions to teach oneself. The Bhikkhus do not expect any significant ‘evolution’ (hermeneutic interpretation) of the *Dhamma*, for the Buddha’s teaching is not just an explanation, but the re-discovery of an ‘ancient path’, which is *akālika*: ‘timeless at the moment of insight’. The distinction between *Dhamma* as explanation and *Dhamma* as experience should not be made unless it is useful to do so, for the two modes become unified through practical application in daily life and monastic practice.

If the underlying motivation is conversion, Bhikkhu Vajiro has no interest in dialogue with other faiths; outside that context he expects debate about the nature of reality to focus on clarification of terminology. The scope of possible dialogue is limited by the ability of interlocutors to debate in the non-confrontational manner that is characteristic of the Buddha’s discourses. Bhikkhu Vajiro considers that the Four Noble Truths should be the foundation for inter-Buddhist dialogue, in which case the motivation is to alleviate suffering, rather than simply to explicate views.

Science and Buddhism have different purposes, for science offers explanations while Buddhism offers solutions, and working out the ultimate nature of reality is not the same as perceiving the truth of the way things are. If science is true to its empirical basis it should not claim certainty, because conditioned processes are inherently uncertain. The scientific imperative to sort out the structure of reality is a byway on the path to liberation, and scientific explanation is the imposition of another pattern onto an existing structural pattern. There is a clear distinction between Buddhism and science, in that conditioned existence is uncertain, but Buddhism seeks to break through to the certainty of an unconditioned realm.

Neuroscientific explanations cannot contribute to ethical considerations in the way that Buddhist explanations can, for there is no such thing as a wholesome or unwholesome neuron, and scientific understanding of the nature of the universe is of little help, for example, when dealing with anger and its consequences. Despite the instrumentally-observed correlation between neuronal events and mental events, the seat of consciousness is not the brain, but the awareness that takes cognisance of

those observations. Bhikkhu Gavesako does not rule out the possibility that there could be a more subtle form of embodiment than the ‘coarse physical body’ as the carrier of consciousness, but he is generally more realist than idealist with regard to embodiment, for according to the *suttas* consciousness cannot be the basis of the other four *khandhas*, which arise in mutual dependence.

Buddhist mind-explanations are not just theories, but guidance to practice. Terms in those explanations (such as ‘*dhātu*’ or ‘*gandhabba*’) are conceptual categories: they do not refer to things, but to processes. To take such terms in a literal or scientific sense is to miss the point that ordinary reality is a set of processes conditioned by time and by *kamma*, never possessing the apparent objectivity given by acts of naming. Rebirth can be believed in advance of any direct knowledge because it is intuitively reasonable, but the notion of rebirth also fulfils a guiding function, pointing to an important experiential insight into the momentary constitution of the self.

Andy Wistreich

Andy Wistreich is a Buddhist practitioner whose teachers come from the Gelug tradition of Tibetan Buddhism. Since he works in national computing services for higher education, and also has a family life, he has not taken ordination. Instead, he has maintained a long-term pupil relationship with several Tibetan teachers, and as such has undertaken a commitment to Tantric practice, although such matters of private practice were not discussed in the interview. He facilitates the Saraswati Buddhist group, which currently meets at his home in Somerset, and he teaches at FPMT Buddhist groups and centres in the UK.

Interview summary

Wistreich teaches and practices the Gelug-pa tradition as established by Lama Tsong-khapa, which is distinguished amongst other schools by the balanced approach taken between the *sūtra* path of intellectual explanation and understanding, and the *tantra* path of ritual practice and experiential realisation; the former being a prerequisite for the latter. Gelug-pa understanding of tradition is syncretic and systematic, in that previous Indian Buddhist schools continue to be valued as skilful means, but are ordered and studied according to a hierarchical system.

...it does not mean that because [the Tibetan tradition] developed later, that it rejected what came before. It used it as a basis...Tibetan Buddhism does not reject anything they find in the Pali Canon, in fact they embrace the whole of the Theravāda *suttas*, the Mahāyāna *sūtras* and all the *tantras*. They are unique in that they cover the whole spectrum. That is one of the features of Tibetan Buddhism (Wistreich).¹⁵

...in the traditional monastic training they study, successively, increasingly subtle systems of tenets, but [with] each new system they refute the earlier one in order to refine their understanding, until they reach the most subtle, which is the Prāsangika-Madhyamaka, and along with each system goes various tenets related to the mind (Wistreich).

For the Gelug-pa, the key to liberation is the realisation of emptiness. Wistreich considers the Prāsangika-Madyamaka system to be the summation of all Buddhist systems because only in that system is it emptiness taught 'extensively'. He argues that the systemisation of teachings is appropriate on three grounds. Firstly, because adherents to Theravāda and various Mahāyāna schools and tenets appear to have co-existed reasonably equably in Indian monasteries, so monks could change their practice as their understanding developed; secondly, because systemisation is educationally efficient; thirdly, because all the systems have the same goal of liberation from suffering. Western historical scholarship suggests that the Mahāyāna *Sūtras* were composed long after the death of the Buddha, but Wistreich gives reasons why he has chosen to fully accept the more traditional account.

...at the end of the day I have to say I do not know, then I have to choose which tradition I am going to follow. Am I going to follow the western academic tradition, which says they were actually written around the time of Asaṅga and Nāgārjuna, or am I going to follow the tradition that I have been taught by my Tibetan teachers, which is that they were taught by the Buddha at specific times during his life to specific disciples, and were then hidden? In fact they say that the Perfection of Wisdom *sūtras* were given to the nāgas and that Nāgārjuna went and retrieved them from there.

So...as an ordinary westerner, which one am I supposed to believe? ...Now all my western education would prepare me to believe the former, so how could it be that I might even countenance the latter? There are lots of ingredients that might make me do that. One of them would be that I met these incredible teachers who bowled me over so much that they made me challenge everything I had learned up till then through my western education, to the sense of thinking: 'maybe it's not the whole truth'. Maybe there is a depth which my western education

hasn't been able to...induct me into, because that knowledge, if it ever did exist in the West, has been lost.

...there are certain practices, for instance, in my tradition, where we do certain prayers to what we call the merit field, which involves all the lineage gurus, and they are in a line. They come down from Śākyamuni to the present and there's a whole notion about the living tradition, and its source is back to Śākyamuni, and that is very important because the Buddha became enlightened and therefore if it does not source back to him – as you say, it might come from enlightened minds, but somehow they do not have quite the authority that the Buddha [has], so therefore it might be problematic for my faith in the Mahāyāna – for me personally – and I am not speaking for all the other Mahāyānists in the West – but for me personally it might be better for my mind to have faith in what I was taught by my Tibetan Buddhist teachers (Wistreich).

His faith is strong, but not absolute. He remains open to persuasion, and if given absolute proof of the non-existence of, for example, hell-realms, he would 'work them out of [his] meditation.'

[The Dalai Lama] says that if there is something that our direct perception can refute - Vasubandhu taught, in the *Abhidharma-kośa*, that the hells were so far below Bodhgayā that they would be out the other side of the earth - now His Holiness, he has referred to that, and said that, therefore, we have to refute that particular teaching. Even if it comes from Lord Buddha, we nonetheless cannot accept it because it goes counter to direct perception. I am very pleased with that, and I think that westerners generally should feel some confidence that an authority like His Holiness can say categorically that if science can disprove something that's in the *Abhidharma* texts then we should reject them, even if the Buddha taught them (Wistreich).

Asking for absolute proof appears to be an impossibly high standard; in fact there are circumstances when an accumulation of compatible evidence from different sources can lead to a change of view.

It is very hard to prove that the world is flat, but that is certainly what they believed in those times...it would be very hard to believe that the world is flat now, in fact there are so many different bases on which we are certain that it is round, that it's best if we realign all the teachings round the idea that the world is round...Geshe Thegchok, who is one of my teachers, said the shape of the world is determined by your karma, and what that refers to is: if you were born at that time the world was flat – if you are born now the world is round...phenomenology says that our experience of the world is flat, because the sun rises on one side in the morning and sets on the other, so our senses tell us that the world is flat, therefore any notion that the world is round is based on conceptuality rather than direct perception (Wistreich).

For dialogue between Buddhism and science to be productive there must be openness to a change of view on both sides. Wistreich thinks this is possible, for he does not limit the scope of Buddhism to the explanation of meaning, rather than the explanation of fact.

I do not think there is anything in Buddhism which I regard as unempirical. So I mean I can accept there are some things we can not measure with scientific instruments, but to me that is a sign of the inadequacy of the instruments. I would say that omniscient mind is every bit as empirical as that glass of water. It is just that we have not researched it yet. His Holiness does sometimes say some things would benefit from further investigation, and I think that is a useful phrase for something like that (Wistreich).

The Dalai Lama has paved the way with his dialogues with Western scientists for a gradual development which I am sure will happen throughout the 21st Century, where we will end up...with a Buddhism that completely accords with aspects within science and maybe there'll be rub-off the other way too...where Buddhism and science accord there is no reason to keep them separate (Wistreich).

Mind is synonymous with consciousness, and is one of the six elements that combine to constitute reality. The element of mind manifests as six consciousnesses, five being the senses, while the sixth is mental consciousness, with mental events as its object. Wistreich explains the operation of the consciousnesses with reference to visual consciousness.

Let's take the visual sense consciousness. That is different from the eye, the retina and all the other apparatus physically involved with seeing. So, in order for visual perception to take place you have got to have the eye faculty, the visual object and the eye consciousness. It is like that with all the senses. Actually, according to the *Lo-rig* or mind and awareness teachings, the definition of mind, which divides into the other six, is 'that which is clear and knowing'. So the word clear refers to the fact that the mind is clear of matter, so it is completely non-material, the mind. So if we go back to the visual...when we see something the visual faculty is material [but] it is not all gross matter. It is also flesh and blood, and it also includes some pretty subtle workings in the brain and the nervous system and all that. So they do not say that the sense faculty is a gross thing. They do not say that it is the eye that you could pluck out. The sense faculty is the whole [function] that enables us to see. The object is obviously physical, and the consciousness, which is the third essential ingredient for seeing to take place, is clear, in other words it has no physical aspect at all (Wistreich).

Clear in this particular context means not physical, and then knowing means aware: able to experience: the subjective side of experience. So we have already wrapped up awareness into mind, which divides into the six consciousnesses...Now, luminous is also part of knowing, because luminous refers to the mind's capacity to throw light on things, which even an ordinary person's mind can do (Wistreich).

The clear nature of mind is one of the two aspects of Buddha-nature, which is present when the mind is impure (*saṃsāra*) and when the mind is pure (*nirvāṇa*).

There is also talk about the ultimate Buddha-nature, which is the emptiness of that Buddha-nature or clear nature of the mind. This is based on the fact, first of all, that the clear nature of the mind is always there but nonetheless it is a continuum of moments: each moment triggers the rest. It is the continuum of mind that is said to be beginningless and endless, and passes from one life to another. In a sense it is permanent and eternal, because it goes forever and started beginninglessly and in another sense, on a subtle level, it is impermanent, because it is still momentary and so no moment exists by itself. It only exists in relation to the previous moment and the next moment and therefore ultimately it is unfindable...

...in the end you come down to what is helpful to your own mind and your practice, and for some people, their practice might be better if they think [Buddha-nature] exists by itself from its own side, for then when they get down to it they feel they can develop a more stable mind based on it. But if you look into the writings of Lama Tsong-khapa, he says that is a fantastic object for developing *śamatha*, in other words *shi-ne* or calm abiding, but when you move on to insight you have got to deconstruct it and see its emptiness, and that is what in the Lama Tsong-khapa tradition is called Mahāmudrā: the union of these two: the union of the conventional and ultimate aspects of the clear mind (Wistreich).

The key Madhyamaka tenet of the 'emptiness of the inherent existence of anything from its own side' is more than an intellectual understanding: it has to be realised in practice, by 'deconstructing the self and phenomena'.

...that...shows that 'me' is just relative. It is O.K. to say 'me' but 'me' is mere imputation, mere label, and if [one] just take[s] it as that, that's fine, but the trouble is that [one] exaggerate[s] it and on the basis of that arise all the afflictions like attachment and anger and jealousy (Wistreich).

There is no denial of the reality of the external world, but there is a denial that that world exists except in relation to the mind.

...according to the Madhyamaka there is an external world and a subjective mind-world, but neither of them exist independently; it is just an interdependence, and neither of the interdependent phenomena exists by itself. They only exist relative to one another. So in that sense you have got emptiness and dependent arising co-existing. That means you don't have to argue with the world...It's just that if you want liberation you have got to realise the ultimate reality, which is emptiness.

...it is maybe the word emptiness that is challenging because emptiness sounds like nothingness, but it is...important to recognise that the word emptiness is being used to translate the Sanskrit *śūnyatā*, and *śūnyatā* does not mean nothingness. It means empty of intrinsic reality, empty of its own existence...as soon as you think emptiness means nothingness you have lost the plot (Wistreich).

Wistreich is aware that emptiness teachings are intellectually difficult, and that it is difficult to realise those teachings in each moment, and so to modify the ethical motivation for every act.

It is not as if this is a westerners' problem, that emptiness seems like nothingness. This goes back to the time of Buddha...The Buddha turned the Wheel three times; the second time he taught emptiness, really heavy-duty, so because people were falling into nihilism he taught the third turning where he emphasizes the Buddha-nature, which seems more positive because it sounds like...we have got *something* but...the Buddha-nature also has an ultimate aspect, which is emptiness. The other thing is [that] emptiness does not exist by itself; emptiness is a quality of something, so we talk of the emptiness of the glass, so the emptiness of the glass depends on the conventional existence of the glass. You can not have an emptiness of the glass if there is no glass there, therefore emptiness does not exist independent of what it qualifies.... So there is this classic phrase, 'the emptiness of emptiness'. In all the traditional teachings that is one of the types of emptiness...and it is the saving grace really, because as Nāgārjuna says, if you cling to emptiness you have made a poison of the medicine, and then there is no hope. Better never to have heard of it, than to do that, because then you have destroyed the thing that can free you. So you have got to be very careful of either making a thing of emptiness, or thinking that emptiness means nothingness. That's where the Middle Way is, between the two. It is understanding that emptiness and conventional existence are two sides of the same reality; that the Two Truths are not separate...

...to be completely free is to fully realise emptiness; not just partial realisation, which is what the lower schools teach. They still leave an intrinsic smallest atom and an intrinsic shortest moment. They say everything else is mere imputation, but they are all collections of those things...but the Madhyamaka view completely smashes all that. It says [there is]...nothing at all from its own side, and that is the challenge: to go down that [route] without denying cause and effect. Once you have denied cause and effect you might as well be a mass murderer...it junks

ethics if you abandon cause and effect. That is why Nāgārjuna says the medicine becomes the poison (Wistreich).

Both moral rules and the ethical motivations that generate or comply with those rules are thought to be consequential effects of the liberating realisation of emptiness. In other words, it is impossible to be truly wise without also being compassionate.

I think we have got to bring in the method side...which is the nature of great compassion...one of the most important things about Buddhahood is that Buddhahood depends on compassion for every single sentient being and it is on that basis that the merit to create omniscience is built. So we have got to have a notion of what merit means – that from positive deeds comes a kind of positive potential, which if it is directed towards a particular goal can be very efficacious towards that goal (Wistreich).

The method side is basically this compassion [or] Bodhicitta aspect to enlightenment for the benefit of all beings, and the wisdom is this deepening letting go of clinging and self-existence, and both of these are essential to Buddhahood. The wisdom side evolves into the Dharmakāya, which is the Buddha's mind which simultaneously realises emptiness and can perceive all phenomena. Prior to Buddhahood nobody can do that. Even the moment before Buddhahood all one is capable of is seeing them separately, because to bring together one's awareness of the conventional truth and the ultimate truth, in one, requires a unification of method and wisdom, which is what Buddhahood is (Wistreich).

Buddhahood is completely perfected wisdom and compassion, and as such is completely perfected mind, with the ability to manifest embodiment in the form of radiant clear light. Although this is a special form of appearance, it is on a continuum with the embodiment of ordinary beings.

Even this [body] is an appearance of mind. It is a result of my karma and my mind joining with the sperm and the egg and producing this. Without my mind and karma the sperm and the egg would not produce this, according to Buddhism. Maybe the biologists would not agree...but again I think the Buddhist description is empirical. If you look into it, look into it, look into it, it so works, it is just so neat, it is not mysterious: it is almost mechanistic, it is just that it includes mind, whereas the Western one does not. They say that mind somehow comes from those genetic confabulations: somehow that is going to produce mind, that mind is somehow produced by matter...for a Buddhist that is just a joke. I am schooled in the West but I suppose I have been deeply influenced by Buddhism, so I am now at the point where I am a western Buddhist: I see things as a Buddhist. I could not possibly accept that everything comes from just the sperm and the egg, even though I accept

the effect of genetics on certain things which help shape our personality. No problem with that, but somehow something karmic makes me link with that. I think there is a mind which connected to those two cells and led to this, and I suppose I also think this mind will continue after death, but again I do not have total proof of that. It is not like I can remember my past life...I do not have that to go on (Wistreich).

Wistreich's religious practice and his mode of pursuing, reflecting upon and interpreting his life is based upon the Gelug-pa Buddhist teachings about the mind, about liberation, rebirth and the process of rebirth, but above all about emptiness (*śūnyatā*). He sees no soteriological value in reinterpreting these accounts, or bringing them into dialogue with western modes of discourse, although interpretation and dialogue may be of benefit to others.

I have no need to do that as a practitioner. The only reason I would need to is when I am talking to somebody who is not a practitioner, and I want to sort of build a bridge with them, like His Holiness does in his dialogues with scientists...I know I have kind of made a big step, and I would not expect future Western Buddhists to all make that step, so I think it would be helpful if...studies helped to improve the dialogue between the two traditions (Wistreich).

...what we need to do in the 21st Century is to come out of Tibet and let's say all the other cultures in the East as well, into the 21st Century globalised culture, with something that is not alien but which is accessible for those ordinary people who think it is useful. We have got to do that. We have not got that long. The world needs it badly. I am confident that there is a whole next generation of Tibetan lamas who are going to help a lot with it. I have met one or two of them. They are in their late teens now: they are absolutely brilliant and they are going to help Tibetan Buddhism get over this. My teacher Geshe Wangchen has already written a book in Tibetan on Western science...that is studied by the Geshes in the monasteries (Wistreich).

Synopsis

For teaching purposes and as a prerequisite for tantric ritual practice, the Gelug-pa tradition of Lama Tsongkhapa has developed a hierarchical ordering of doctrinal systems, justified on the grounds that cohabitation between intellectual traditions within monastic institutions was the norm in pre-Moghul Indian Buddhism, because systemisation of doctrines is educationally coherent, and because all traditions have the same goal of liberation from suffering. Wistreich upholds the view that the Mahāyāna *sūtras* were taught by the Buddha; he finds this acceptance of traditional

accounts conducive to his own soteriological progress, to faith in his teachers and their lineage, and to effective practice within their explanatory paradigm. He finds it reassuring, however, that the Dalai Lama has indicated that if doctrines are refuted by ‘direct perception’ they should be set aside.

According to *Lo-rig* teachings, mind is synonymous with consciousness and is clear, knowing and luminous. ‘Clear’ indicates that mind is clear of matter, as an element with no physical basis at all. ‘Knowing’ indicates that mind is aware: it is capable of experience. ‘Luminous’ indicates that, as a part of knowing, all minds are able to throw light on things. In a conventional sense, the continuity of the clear nature of mind is the Buddha-nature, but it is impure. In an ultimate sense Buddha-nature is the emptiness of the clear nature of mind: its emptiness of inherent existence, as a momentary relation in dependence on a sequence of relations. Mahāmudrā practice is the combined realisation of both the conventional and ultimate aspects of the clear nature of mind.

From this relational viewpoint, the external world and a subjective mind-made world both exist, but only in relation to each other. Emptiness of inherent existence is true of both world and mind, and even of emptiness itself: the ‘emptiness of emptiness’. To imagine emptiness refers to nothingness, and thereby to cling to emptiness as itself a paradoxically-inherent abstract object, is to have ‘lost the plot’, to ‘deny cause and effect’, and to ‘make a poison of the medicine’ by eliminating the basis for practical ethics and of compassion as an inevitable concomitant of wisdom. Wistreich upholds the Mahāyāna view that diligent practice over many lifetimes leads to the unification of wisdom and compassion, and to omniscient Buddhahood.

Wistreich only feels the need to interpret traditional teachings when communicating with non-practitioners: only then does it become useful to construct bridging explanations between markedly different paradigms and discourses. That process is exemplified by the Dalai Lama’s discussions with scientists under the auspices of the Mind-Life Institute. Wistreich appreciates that many westerners will be unwilling or unable to attempt the complete immersion in Buddhist paradigm and practice that he has undertaken, but he is confident that the next generation of Tibetan *Geshes* will have the knowledge, skills and wisdom required to build bridges between Buddhist and other discourses in a globalised world.

Notes to Chapter 4

¹ The bottom up/top down directional analogy is both a metaphor and a metonymy. As metaphor, the point is that explanations that begin with the problem and its context are preferred to explanations that begin with probable material causes. As metonymy, neural events are either ‘top-down’ cognitive manipulation of ideas or ‘bottom-up’ information from the senses.

² The disagreement between Sangharakshita and the English Sangha Trust has long been the subject of hearsay report. Those interested in gossip should consult the fairly scurrilous Anonymous (n.d.).

³ In Leeds there are enough traditions to motivate the establishment of an umbrella organisation in the interest of cordial relations and external representation.

⁴ In Kennedy (2004) I give a figure of 158,000, the difference being a consequence either of my own poor arithmetic, or the confusing regional division of census data between England and Wales, and Scotland, as well as the omission Northern Ireland. I defer to Bluck’s (2006: 13-16) calculations, and in this section I am indebted to his excellent presentation of recent data.

⁵ Sōka Gakkai has been excommunicated by the Nichiren Shōshū monastic organisation in Japan. There is some uncertainty concerning the ordination claimed by Sangharakshita, the founder of the FWBO. (Anonymous n.d.). The leader of the NKT has effected a schismatic separation from the Gelug-pa tradition

⁶ The phenomenology of religion does not necessarily extend to the use of rigorous Husserlian methods, apart from bracketing out questions of the truth or falsity of doctrines (Pye 1980: 32). The hunt for abstract categories to explain interactions between religious phenomena is just the extraction of general principles from particular examples, which has always been the stock in trade of western philosophy.

⁷ Dumont’s conclusion that the ‘this-worldly’ western ideology of individual personality is mirrored by an ‘other-worldly’ Indian ideology of renunciation has been criticised by Harris (1993).

⁸ The FWBO’s evolutionary theory is discussed in the summary of the interview with Ratnaprabha.

⁹ The nature of mind is one of the points at issue between Sangharakshita and Batchelor. Batchelor argues that: ‘It is odd that a practice concerned with anguish and the ending of anguish should be obliged to adopt ancient Indian metaphysical theories and thus accept as an article of faith that consciousness cannot be explained in terms of brain function’ (1997: 37). Sangharakshita responds that ‘Logically speaking, [practice] begins with the ‘existence’ of what might be described as a transcendent Absolute...’ (1998: 10). Both sides of this argument about the

transcendent or immanent origin of Buddhist practice can claim doctrinal orthodoxy, by privileging different sources in the Pāli Canon, such as the *Dhammacakkappavattana Sutta* or *Udana 80*. The incompatibility of these two views comes to a head around the question of the materialism or immaterialism of the mind, and Sangharakshita points out that either view is an ‘article of faith’, because ‘belief in the existence of ‘matter’ is as much an article of faith as belief in the existence of ‘spirit’. The issue is then which article any particular Buddhist prefers, and why.

¹⁰ Oliver (1979) is not sufficiently analytical to be included in this list.

¹¹ Something very like Pye’s process of recouplement has been offered by Chappell with respect to the interpretation of revolutionary doctrinal texts. He outlines a tripartite hermeneutic sequence of ‘individualization’, which equates to the new interpretation, of ‘integration’ as the new interpretation is ‘restored to the historical milieu and the tradition’, and ‘control’ as the text is forced into compatibility with traditional doctrine (Lopez 1987: 80).

¹² It could be argued that ritual theory amounts to a monolithic theory because most behaviour can be considered to be a form of ritual (Lewis 1980: 6, Bell 1991: 200). But doctrine must be exempt from ritual theory, or else theory would be ritual.

¹³ For example, the *Sāmañña-phala Sutta* is framed so that the advantages of Buddhist practice stand in contrast to the metaphysical doctrines of the other heterodox teachers. In the *Kālāma Sutta* a selection of ‘consolations’ of the religious life are offered, in accordance with the variety of metaphysical views that might reasonably be entertained

¹⁴ Geshe Kelsang Gyatso champions the Dorje Shugden practice, which the Dalai Lama has proscribed (Bluck 2006: 131, 135). Dorje Shugdän is a pre-Buddhist Tibetan spirit-deity who is believed to have waited over the centuries for the opportunity to become the protector of Tibet and of the Dharma, following the departure from Nechung monastery of the oracle of the Gelug-pa sect, Dorje Drakden (Chan: 1994: 165-166). Thus the Dorje Shugden practice is not just a private ritual, but is enmeshed in a centuries-old dispute amongst arcane protectors and magical forces. This demonic stand-off perhaps symbolises long-standing political strains amongst the Gelug-pa, which have re-emerged as a consequence of the Chinese occupation of Tibet.

¹⁵ Contemporary Tibetan Buddhists have access to the Pāli Canon, which was not available to their forebears. For example, I have attended teachings on the *Dhammacakkappavattana Sutta*, by Geshe Tashi Tsering, at the Jamyang (FPMT) centre in Leeds.

Chapter 5

Attitudes

Introduction

Minds are inherently attitudinal, in that they attend to the world in ways that are intended to be useful; it is therefore inevitable that the participants in this study respond to contemporary circumstances, even when their response takes a negative form. On the evidence of the interviews, they respond to the scientifically-motivated reduction of the category of mind to mind/brain-identity with an overall attitude of resistance. Accompanying that resistance are combinations of more specific attitudes of, firstly, faith in tradition; secondly, equanimity with respect to the ontology of mind, which enables concentration on psychological matters; thirdly, speculation about transcendence; and fourthly, some qualified acceptance of neuroscientific findings. As a general characterisation of their responses, I suggest that the majority tend to prefer psychological explanations of experience to ontological of explanations of mind. Their relative equanimity about ontology reflects the importance, for Buddhists, of subjective ‘realisation’. This term ordinarily refers to the understanding of an explanation, but Buddhist usage refers more specifically to the verification of an explanation in immediate experience, stabilised over time in extended experience.

I use an explanation of attitudes by Lewis (1979) to elucidate the combination of experience and explanation in the formation of the participants’ attitudes and opinions. The participants’ emphasis on subjective experience and their characteristic Buddhist de-emphasis of the self motivates an addition to Lewis’s theory to account for the role of the subject of immediate experience. With this modification the theory can serve as a relatively simple and culturally-neutral model of the mind, incorporating acquaintance with the world by the subject, historically-sedimented responses to the world by the self, and the modification of action and experience according to explanation. ‘Acquaintance’ refers to the sensori-motor perceptual initiation of mental events, the ‘subject’ refers to the immediate awareness of those events, the ‘self’ refers to historically-conditioned responses to the temporal continuity of immediate mental events, and ‘explanation’ refers to the ‘top-down’ modification of mental events, both linguistically and by the cognitive modification of percepts.

Resistance to scientific mind-theory

Despite the even-handedness of ‘Middle Way’ rhetoric against eternalism and annihilationism, advocates of Buddhist mind-theories in India and East Asia have normally encountered belief systems that advocate some form of eternalism, or a metaphysics of spirit. Buddhism under globalisation finds itself in dialogue with the opposite pole, that of annihilationism, in the form of a metaphysics of physics, according to which the mind is *just* the organisation and neuronal activation of the brain, and cannot survive the dissolution of that organisation. My task was to identify contemporary Buddhist responses to this shift in dialogic partnership from eternalism to a neuroscientific version of annihilationism, and this chapter presents findings from the interviews, not necessarily in the form of unambiguous views (opinions), but in terms of wider attitudes.

According to the Oxford English Dictionary an attitude is a ‘habitual mode of regarding anything’. A person’s attitudes can be identified from subjective impressions of underlying motivations, but are more overtly demonstrated by sets of opinions. Attitudes are more than just continuity of opinion expressed in propositional form: they are the totality of states of mind that provide the background for the formation, retention and expression of opinions in propositional form.

But what is the difference between an attitude and an opinion? I would like to say: the attitude comes *before* the opinion. (Wittgenstein 1992: 38)

If attitudes come before the verbal expression of opinions, attitudes denote a pre-linguistic intentional orientation, functioning to organise opinions into a consistent set or ‘habitual mode of regarding’. The most typical attitude displayed by the interview participants was that of *resistance*, for they generally felt that scientific investigations into the ontology of mind were peripheral or antithetical to their psychological, existential and soteriological concerns. Although some of the participants felt that translation between Buddhist and scientific discourses might be useful under globalisation, most saw little benefit to be gained from recasting Buddhist mind-theory into western philosophical and scientific terms, with the exception, in the case of Ratnaprabha and Crook, of evolutionary terms.¹

Their resistance is reminiscent of Jacques Derrida's analysis, in *Resistances to Psycho-analysis* (1998), of the resistance displayed by some of Freud's patients, who refused to open the core of their dreams to psycho-analytic investigation. Derrida suggests that the resistance of the subject of an investigation presents a challenge to *all* analysis (1998: 2-9), but his Freudian example indicates that resistance is mainly to the interpretation of personal meaning by impersonal others in terms of a prescriptive theory; that is to say, resistance is to analyses that aim to reduce, reify and vitiate the 'unanalyzable synthesis' of non-rational forms of cognition (Derrida 1989: 14).

Derrida is concerned to suggest that resistance necessitates his style of deconstructive analysis (1989: 26-28); the participants in this study are more concerned to retain the right to interpret their own minds. Their resistance was not to dialogue, but to reductive analyses that forced them to react to explanations of the nature of mind in wholly scientific or western philosophical terms, rather than allowing them to consider the implications of scientific research in their own time and on their own terms. Only Wistreich predicted a transitional timescale, century-long, after which dialogue between Buddhism and neuroscience might be expected to have reached some agreement. I suggest that the resistance of all the participants to scientifically-informed analysis is a transitional attitude, for three reasons.

1) Resistance is a whole-minded response.

Attitudes are not just rational responses but completely human responses, which are inclusive of emotions and intuitions affected by unconscious cognitive processes. Emotive processes are not under the same degree of self-control as rationality, and rationality is not always as self-controlled as when it is deployed as an after-the-event mode of justification for decisions already taken under the sway of emotion and unconscious intuition. Any change of attitude to neuroscience is, therefore, likely to depend on wider perceptions of the influence exerted by science on the fate of society and the environment, as well as on the relevance of specific findings.

2) Resistance is hermeneutically transitional

It is perfectly reasonable to withhold judgment about neuroscientific explanations that are themselves transitional, incomplete accounts. Mapping of cognitive functions and connections by means of pathway tracing and real-time imaging

techniques has yet to identify the precise function of many areas of the brain, (Freeman 2003: 27-36). Progress also needs to be made on specific hypotheses, such as the conformation or disconfirmation of Crick's identification of the claustrum as a neural correlate of consciousness, or the ways in which sensory stimuli are neuronally-encoded (Sharpee et al 2006, Smith and Lewicki 2006). Resistance is an appropriately hermeneutic transitional response to neuroscientific explanations that are themselves in transition until their heavy theoretical overhang is diminished.

3) Resistance is methodologically transitional

So long as neuroscience is work in progress towards a notionally complete explanation, 'belief' 'knowledge' or 'certainty' about the nature of mind can be considered to inappropriately reify the dynamism of explanations, scientific or Buddhist, in the course of their evolution from one paradigm to another as a result of experiment, introspection, religious practice and dialogue. It is therefore reasonable, as a transitional position, to posit mind as a separate category or element that performs real work in the world, yet not on that account to rule out dialogue with science. This is the position taken by Wistreich, who argues that Buddhist teachings are empirically true, and that it is a matter of time before the Buddhist-scientific dialogues initiated by the Dalai Lama '...will end up...with a Buddhism that completely accords with aspects within science and maybe there'll be rub-off the other way too....'.

Effectively, the Dalai Lama postulates the existence of immaterial mental events that correlate with neuronal events (Wallace 1999: 159). This correlation is similar to supervenience (Kim 1993: 175-178), although the Dalai Lama also entertains the possibility that supervenience is not quite contemporaneous, so allowing for prior mental events that exert a causal effect on physical events.² Because the Dalai Lama's view is expressed with exemplary respect for empirical scientific investigation, it retains the advantage of being methodologically transitional; firstly because his view is a theory like any other, awaiting empirical verification or falsification, and secondly because it occupies a 'middle way' position, linking Buddhist and neuroscientific explanation by means of a conceptual connection, but without positing any causal mechanism by means of which the mental exerts influence in the physical (Wallace 1999: 160-161). On one hand, mind/brain identity

suffers from a ‘gap’ in the explanation of how the physical gives rise to the mental (Wallace 2002: 19). On the other hand, mind/brain supervenience, contemporaneous or not, risks Ockham’s razor, should it become evident that brains do all the work that is ascribed to minds. Neither Wistreich nor the Dalai Lama anticipates such an outcome.³

It is significant that the Dalai Lama should be interested in dialogue with neuroscience, and that Wistreich’s testimony indicates that the Dalai Lama is supported by at least some of the Gelug-pa Buddhist community in that initiative. His openness to dialogue is a reminder that differences of view need not spell the end of equable communication.⁴ Openness to dialogue allows Gelug-pa Buddhists to retain their belief that mind is immaterial, as Wistreich does when he asserts that, for a Buddhist, the idea of a material basis for mind ‘is just a joke’, yet at the same time also to take neuroscience seriously, accepting that both Buddhist mind-theory and neuroscience are explanations susceptible to empirical verification at some future time. In the meanwhile, if supervenience, contemporaneous or not, is a real relation between mind events and brain events, it follows that there is a close relation between the details of neuroscientific explanations and mind explanations, and that the examination of either system might cast light on the other.

Specific attitudes

Once the participant’s precautionary attitude of resistance was made clear, they willingly engaged in the interview process, so long as dialogue was sufficiently reflexive to allow for discussion of the expectations, terms and relevance of the research. Most of the interview participants feel that the underlying nature of mind is peripheral to their main concerns: several, particularly Wistreich, upheld a firm belief that mind has a non-material nature, yet none expressed their views with absolute certainty. Some have confidence in a particular view; others consider resolution of the issue to be deferrable or irrelevant. Although negative, such responses are interpretative attitudes, occurring in relation to the contemporary view of the mind, for the participants are well aware of what Baker calls the scientific ‘Standard View’ of mind-brain identity (2001: 17-18). In addition to general precautionary resistance, the participant’s responses reveal combinations of attitudes along a spectrum from

reliance on traditional explanations through indifference and ambiguity to some agreement: I say ‘combinations’, because although one attitude generally predominates, the other attitudes are interwoven to produce the individuality of each response.

From the interview data, I distinguish four attitudes of response (separating the second into five types) to the findings, conjectures, and sheer cultural presence of the scientific ‘Standard View’. The rather indistinct label ‘attitudes of response’ is appropriate because the participant’s views are not expressed as knowledge, or invariably cashed out in terms of attitudes of belief.

1. *Faith in tradition*

The first attitude is faith in traditional teachings that describe mental events as non-material. Under a prototypical version of this attitude, faith in overall doctrine is thought to be more conducive to salvation than sceptical winnowing of teachings to account for the entailments of scientific theory. Faith-based justifications are reinforced by the subjective experience of the intangibility of mental events, and by appreciation of the logical coherence of traditional arguments, but faith depends in the first instance on the *ad hominem* warrant of the Buddha and his lineage; experience and reason are subsequent confirmations.

Faith in tradition is variously apparent in Wistreich’s acceptance of the Gelug-pa paradigm, in Bhikkhu Vajiro and Bhikkhu Gavesako’s experiential interpretation of the Pāli *suttas* through the medium of monastic practice, and in Shaw’s reliance on ‘immediate Buddhist tradition’, by which he means the tradition as it is expressed for contemporary circumstances by his teachers. Faith in tradition is demonstrated by all the participants, but sometimes selectively, as when Crook doubts rebirth, or Pym advocates belief in ‘only what is helpful to you’. Unusually, Wistreich rarely mentions the subsequent validation of traditional teachings by subjective experience, but that may be an effect of the qualitative interview process, which in his case strayed into doctrinal exposition.⁵ Shaw is critical of Gelug-pa over-scholasticism, but the emphasis in Wistreich’s exposition of Gelug-pa teaching is directed towards making apparent the meaning of the relatively simple formula of ‘the emptiness of

everything from its own side' (*śūnyatā*), as a teaching that is intended to be realised in practice.

There are clear differences of approach to traditional explanation between those who are openly reflective about Buddhist and scientific mind-theory, such as Crook and Ratnaprabha, those who make assessments of teachings, such as Shaw, Dharmavidya, Prasada and Pym; those who, for soteriological reasons, are deliberately not selective, such as Wistreich, Bhikkhu Gavesako and Bhikkhu Vajiro; and finally Jones, who 'pulls the rug from under' respect for tradition with characteristically Zen 'skilful means', when he describes Buddhism as the 'last of the *kleśas*' (defilements). Too much can be made of these different attitudes to tradition, for all the interview participants have pursued a continuing commitment to Buddhism for most of their adult lives. This commitment to one faith, and usually to one tradition or lineage, contrasts with the postmodern 'new age' shift from religion to spirituality, where 'multiple spiritual sources are engaged with simultaneously' and 'the web of spiritual interests is constantly revised and reconfigured' (Philips and Aarons 2005: 217-210), (Cush 1996: 205-206). Their commitment represents faith or trust (*śraddhā*) in the sense of firm confidence rather than unthinking acquiescence. The differences between the participants are not so much matters of faith as of degree of reliance on words; that is to say, the extent verbal explanations are expected to provide accurate descriptions of the events, persons and experiences to which they refer, and to facilitate access to those experiences. For example, Shaw has a nuanced view of explanation, which separates out the question of the literal or descriptive truth from the ability of the explanation, as an *upadeśa*, to facilitate access to soteric experience. Pym suggests that the truth of any religious explanation cannot be evaluated until the relevant experience has been attained.

2. *Equanimity*

Apart from resistance to reductive scientific analysis, neglect of scientifically-informed contributions to the ontology of mind may spring from equanimity or indifference about issues of the kind that Pym expects to be unfathomable by ordinary minds, as opposed to enlightened minds.⁶ Whether equanimity, indifference, or any other term is the appropriate characterisation for any particular

participant is difficult to determine without supposition about implicit motivations for attitudes and opinions. Such supposition is an impressionistic procedure that is methodologically inadmissible in the qualitative interview context

Fortunately, the participants do provide a variety of explicit justifications for their tendency not to respond to questions about the ontology of mind. Pym's reference to the Buddha's 'Unanswered Questions' as the exemplary way to deal with ontological doubt (Horner 1957: 162-167 [MN I. 484-489]), falls partly within the category of faith in tradition, but also expresses his preference for evocative and indicative poetry over explicative doctrine, on the grounds that 'the language of the spirit is not the language of the dictionary'. Shaw and Bhikkhu Gavesako consider that scientific discourse is only informative about objective matters, rather than subjective concerns; Crook and Jones feel that ontological explanation suffers from a grasping after certainty where certainty cannot to be found; Prasada makes the same point in different terms by arguing against the tendency to grasp at objects and views, particularly views that reinforce a sense of self; Dharmavidya considers that scientific discourse is on an equal metaphysical footing with any other, for science also depends on metaphysical presuppositions that are merely 'human construct[s]'.

Preference for subjective experience, analyses of 'grasping' and observations about the human limitations to metaphysics, all suggest that the participants find concentration on the ontology of mind to be a psychologically suspect craving for certainty. In consequence, they direct their attention towards psychological rather than ontological concerns. This finding supports the most general conclusion that can be drawn from the interview testimony: that despite devotion to tradition and appreciation of its utility, participants consider that the ultimate nature of reality is not to be discovered in explanations: since explanations emerge from experience they must be validated by experience of the 'way things are in the world'.⁷ It is in consequence of this existential attitude that their resistance to unwonted analysis is tempered by equanimity or indifference. From the interview testimony, I conceptually isolate five alternative attitudes, which permit equanimity or indifference about ontology, by directing attention away from grasping after the nebulous certainty of a particular view of the mind, scientific or otherwise.

i. *Essential experience*

This is reliance on primary (immediate) awareness as the validation of all experience, including ostensibly objective instrumental scientific observations. Pym describes introspective investigation of primary awareness as ‘the Middle Way’. The prototypical Buddhist metaphor is here recast as existential ‘presence’, which Pym describes as a form of enlightenment, ‘acceptance of the here and now, but free from time’. This experience is of living mindfully between past and future, not overcome by cognitive constraints that limit, by means of definition, what it is to be a person, with a mind. Such a phenomenological approach is non-doctrinal, very ‘this life’, amenable to ecumenicism, and is not necessarily incompatible with the scientific Standard View. The point is that there is a special kind of warrant in personal experience, rather than the experience of another time or person, which Jones (and Heidegger) describes as ‘facticity’. There is a temporal distinction between primary experience, which seems to confer this warrant directly, and historical, ‘secondary’ experience, which observes facticity through the less reliable warrant of memory. This is not an absolute distinction, for primary experience is not absolutely immediate.

Consciousness...comes into being when information is represented to a monitoring faculty under deliberative attention...Only as attending proceeds, however, does it become possible to describe the immediately antecedent experience of a conscious episode. In fact mental experience can be consulted only retrospectively and such experience, as evidence for the existence of mind, can appear only as an introspective report of past events. (Crook 1980: 28)

Neuroscience supports Crook’s view that primary experience is a mental construction requiring some temporal duration (Libet 1965: 83, 1979: 640, Freeman 2003: 178-186). If the absolute immediacy of experience is open to question, so is the absolute reliability of ‘facticity’, but that does not diminish the qualitative sensory difference between the relative immediacy of primary experience and secondary recall from memory. There is also a ‘folk’ psychological difference, in that primary experience is always motivated by intentionality in Brentano’s basic sense of intentional ‘aboutness’ with respect to the world (Dennett 1987: 32-33), whereas secondary experience tends to be co-opted for the guidance of acts of ‘cunning’ intentionality, which are aimed at the preservation of the self (van Reijan 1988: 411-412, Adorno and Horkheimer 1997: 57).⁸

Crook's 'attender' and Pym's 'unself' seem to be about the business of 'aboutness', not the business of 'cunning', but it is not clear if that is the case with Ratnaprabha's notion of 'self-reflective consciousness' (Cooper 2003: 97 102-107), for reflection is normally a temporal process more characteristic of the self than the attender, and the self which reflects is prone to cunning intentionality. A conceptual dilemma is set up, if both the 'unself' and 'self-reflective consciousness' are envisaged to be capable of self-transcendence. It is difficult to understand how that can be so if consciousness is a relation between the world and a monitoring faculty, and it is unclear whether, by 'transcendence', is meant some revisioning of the dualism of ordinary mental relations, or some form of escape from dualism. The dilemma seems to result from the use of the term 'self' without clarity about the extension of its meaning, a problem that attends all 'folk' psychological concepts. As a preliminary resolution to the dilemma, I interpret Pym to mean that the unself is entirely without self, and Ratnaprabha to mean that self-transcendence is transcendence of self: they may both be referring to escape from the intentionality of the historically-constituted self, not from primary experience as such.

ii. *Essential doctrine*

The Four Noble Truths in particular are held to be self-evident. Because other doctrines gain coherence from their consonance with these Truths, it is possible to practice Buddhism without hardening an attitude of *preference* for the non-material nature of mind into an attitude of belief, even though a literal interpretation of some doctrines depending on the foundation of the Four Noble Truths also depend upon the notion of immaterial mind. Concise doctrines such as the Noble Truths or the *śūnyatā* teaching have the advantage of covering a wider set of cases and so attracting wider agreement than explanations that refer to specific cases (Strevens 2004: 155). Pym and Shaw emphasise that the Buddha's simple message has been obscured by proliferating doctrinal speculation, and Ratnaprabha volunteered a brief list of essential teachings on mind,⁹ and Bhikkhu Gavesako and Bhikkhu Vajiro point out that agreement on the Noble Truths is the foundation for dialogue between Buddhist traditions. This preference for simplicity of explanation clears the way for emphasis on practice and experience, and both consistency of practice and coherence of concise

doctrine provides some defence for Buddhist identity against the threat, under globalisation, of dissolution into the welter of ‘New Age’ spirituality (Phillips and Aarons 2005: 216-218).

iii. *Essential ambiguity*¹⁰

Ambiguity is refusal to discriminate, or rejection of discrimination in favour of radical doubt. It is sometimes validated, as with Pym and Jones, by reference to cryptic texts such as the *Kālāma Sutta* (Woodward 1932: 170-175 [AN 111.65]), the *Prajñā-paramitā sūtras* (Conze 1973), or the *Hsin Hsin Ming* (Clark 2001).¹¹ For Jones, ambiguity is a tool designed to undermine the reifying tendency of explanation, and return attention to non-discriminatory practice and experience. The practice of non-discrimination can be linked to soteriology, for Jones remarks that ‘*samsāra* is in essence the pain of dualism’. Non-dualism encourages a holistic view of the mind, as operating in dependent relation to the world and in continuity with the world. From this standpoint, whether the mind is material or non-material can be left indeterminate, opening the way for explanations that view mind and matter on some sort of continuum.¹²

iv. *Essential practice*

Practice involves a suspension of speculation in favour of ritual activity that allows intuition to arise spontaneously. As Crook remarks:

...to ask for the meaning of the universe: from the point of view of the universe that is a gross impertinence...If you back off that, the universe is given to you. (Crook)

Preference for practice is practically an entailment of preference for the warrant of primary experience. There are three justifications for this approach: that mind reorients itself when released from the flood of intentional activity; that precious time is not wasted on irresolvable issues; and that unlike intellectual activity, practice is inherently psychotherapeutic. Bhikkhu Gavesako describes practice as ‘the key to unlock the *suttas*’. The Theravāda Thai Forest tradition traces its practice attitude back to Mahākassapa; a lineage also cited by Crook on behalf of the Ch’an sect. Although Crook has *Dharma* transmission from his teacher, he accepts that some

names in the traditional lineage are fictional: what matters is faith in the continuity of practice, not faith in the specific identity of historical persons.

v. *Essential therapeutics*

The diagnostic form of basic Buddhist doctrines, the emphasis on the alleviation of suffering and the differentiation of practices according to psychological types all suggest some affinity between Buddhism and psychotherapy. The key difference, according to Prasada and Dharmavidya, lies in highly nuanced Buddhist attitudes towards the notion of a self. The self that Buddhism denies is not what Pym calls the ‘unself’, and Crook calls the ‘attender’ to primary experience (Crook 1980: 28), but the development in secondary experience of what Prasada describes as the ‘accumulation of habit-energy’, and Crook describes as ‘identity-formation’ resulting from ‘objective self-consciousness’. Buddhist therapeutic practice is about observing and modifying the processes that enable habit energy to exert obsessive effects, leading to grasping after self as if it were a stable object, and craving for external objects that reinforce a sense of self.

According to *Abhidhamma* explanation, any conscious event (*citta*) arises with the support of psychological conditioning factors (*cetasikas*) (Rhys Davids 2002: 175-177, Rowlands 1982: 9-10, van Gorkham 1975: 12-13). Buddhism is practically concerned with the psychological conditioning that makes each conscious event wholesome and joyful rather than unwholesome and painful (Govinda 1969: 63-64), on the belief that not only are action-decisions conditioned by *cetasikas*, but that perceptual cognitions cannot be trusted, unless unsuitable (unwholesome) *cetasikas* such as greed or attachment (*lobha*) hatred or aversion (*dosa*) and delusion or ignorance (*moha*) are restrained. This is why Prasada and Dharmavidya refer to the Buddhist diagnosis of human ills as a ‘psychology of addiction’.

Prasada interprets the basic diagnostic formulations of early Buddhism, particularly the Four Noble Truths and the five *skandha*, as diagnoses of the predilection to escape existential suffering (*dukkha*), which leads paradoxically to imprisonment in a self constituted entirely out of habit, and a consequent inability to encounter the real state of affairs in the world. The basic doctrinal formulations indicate a therapeutic method for reconditioning the mind, by enabling attention to a

more direct experience of encounter with the world to become the antidote to habitual, self-constituting responses (Brazier 2003: 21-24).

According to Prasada and Dharmavidya, the term *rūpa* in the *skandha*-formula refers to phenomenal forms as appearances to consciousness, and not to material embodiment. The formula constitutes an entirely phenomenological explanation, and when the Buddha is said to have said ‘leave the *skandhas* behind’, he did not refer to physical extinction, but to perfecting functioning by relinquishing the grasping of phenomenal form and the grasping after a self. What matters is not the materiality of embodiment or whether the mind has an embodied basis, but psychological modifications to the process of encounter with the ‘other’ that constitutes the world.

3. *Transcendental speculation*

Despite these five alternative supports for equanimity or indifference about ontology, Shaw, and to a much lesser extent Pym and Jones, express an attitude that transfers seamlessly from existential and psychological matters to ontological speculation, and in the process transcends the scientific concern for the material world. This attitude has affinities with idealism interpretations of Yogācāra thought; it resembles pantheism, but is not particularly theistic, although neither Pym nor Shaw are averse to God-talk, for this attitude is sufficiently transcendental to encompass an ecumenical lack of concern for the precise labels and details of personification.

...it is a different question - didactically how best to communicate bizarre things that are outside our ordinary language and thought, rather than the question: personal or impersonal? (Shaw)

The transcendental attitude depends on a metaphysic that transcends realism by including all phenomena within ordinary subjective experience, and all unenlightened subjective experience of conventional reality within experience of the ultimate reality of enlightened Mind.¹³ In this transcendental account, Mind tends to be capitalized. Shaw’s speculative view transcends the mind/matter conundrum, by holding that neither mind nor matter are as they seem, for beings not only misconceive their world, but make manifest the material and temporal structure of *samsāric* reality. There is no shortage of ontological discussion in this ‘pseudo-

idealist' view (Shaw), yet the question as to whether the ordinary mind is material or immaterial loses relevance, because the categories of materiality and non-materiality are symptomatic of an erroneous attempt to grasp the appearance of enlightened Mind.

4. *Qualified acceptance of science*

The fourth attitude is inclination to accept scientific findings on the grounds of empirical probability. Acceptance of scientific findings is the least evident of the attitudes; never dominant, and complicated by differences in the standards of verification that are expected of a scientific theory. This attitude is most clearly expressed by Crook, in his published account of consciousness, when he says that 'the mind is...*materially* present in the world' that 'there is no case...for some *mysterium*, an agent of non-material origins, unless information processing is itself is given that status' (Crook 1980: 28-29). It is also expressed by Ratnaprabha, who thinks it would be 'rather silly' not to accept some material basis for mental functions. Girded with more qualification, acceptance of science is also expressed by Wistreich, notwithstanding his traditional approach, when he suggests that there is nothing in Buddhism that is not empirical, when he agrees with the Dalai Lama that 'if science can disprove something that's in the *Abhidharma* texts then we should reject them, even if the Buddha taught them', and when he expects that 'we will eventually end up...with a Buddhism that completely accords with aspects within science and maybe there'll be rub-off the other way too...'. In principle, Wistreich adopts the same attitude to scientific investigation as Crook and Ratnaprabha, but he sets up a difficult verification-standard by expecting proof to take the form of direct perception. But it seems that in some circumstances a consilience¹⁴ of indirect, conceptual evidence from several sources may be sufficient, as when he remarks that

...it would be very hard to believe that the world is flat now, in fact there are so many different bases on which we are certain that it is round, that it's best if we realign all the teachings round the idea that the world is round. (Wistreich)

Lewis's theory of attitudes as a model of the mind

Resistance is a general response to the totalizing tendency of reductive analysis, but faith in tradition, equanimity about ontology, transcendental speculation and

qualified acceptance of scientific findings, are all more hermeneutic interpretative attitudes, because formed and expressed in the context of current circumstances. Acceptance of scientific findings clearly depends upon assessments of the relevant details of sound experimental work. The other attitudes could be justified solely by reference to tradition, but they acquire particular salience from their deployment in the contemporary context, and in the interview context of this research. I may be interpreting beyond the opinions of some of the interview participants, in suggesting that this salience is in part a response to the scientific ‘Standard View’ of the mind, but I justify this interpretative step on two grounds. Firstly, all attitudes, collective or personal, are responses to present contexts, and with respect to the mind the standard scientific view forms a major part of the contemporary context. Secondly, at the outset it was made clear in an introductory letter to the participants that the research was motivated by the ‘...heightened interest over the last fifty years in philosophical, psychological and neuroscientific investigations into the nature and functioning of mind’. In the same letter I raised the preliminary question, ‘are Buddhist views compatible with the scientific view of mind as simply an emergent property of neurobiological functioning?’ The participants were, therefore, fully informed of the nature of the research, and the opinions and attitudes they expressed constitute their personal response to that research focus, even when they decided to redirect that focus in accordance with their own attitudes.

To illustrate my interpretation that the participants’ views can be arranged into a set of attitudes, and incidentally to illustrate why propositional analysis is inherently liable to meet with precautionary resistance, I build upon Lewis’s argument in ‘*Attitudes de dicto and de se*’ (1979). He suggests that all attitudes, including belief, knowledge and desire (1979: 528), are fundamentally attitudes *de se*: they are attitudes of *self*-location with respect to the properties of things in the world, including things imagined in logically possible worlds (1979: 520-521). Attitudes *de dicto*, which depend upon propositional statements (teachings, doctrines or texts) made by others, are not self-locations but *other*-locations, yet they cannot be achieved without the cooperation of an attitude *de se*. In other words, attitudes towards properties take precedence over attitudes towards propositions about those properties (1979: 516, 522). This is because *de dicto* propositions are themselves abstract

entities with properties external to the individual, therefore *de dicto* propositions are entities towards which attitudes *de se* are possible. Attitudes *de se* and *de dicto* are formed on the basis of acts *de re*, that is, they are ascribed on the relational grounds of ‘suitable acquaintance’ with the properties of the object of the attitude (1979: 539-542). Attitudes are therefore not entirely ‘in the head’, but depend on a relation between a mind and its object, whether or not the object is located externally in a real world context, or is a mental event appearing to consciousness. To remain meaningful, suitable acquaintance must be continuously re-assessed to ensure what Lewis calls ‘apt transmission of reliable information’ about the properties of any object (1979: 539-540).

Lewis restricts his discussion to ‘the attitudes of imaginary hyper-rational creatures’ (1979: 515), but all attitudes are interpretations of contextual acquaintances with the properties of things, therefore not only may acquaintances be ‘unfit for purpose’ but interpretations may be irrational. Reasoning is continually influenced by context, prejudice, language, emotion and memory: in Buddhist terms, by *karma*. It is because attitudes are not determined logically but with the whole mind and on the *de re* basis of uncertain acquaintance that interpretations are hermeneutic: they are intuitive and *seemingly given* when they are sourced in areas of mind and world that are beyond rational control.

Lewis admits that his description of the relational process ensuring transmission of information between the object of an attitude and the self is rather vague (1979: 540). As a result, his unexamined notion of the self, like the neuroscientific assumption that thalamo-cortical processes constitute a ‘self’, leaves something more to be said, particularly with respect to the Buddhist doctrine of the absence of a permanent self (Skt. *anātman*, Pāli *anattā*), which motivates more precision in the characterisation of individual mental personality.

As do Crook, Pym, Jones and Prasada, the linguistic philosophers Lakoff and Johnson make a conceptual distinction between the present subject and the historically and temporally-constituted self (1999: 267-288). Deploying this distinction, I suggest that an attitude becomes ‘realised’, in the sense commonly used in Buddhist discourse, when the object of the attitude is attended to by the subject of primary experience without interference by the habitual presuppositions of the

historically-constituted self,¹⁵ and that realisation is stabilised when this state of affairs becomes temporally extended; that is, when understanding of the ‘way things are in the world’ is not radically modified to suit the obsessive requirements of a self.

An addition is required to Lewis’s sequence of Mediaeval Latin ‘tags’ to accommodate temporal duality in the constitution of subjectivity. Thus, the temporal foundation for other-location *de dicto* and self-location *de se* resides in subject-location *de animo*, which participates in the relation of suitable acquaintance *de re* with the object of a prospective attitude as it is experienced in immediate or ‘primary’ awareness.¹⁶ Only the immediacy of subject-location *de animo* enables continuous reassessment of the object of an attitude; without that, both self-location *de se* and other-location *de dicto* can only repeat past attitudes.

The interview participants’ four attitudes of response to the scientific ‘Standard View’ of the nature of mind (faith in tradition, equanimity about ontology leading to emphasis on psychology, speculation on transcendence, and inclination to accept sound neuroscience) all utilise combinations of *de re* acquaintance with *de dicto* doctrinal and scientific explanations. This occurs when they look for guidance outside immediate experience and when they express preference for traditional Buddhist analysis. But all the participants, including those with strong faith in doctrine, in their own terms emphasise the soteriological utility of primary experiential subject-location *de animo*, eventually and hopefully to be stabilised in realisations unaffected by habitual modes of interference *de se*. They do not, therefore, resist analysis just because analysis conflicts with tradition, as a rhetorical block against dialogue with anything other than their preferred version of ‘right view’, for any view must be capable of explanation and defence. They resist analysis, even Buddhist analysis in Jones’s case, when analysis reduces textured meaning to propositions that cannot simply be accepted and repeated *as prescribed*, but may be acceptable when personally located *de animo* in awareness, and stabilised *de se* in self-awareness that is not habitually erroneous. This, I think, is the substance of Wistreich’s point when he refers to the Dalai Lama’s acceptance that ‘direct perception’ confirms or disconfirms an explanation.

To summarise, any attitude, such as a belief, may depend on traditional explanation but attitudes are provisional until their object is located in the primary

experience of the subject and attitudes are transitory until repeatedly confirmed in a ‘bottom-up’ flow of acquaintance with the world, which alters the habits of the historically constituted self. Response to contemporary context matters, because attitudes may be erroneously formed if the mode of acquaintance with the object of an attitude is forced on the immediate subject in a pre-explanatory ‘top-down’ direction, as a habitual mode of regarding initiated by the historical self, irrespective of perception of the external world.

For the reader, this discussion constitutes yet another *de dicto* account, which may present an erroneous view of the world by reifying explanation, self and subject, and by rationalising the experiential functioning of ‘suitable acquaintance’ relations between them. This is not just an interplay of concepts, but of problematic psychological issues, which may now be illuminable by reference to the theoretical commentary on neuroscience.

Underlying these issues, old and intractable ontological problems about the nature of self and subject are brought into focus by the translation of the subject of primary experience into the appropriate Latin term *animus*, despite the historical ‘excess baggage’ of that term as a reference to the mind as an eternal soul with ‘secondary’ or extended temporal duration.¹⁷ Like the Pāli and Sanskrit term *citta*, *animus* evidently denotes momentary sentient consciousness, but consciousness forms part of a temporal sequence that can be remembered and can have a hypothetical beginning and a predictable end. Because any awareness dependent on memory is an indirect recall to experience, the history of subjective awareness has a lesser epistemological warrant: the developing sequence of *animus* or *citta* is only fallibly remembered to be a continuous mind, and that fallible continuity of *animus* or *citta* can only be predicted *de dicto* to be a soul or *ātman*.¹⁸

Irrespective of any direction of causation between mind and brain, if mental events occur in identity or supervenience relationship to neuronal events, then investigation of the order and structure of neuronal events should provide insight into the reference of concepts used to describe the mind. Conversely, investigation into the meaning of mental concepts could clarify the functional purpose of neuronal events. These assertions amount to the view that psychological and neuroscientific explanations can be compatible without reduction.

Wittgenstein famously corrected his assertion, in the *Tractatus*, that words can denote simple objects (Wittgenstein 1961: 11-13 [TLP 2.02- 2.04]), to propose that ‘the meaning of a word is its use in the language’ (Wittgenstein 2001: 18 [P.I. 43]). Yet we do talk about the world with an agreed rough and ready accuracy of reference, because the world is organised into natural kinds that can be indicated by concepts with sufficient reliability for human purposes (Kornblith 1993: 107). Similarly, neuronal groupings have Hebbian plasticity in the developmental determination of their purpose (Hebb 1949: 69), so the functional role of a particular ensemble cannot be predicted with certainty, yet the functions that brains are called upon to fulfil with respect to the natural kinds in the world are sufficiently reliable for general mapping of brain function. The upshot is that sufficient accuracy can be expected when ‘folk’ psychological concepts are used to describe and relate mental and neuronal functioning. On this account it is possible to say what we do, why, and how, in psychological and neuroscientific explanations that can be cross-referenced to each other, and to illuminate the way in which the tetrad of explanation, experiential acquaintance with the world, primary subject, and historically-habitual self are interrelated in the formation of attitudes. This four-fold interrelation constitutes a simple functional model of the mind in action. This model can be equated with neuroscientific explanation, if *explanation* equates to the mainly cerebral cognitive modification of mental events, if acquaintance or *experience* is thought of as the phenomenal appearance of things and events in conscious awareness, which stand in relation to the *subject*, yet can be modified by habitual and intentional *self*-processes. Consideration, in subsequent chapters, of how these four components of the attitudinal model of mind are interrelated begins in Chapter 6 with an examination of the relation between explanation and experience, motivated by the interview participant’s testimony that they have a preference for the former as warrant for the validity of the latter.

Notes to Chapter 5

¹ Bhikkhu Vajiro does not support the idea of the evolution of the *Dhamma*, because the Buddha referred to the *Dhamma* as the rediscovery of an ancient path.

² Hume argues that temporal difference is vital to the notion of causality (Ryan 2003: 29-30).

³ Whatever the Dalai Lama's motivation, his decision to become involved in dialogue with science is significant because the outcome of public dialogues tend to be determined by public judgement, rather than predetermined by the active participants.

⁴ The Dalai Lama's openness to dialogue is not shared by all of the neuroscientific community, for there was opposition to his invitation to address the 2005 Neuroscience Conference. It has been suggested that the opposition was motivated by geopolitical rather than scientific reasons (Nature Editorial 2005: 889, Cyranoski 2005: 454). The Dalai Lama is partially protected from the unpleasant aspects of disagreement because his encounters with scientists are mainly facilitated under the auspices of the Mind and Life Institute conferences (Houshmand, Livingston and Wallace 1999: 175-179).

⁵ Wistreich confirmed the importance of the warrant of experience in a personal communication after the interview.

⁶ I thank John Pickering for suggesting indifference as an appropriate term. Equanimity, indifference and poise are all used to translate the Buddhist cardinal virtue (*brahmavihāra*) of *upekkha* (Pāli) or *upekṣā* (Skt.), although indifference carries the additional connotation of lack of care. Hamilton suggests that 'non-partiality' 'better conveys the point of non-attachment' (2000: 201 n. 58)

⁷ The importance of experience in early Buddhism is described by Hamilton (2000: 84, 110-111). This emphasis stands in marked contrast to Sharf's view that the religious appeal to experience is ideological (1998: 96-97), but it should be noted that Sharf's critique is mainly of mystical or ineffable experience. It cannot be assumed that the Buddhist enlightenment experience is a mystical experience (Gombrich 1997: 5-6).

⁸ In Abhidhamma terms, aboutness-intentionality is *manasikāra* and 'cunning' intentionality is *cetanā*. See Chapter 7 note 13.

⁹ Ratnaprabha's list:

- 1 Mind as moral.
- 2 Mind as the source of *dukkha*.
- 3 Mind as perfectible.
- 4 Mind, as indicated by 1, 2 and 3, as subject to conditioned arising.
- 5 The accessibility of *śamatha* and *vipāśyanā*.
- 6 The influence of prior *saṃkhāras* and the survival of *saṃkhāras*.

¹⁰ Ambiguity is described by Pye as ‘the unresolved coexistence of elements belonging to the transplanting religion and to the situation being entered’ (1969: 237). Rather than being an example of such an analytical category, the ambiguous attitude displayed by Jones is a characteristically Zen procedure of withholding determination as a method of soteriological practice.

¹¹ Clark’s (2001) translation of the *Hsin Hsin Ming* is widely available in ephemeral sources, both with and without citation; see <<http://www.mendosa.com/way.html>>. For other translations, see <<http://www.sacred texts.com/way.html>>.

¹² In contrast to the Augustinian view of an incompatible union of body and soul (Abercrombie 1938: 87), a metaphorical version of the continuum view is implicit in Aquinas’s notion of a hierarchy of becoming, with humans occupy a position as the highest of the material creatures and the lowest of the intelligent creatures: ‘...on the borderline between spirits and bodies’ (Gilson 1929: 216). Humans are considered the highest of the embodied beings with material form, and the lowest of the beings with intellect; above them are the angels, transposed into pure, disembodied intelligences.

Johansson suggests that in early Buddhism the tangible/intangible mind/matter distinction was not clear-cut (1979: 32-34). Consciousness can be described as a force which causally energises the four material elements (Rhys Davids 2001: 25-26), yet it arises with them in causal dependence on co-operating conditions, and if the relational ontology of causal dependence is stressed, rather than the phenomenology of qualitative difference, mind may alternatively be conceived as not practicably separable from matter. Consciousness, in the *suttas*, only arises on contact with sensory stimulation, rather than by act of mind alone, and ‘without bodily functions, the mind would not be stimulated’ (Johansson 1979: 33). There are two possible perspectives on this intimate association between mind and matter. On one hand, matter and mind lie at either end of a continuum of materiality from gross to subtle to formless, and mental events inevitably partake of the quality of materiality in that their psychological contents are expressive of material forms (Johansson 1979: 32-34). On the other hand, the psycho-physical entity (*nāma-rūpa*) can be characterized idealistically as conscious processes or phenomenal objects apprehended by other conscious processes: ‘the body is known only through the mind’ (Johansson 1979: 33).

Viññāṇa is not altogether “mental” in the western sense, and *rūpa* is not altogether material. There is no dualism in Buddhism. (Johansson 1979: 33).

¹³ For this dual use of the term ‘Mind’ in a Ch’an context see Cheshier (1971).

¹⁴ ‘Consilience’ was used as a term for the mutually-reinforcing compatibility of different theories by Whewell (1858), and misappropriated by Wilson to support the ‘Ionian Enchantment’ of the reduction of different theories to one fundamental physical theory (1996: 1-5).

¹⁵ Lewis *does* make the distinction between self and subject when he distinguishes between ‘people as continuants’ and as ‘a more or less momentary time-slice thereof’, but he considers both to be forms of the self (1979: 527). It is the contention of this thesis that the ‘time-slice’ is not a form of the self. Neuroscientific work that supports a differential origin for the subject, as opposed to the self (Varela 1999), is discussed later in the thesis.

¹⁶ I thank Elizabeth Pender and David Levene for suggesting *de animo* as the appropriate Latin translation for ‘of the subject’.

¹⁷ I owe this point to David Levene.

¹⁸ Buddhism repudiates *ātman* as a continuity term for the mind, yet the individuality of karmic consequences fulfils the continuity function.

Chapter 6

Explanation and experience

Introduction

This chapter examines explanation *de dicto* and acquaintance *de re*, that is, the linguistic commentary on the primary sensori-motor experience of acquaintanceship with the world. Two main modes of explanation can be differentiated epistemologically. One is empirically-based on particular knowledge, the other based on evaluative propositional thinking about meaning, at a remove from the commonsense certainties of everyday life (Arendt 1978: 57-58, 62-64, Wittgenstein 1979: 28, 31, 46 [OC. 209, 234, 354], Stroll 1994: 39). In pre-modern times the possibility of a moral connection between these two modes was assumed (MacIntyre 1971: 111, Jauss 1989: 4-10, Fuller 2005: 9), and the traditional Buddhist *Dharma* is a pre-scientific discourse that includes them both. Modernity is typified by the separation of discourses of knowledge and meaning, ‘is’ and ‘ought’, yet they both refer to the same world and can be interrelated with the aid of bridging terms or laws, which preserve the ‘folk’-psychological explanatory schemas typical of the evaluative mode (MacIntyre 1971: 120, Fodor 1974: 129-131).

Explanations never achieve absolute truth, for they are indicative models that depend on information from prior ‘representations’ of the world (Teller 2004: 439). Representations are perceptual cognitions resulting from sensory acquaintances with the world. Despite the experiential certainty of everyday life, representations are so permeated with habitual responses to earlier perceptual cognitions that it is questionable whether the external world is directly experienced, indirectly represented, or internally ‘enacted’ (Varela, Thompson and Rosch 1991: 172). I contend that although perceptual cognition correlates to the activity of a closed nervous system (Maturana and Varela 1998: 163-166, Llinás 2001: 57), it is sufficiently coupled to an external world to enable representational correspondence to that world. The quality of perceptual cognition is indirect, approximate and idealized, yet is sufficiently ‘homomorphically’ isomorphic (Llinás 2001: 65) to bestow a sense of ‘facticity’ on ordinary experience.

The commentarial character of explanation might be taken to indicate that it is a transcendent function with respect to primary experience, but this is not so

phenomenologically: explanation is not external with respect to immediate or primary experience, but appears to primary experience as yet another feature of the world. The constructions of explanation depend on memories of ‘secondary’ experience, but always appear with the ‘lightning speed of thought’ as an integral part of primary experience (Wittgenstein 2001: 89, [PI. I. 318-321] Johnston 1993: 72, Arendt 1978: 44), therefore acquaintance with an explanation (a thought) appears in awareness on a par with acquaintance with a percept. Neuroscientific evidence suggests that linguistic explanation is a relatively flexible development of perceptual cognition, and perceptual cognition is a relatively fixed mode of explanation of the world; the difference between explanation and experience is therefore a matter of degree rather than fundamental ontology.

Buddhism implies that explanation and experience can be altered for the better. Alteration is simple in the case of explanations because they are flexible models, which can be adjusted to be more or less effective or true. Although felt to be certain, primary experience of the world is more difficult to modify because it takes the form of phylogenetically, developmentally, and psychologically conditioned conscious qualia, by means of which change and continuity in the world is understood. For mental events to have a relation of identity or supervenience with respect to neuronal events it is necessary that there be an ordered relation between one moment and the next and between one event and the next, otherwise continuity and change amongst the properties of the world could neither be experienced, explained, or modified.

Certainty in experience

By the nature of the empirical method, the scientific order of knowledge offers the inductive warrant of probable truth, but not of certainty. By contrast, the phenomena of the everyday, which form the objects of primary experience and therefore also of Buddhist mindfulness practice, are largely things that are felt to be certain: this is the reliable procession of night and day in the peopled space of community. Although such things are not immutable, Wittgenstein suggests that their existence cannot be doubted: they ‘stand fast for us’ with foundational certainty because they form the ‘hinge’ on which more uncertain events of everyday life turn, and are thus not open to doubt or revision (Wittgenstein 1979: 18 [OC 116], Stroll

1994: 105-110). Even though life embedded in the experience of communal praxis provides the foundation of animal certainty, derived explanations in terms of knowledge or meaning are less certain. This is because explanations are not metaphorical ‘conduits’ for the transmission of the full texture of information, as if conveying the phenomena-in-itself, but are reductions of reality: they are analogical models or ‘frameworks’ constructed as aids to discovery and understanding (Reddy1979: 286-292). This reductive constraint on explanation-as-modelling applies equally to the Buddhist *Dharma*. Although it is an exegetically unified account, the explanatory *Dharma* can only indicate a possibly soteriological mode of acquaintance with the world, of the sort that warrants certainty.¹

Orders of knowledge and meaning

Arendt (1978) argues that there are two types of explanation. Underlying the first type, a Platonic sense of wonder motivates generalisations from experience and the systematic constitution of an unchanging order of meaning behind appearances (1978: 114, 138, 141-151). Underlying the second type, wonder about the world also gives rise to a sense of puzzlement, which motivates the scientific constitution of an order of empirical knowledge (1978: 114). Bhikkhu Gavesako makes this distinction between meaning and knowledge, when he distinguishes between ‘what the Buddha teaches about the truth, or perceiving the truth of the way things really are’, and the ‘western scientific ideal of finding the ultimate nature of reality’. Shaw makes a similar point when wondering if there might be a non-literal as well as a literal theory of truth. The distinction between truth in terms of meaning and truth in terms of verifiable knowledge relates to the difference between subjective and objective experience, and thus the separation of the two orders parallels the explanatory gap between first-person and third-person access to the mind, and the associated distinction between introspection and observation.

Wittgenstein remarks that ‘observation’ depends for its correct grammatical use on the possibility of independent verification, therefore introspection can never be observation (Johnston 1993: 2, Hacker 1990: 58, 191), yet a grammatical difference is not a psychological difference, and both observation and introspection remain forms of experience. Not only do the two orders spring from the different attitudes of puzzlement and wonder, but they have different ends: broadly speaking, knowledge is

understanding of the physical world, while meaning is understanding of the human condition.² Despite these differences, the two orders advert to the same world in the philosophical sense of ‘world,’ which includes all that can be thought, sensed, or performed. Ratnaprabha and Jones, Crook and Pym make this point when they assert that in the final analysis all objective observations are subjectively experienced; thus the third person/first person division is a methodological constraint on access to the world, not an absolute distinction: person as object and person as subject inhabit the same world.

The issue for traditional forms of explanation that combine both knowledge and meaning, such as the Buddhist *Dharma*, is not whether there are two distinct epistemological orders or whether one order should be reduced to the other, but whether conclusions in one order can be meaningfully related to conclusions in the other. Since the grammatical and methodological difference between the two orders does not obviate their basic ontology as explanations, the order of knowledge is susceptible to interpretation in the order of meaning, and *vice versa*, and confusion only arises with translation issues in the course of the interpretative process. MacIntyre interprets Hume’s critique of the illogical progression from a factual (order of knowledge) premise to a moral (order of meaning) conclusion to be an argument that transition from an ‘is’ statement to an ‘ought’ statement requires the use of ‘bridge notions’ that express human dispositional evaluations, (MacIntyre 1971: 120-121).

We could give a long list of the concepts which form bridge notions between ‘is’ and ‘ought’: wanting, needing, desiring, pleasure, happiness, health – and these are only a few. I think there is a strong case for saying that moral notions are unintelligible apart from bridge notions such as these (MacIntyre 1971: 120).

MacIntyre is not concerned with the epistemological status of factual statements, nor does he agree with Hume that ‘is’ and ‘ought’ statements are incommensurable. He is suggesting that the transition from factual statements to prescriptive statements is illegitimate without reference to human dispositions. I think it is the apparent absence of these bridging terms that moves Ratnaprabha to describe mind/brain identity theory as a ‘slight impoverishment of thought’. The tendency to make the distinction between ‘is’ statements in the order of knowledge, and ‘ought’ statements

in the order of meaning, without concern for the means to bridge that distinction, constitutes a significant difference between thought under modernity, as opposed to thought in medieval Europe (Jauss 1989: 4-10) or in ancient and medieval India (Fuller 2005: 9).³

The Buddhist *Dharma* refers to both the explanation and the reality of the way things are in the world (Griffiths 1999: 159n.77). Since ‘is’ and ‘ought’ are not disassociated, the experiential meaning and the empirical facts of the world are not disassociated. Unless, therefore, it is possible to connect meaningful statements with knowledge statements using ‘bridge notions’ referring to human dispositions, doubt can be cast on the indicative reliability of the Buddhist *Dharma* in its explanatory sense. Bridging notions facilitating relations between explanations are not unique to moral and religious discourse, for they are also necessary for transition between levels of explanation in the sciences (Fodor 1980: 131). Of most relevance to this thesis is the validity of broadly psychological, *Abhidharma* forms of explanation, but any more fundamental or ‘lower-level’ explanatory discourse, right down to quantum physics, should be capable of eventual relation to any ‘higher-level’ discourse such as sociology or economics, by means of evaluative dispositional terms. If there is no *mysterious* means of transition from ‘ought’ to ‘is’, by which the ontology of the external world can be altered to accord with human disposition, then the unification of empirical and meaningful explanation does not depend on the subservience or reduction of one discourse to another, but on the consistent interpretation of the ‘is’ of scientific findings in terms of the ‘ought’ of human, and in this case Buddhist, values.

Against reduction

Contrary to contentious sociobiological claims (Wilson 1998), when an ‘extended’ or ‘higher-level’ psychological or cultural explanation such as the Buddhist *Dharma* is related to a lower-level explanation such as a scientific theory the result is not a *further* explanatory reduction (for all explanation is reduction of the rich qualitative texture of experience to the thin texture of a model) of the former theory to terms of the latter. It is suggested by Friedman (1974: 18-19) and Kitcher (1976, 1989) that scientific explanations do not advance understanding by means of reduction, but by theory-unification. Fundamental theories possess the ‘explanation

extension' required for unification (Kitcher 1989: 447), but lack the concepts necessary to do the explanatory work of the higher-level theory.⁴ Jones (1995) argues that if 'completeness of explanation is the goal of unification theory', then a lower-level theory, such as neuroscience, cannot do explanatory work without the aid of terms derived from higher-level theories such as psychology, if it is to adequately explain the important generalisations of those theories. Thus unification is not a reduction but a combination of lower-level 'explanation extension' and 'higher-level non-reductive explanatory schemas' (Jones 1995: 27-29). In psychological cases the 'explanatory schemas' are precisely MacIntyre's 'human evaluative dispositions', which make use of 'folk' psychological categories to explain patterns of events (Dennett 1987: 27-28). It is only with reference to these categories, or improvements upon them, that different levels of explanation can combine to extend scientific understanding of the relations between mind, brain and world.

Hardcastle (1992) suggests that the explanatory extension of a lower-level theory can 'illuminate' problematic issues in a higher-level theory. In the case of neuroscience and psychology (and Buddhist mind-theory) neuroscience could either:

1. theoretically demonstrate the possibility of some antecedently problematic presupposition of the extended theory; or
2. conceptually refine the extended theory by better specifying entities which belong to the extensions of the predicates in the extended theory such that proponents of the extended theory alter the ways in which the referents of these predicates are fixed in accordance with the new specifications. (Hardcastle 1992: 419)

The first 'way of illumination' amounts to confirmation or disconfirmation of a presupposition, the second is a matter of conceptual improvement. Of particular concern for this study is the implication that the explanatory extension of neuroscience might illuminate apparent inconsistencies in Buddhist mind-theory, and *vice versa*. With respect to Hardcastle's first point, the 'antecedently problematic presupposition' in need of illumination in Buddhist mind-theory is what is meant by the metaphysical intuition that 'mind' is an element.⁵ With respect to Hardcastle's second point, there are concepts on both sides in need of refinement in order to establish the kind of unification between Buddhist and neuroscientific explanation that is anticipated by Wistreich. There may be many ways of explaining 'the way in which things really are' in the order of meaning, yet the theoretical possibility of

consilience between the two discourses of knowledge and meaning is guaranteed from the outset if both advert to the same world. That unification need not entail reduction of either Buddhist or scientific explanation.

...the various...domains which make up the cognitive sciences are separate and independent fields of inquiry; each has its own history, with its own set of important questions, research techniques, explanatory patterns, criteria for error analysis, and so on. How and whether one domain will ultimately reduce the other is simply the wrong philosophical question. (Hardcastle 1992: 424-425)

Buddhist explanation aims to answer different questions to those generally pursued by science; questions that could be restricted, as Bhikkhu Gavesako supposes, to issues in the order of meaning. However, metaphysical entailments of the consequences of *karma*, such as rebirth, enlightenment and the continuity of mental events, all indicate that to the extent that those posits are intended to be taken literally, they extend into the order of knowledge. In that case, Buddhism ought not to fear conceptual refinement or the examination of problematic presuppositions, for the overriding concern ought to be with 'the way things really are' in terms of both orders of meaning and knowledge, rather than with the defence of tradition for ulterior reasons.

The pluralist alternative

As Dharmavidya implies when he suggests that science is as metaphysical as any other discourse, the grand 'Ionian enchantment' (Wilson 1998: 1-5) of the reduction of all explanation to the brute facts of foundational physics is as much an article of belief, and a matter of metaphysical dispute, as are the tenets of any religion.⁶ Cartwright considers that scientific theory-reduction is only achievable by virtue of assumptions, including mathematical assumptions, made in order to manufacture a fit between theoretical models and the evidence they portray (1983: 4). Foundational science idealizes rather than describes reality, for the world is amenable to plural explanations, and therefore ontologically various or 'dappled' rather than ontologically unified under one foundational theory (Cartwright 1994: 357-361).

Sklar opposes Cartwright on the grounds that pluralism of explanation is not the same as pluralism of ontology (Sklar 2002: 429), for the 'best explanation' of science (currently quantum field theory) characterises things as they really are, whereas the

phenomenological explanations provided by the special sciences are ontologically misrepresentative or false, but sufficiently ‘similar’ to be explanatory and predictive: they are ‘merely useful fictions’ (Sklar 2002: 430). Sklar considers that the only grounds for scepticism about the universality of the best explanations of physics are provided by the vitalist presupposition of a ‘life-force’ outwith biological explanation, by the ‘hard’ problem of explaining the mind, and by the apparent inability to derive applied explanations and predictions from quantum field theory (2002: 434, 441). He sets the first problem (vitalism) aside as implying something beyond the ‘elementary constituents of the world’, ignores the second (qualia), and tackles the third, arguing that even though foundational theories are inexact and do not provide the best explanatory route to knowledge of complex phenomena, they are ‘on the road’ to the truth of the ‘desired ultimate theory’ (2002: 439). Sklar asserts that science is now sufficiently supported by argument and evidence for the burden of proof to fall on the relativist sceptics.

Contradicting Sklar, Teller is sceptical about the possibility of progress towards such an ideal fundamental theory (2004: 429-430). There is no way of knowing the difference between a true or ultimate description of the way things really are and a ‘useful fiction’ or approximation to the truth, therefore no way of measuring the distance travelled along the ‘road to truth’ by any provisional foundational theory. Sklar asserts that higher-level ‘phenomenological’ theories are fictional idealizations, while foundational theories are approximations to the truth; Teller responds that the approximation/idealization (quantative/qualitative) distinction is misguided, for features of both higher and lower level theories are equally ideal. He cites quarks and gluons, which are just as fictional as the notion of a fluid (2004: 433). He also argues that there can be no clear road to a truth that is as yet unknown, and that matters are only true in certain respects, with the particular respect depending on the interest of the researcher (2004: 435).

Teller implicitly restores the relevance of the problem of mind, which Sklar explicitly sets aside, when he states that truth-evaluations ‘are characteristics of our representations’, and ‘our representations serve as our guides to what we take to be a world independent of us’ (2004: 439). Because representations do not give direct knowledge of the world they cannot determine exact truth. Teller invokes the

Buddhist parable of the blind men and the elephant (Woodward 1948: 82-83 [Udana 68-69]), to illustrate the human epistemological predicament, but suggests that the analogy inappropriately and teleologically identifies the beast, just as science inappropriately presupposes the outlines of a desired explanation of reality.⁷ He argues that humanity cannot get beyond imperfect representation to achieve direct observation (Teller 2004: 440), is indeed ‘stuck’ within the elephant analogy, and therefore needs to embrace the plurality of explanatory contexts.

Complete relativism can be avoided, for in any particular context one explanation will have greater ‘verisimilitude’ than any other (Teller 2004: 442). When an explanation is adequately explanatory it can be characterised as relatively true; in respects in which the same explanation is inadequate or problematic, it can be characterised as relatively fictional. Teller extrapolates from Sklar’s statement that all conceptual explanations, including current foundational theory, are not universally true (Sklar 2002: 440) to argue that all theories are fictional yet useful for prediction and understanding. Such theories are informative fictions, and since they inform, yet are not true, they had better be called ‘veridical fictions’ or ‘fallible veracities’. Thus it is ‘only through idealizations...and their alter egos, inexact truths, that we have access to the world’ (Teller 2004: 447).

Teller’s introduction of hermeneutic issues of context, interest and sensory representation indicates that the epistemological dilemma of the mind-world relation, which Sklar mentions only to ignore, is as salient for scientific explanation as it is to any other form, including religious explanation. Teller is making the same point as the interview participants when they assert that scientific methodology finally depends on presentation to subjective experience. But Teller also remarks that all subjective experience is fallible: it is true in part, fictional in part. Sklar says something similar, when he suggests that our ‘conceptualizations’ are:

...misrepresentative of the true state of affairs, but...sufficiently similar to “how things are” for some predictive, and even genuinely explanatory, purposes. (Sklar 2002: 430)

It is understandable that linguistic representations of the world should be fallible veracities, for they are only indicative models shorn of the rich texture of perceptual experience, but Teller’s assumption that all ‘representations’ are fallible guides to the world stands in need of justification before perception, which is usually felt to be

certain, can be bracketed with explanation as having both ‘fictive and veridical aspects’. In effect, Teller is saying that explanations must be reductive indicative models of a Kantian external world of unobservable things-in-themselves, because they depend on perceptual representations that are also reductive indicative models of the same Kantian world. This view of perceptual representation is radically at odds with the commonsense view of perception, exemplified by Augustine’s account of the intermediate ‘trinity of the outer man’, which *trusts* perceptual cognition to transfer true and accurate information about the world to consciousness and to memory (Augustine 2002: 79). If partially true and partially fictional, as Teller suggests, representations only achieve a partial isomorphism with the world they represent, constructing some parts of the representation out of ‘useful fictions’.

In the interviews there are indications that the participants appreciate the fictional component of explanations, including traditional Buddhist explanations. Ratnaprabha is suspicious of certainty, wanting to leave room for myth and ‘flexibility of thought’, and finding that there are ‘different helpful pictures and images or models to use...’. For example, in the case of the dispute between ‘sudden’ and ‘gradual teachings’ (Dumoulin 1963: 85, Ruegg 1989: 3, 7), he feels that deficiencies in either method can be corrected by the alternative approach. Pym has a strong preference for the language of poetry over literal, logical language in the expression of religious ideas; Shaw wonders if traditional Buddhist explanations, ‘the good *upadeśa*’ may not be entirely couched in non-literal language. Referring to *gandhabba* in rebirth explanations, and to earth, water, fire and air as descriptions of the basic material elements, Bhikkhu Vajiro notes that ‘if you take it literally, you are lost’. His remark succinctly indicates that explanation can be fallible or fictional because explanation functions metaphorically, not literally expressing states of affairs but indicating how to identify states of affairs by similarities between their properties. Despite choosing to take doctrine more literally than the other participants, Wistreich is aware that explanations offer scope for misapprehension, his archetypal case being to have ‘lost the plot’ or to ‘have made a poison of the medicine’ by taking emptiness (*śūnyatā*) to literally mean nothingness. There are also combinations of metaphorical and literal allusion in Wistreich’s characterisation of the mind as ‘clear’, ‘knowing’

and ‘luminous’, and Shaw’s account of the three ‘aspects’ of mind as ‘openness, clarity and sensitivity’.

Given the interview participants’ general attitude of reliance on subjective experience, it needs to be clarified how perceptual representation of the world could be indirect and partially fictional yet felt to be experientially certain. There are indications that some of the participants presume that perceptual contact can be direct, for Wistreich mentions direct realisation, both Wistreich and Prasada mention direct perception (Brazier 2003: 68), Crook refers to ‘direct seeing’ and ‘immediate apprehension of existence’, and Shaw mentions ‘direct contact with a reality’. Care needs to be taken in the interpretation of these statements, in view of their dialogic context: the participants may not be explicitly thinking about whether the mechanisms of perception provide direct access to the world. It is more likely that they mean that perceptual experience may be misguided by prior dispositions and explanations, rather than that perceptual experience is an inherently direct form of contact with the world. Nevertheless, if perceptual acquaintance with the world is inherently indirect, the interview participants’ case for preferring experience as a reliable warrant for the truth-value of explanation is slightly undermined.

Cognitive enaction versus representation

Varela Thompson and Rosch (1991) (hereafter VT&R) argue, on the basis of neuroscientific evidence, that perceptual experience does *not* directly represent an external state of affairs, and does not represent at all, directly or indirectly, for the mind internally ‘enacts’ the world by means of the autonomous functioning of a closed, ‘autopoietic’ neuronal system. Against that view, I contend that the evolutionary history of the brain-world relation supports an approximate or idealized correspondence to the way things are, in that perceptual cognition represents the external Kantian world of things-in-themselves in ways that are partially true and partially fictional.

VT&R’s account of perceptual cognition is an example of how a bottom-up, lower-level theory (the neuroscience of perceptual cognition) can be used to illuminate an intermediate-level cognitive theory. Their account is of particular relevance to this thesis because they attempt to demonstrate how that intermediate

theory supports a higher-level Madhyamaka explanation that experience is not grounded on relations between a real self or a real world. They conclude that perceptual cognition is a ‘closed’ neurological process (VT&R 1991: 139), that there is no self to be found in experience (VT&R 1991: 79), and that since perceptual cognition is an autonomous enactment rather than a representation it cannot support a correspondence theory of truth warranted by reference to an independent external world (VT&R: 134-140, 193-194).

VT&R consider that both self and world are transcendent concepts: neither can be found when experience is examined with circumspection, therefore experience is groundless (VT&R 1991: 217-219). They consider that enacted experience cannot justifiably be divided into events occurring between a subject and an object, but can be reliably introspected ‘with precision’ by mindfulness techniques, giving access to insights that are experientially and ethically transformative. Their alternative to subject/object duality is that cognition:

...is not the representation of a pre-given world by a pre-given mind but is rather the enactment of a world and a mind on the basis of a history that a being in the world performs (VT&R 1991: 9).

The theory of enaction which portrays a ‘bringing forth’ of both mind and world is an extrapolation from the theory of ‘autopoiesis’, which asserts the autonomous self-organization of systems ‘coupled’ to an external environment (Maturana and Varela 1987: 43-52). Autopoiesis is particularly characteristic of cellular biological systems, but the concept has been used more widely in systems theory and social analysis (Luhmann 1995). VT&R provide evidence for autopoiesis from studies of computations in simple *artificial* computational ‘neural’ networks ‘structurally coupled’ to random external influence (1991: 88-91, 151-157). Neural networks undergo state changes in response to external influence, but those changes are internally specified: they are externally initiated but entirely dependent for their subsequent form upon the capacities and prior states of the network. VT&R therefore consider the altered states of the network to be autonomous, emergent enactments within a closed system, rather than symbolic representations of the initiating external stimuli. They extrapolate that the ‘being-in-the-world’ that constitutes the operation of the human mind emerges from the operations of closed neural networks of extreme complexity, which are ‘structurally coupled’ externally (1991: 156). These networks

enact a lived world of experience, which does not consist of internal representations of any external reality.

VT&R illustrate their theory with examples from the visual system, citing research which demonstrates that although colour perception is a response to light wavelengths, its qualitative characteristics are internally generated by cooperation along three different transmission pathways from the retina, and are contextually modified by other sensory modalities (1991: 158-163). They cite Varela & Singer (1987) in support of their contention that the task of the brain is to enact a world, rather than to represent it (VT&R 1991: 96 n. 21). Sensory information from the eye to the visual cortex passes through the lateral geniculate nucleus (LGN) of the thalamus, but amounts to only 20% of the total input received by this nucleus. The other 80% comes from the reticular formation, the hypothalamus, the superior colliculus, the posterior geniculate nucleus and feedback from the visual cortex (VT&R 1991: 94-96). VT&R conclude that visual experience depends more upon internal feedback states than it does upon external input.

What we have described for the LGN and vision is, of course, a uniform principle throughout the brain...An individual neuron participates in many such global patterns and bears little significance when taken individually. In this sense, the basic mechanism of a visual object or a visual attribute could be said to be the emergence of a global state among resonating neuronal ensembles (VT&R 1991: 96).

Their evidence does not entirely support their enaction theory, for although neuronal activation is a closed system, initial variation in background neuronal activation results from sensory interface or 'structural coupling' to an external environment. Incoming information may be overwhelmed by internal feedback, but the purpose of that feedback is likely to depend on the developmental history of the organism and the phylogenetic history of the species in its dealings with the external world: the result, as Llinás suggests, of an evolutionary inculcation of the efficient use of relatively fixed patterns of qualia to facilitate rapid prediction and response in salient and complicated scenarios. The world may not be as it seems, in that the qualities of experienced properties are internally enacted, but that does not entail that they are not representative of the external world, at least with Teller's 'fallible veracity'. Varela and Singer's statistical evidence that 20% of 'bottom-up' perceptual

information combines with 80% ‘top-down’ cognitive information indicates that perceptual cognition is partially representative and partially fictional.

My disagreement with VT&R’s conclusion that the world is not represented turns on the evolutionary history of ‘structural coupling’ to the external world. In the terms used by VT&R, everything known about that world is an enactment. In the terms used by Llinás, the outcome of the history of embodied organisms is the evolution of neural systems that are sufficiently coupled to enable a *homomorphic* form of isomorphism (Llinás 2001: 65). Taken together, the concepts of homomorphism, isomorphism and representation seem to combine neuronal autonomy, structural coupling and the external world into a set of relational events.⁸ They can be separated for experiment, analysis and explanation, but are only functionally autonomous (in the sense of absence of any on-going structurally-coupled relation) in the cases of dreaming and imaginative fantasy, when the brain is only connected to what Damasio calls the ‘as if body loop’ (1999: 1415). VT&R are right to be chary of the word ‘representation’ because it is complicit in the dilemma of the mind as an internal mirror of an external world for the benefit of a non-existent cognitive agent or self (VT&R 1991: 134-141), but so long as it is admitted that there is a hylic world external to personal embodiment the term ‘representation’ retains some meaning. Although they mention the equal importance of both ‘structural coupling’ and ‘enaction’, the latter receives the most attention, and they fail to locate both in a single space, or ‘entre-deux’ between external and internal (VT&R 1991: 230-231), as they must do if the concept of representation is to be entirely exhausted. The fact remains that the sensorimotor system functions to identify and predict danger, security and possibility amongst the natural kinds that constitute an external world, prior to any mental enaction. As such, percepts are never direct, but they are representational; they are selectively focussed on features of the world that are predictively evaluated to be of human concern, and, because they are constituted from relatively fixed qualial patterns, they are habitual representations.

The indirect, ‘top-down’ cognitive input of habitual information from past perception into present perception is like metaphorically ‘...experiencing one thing in terms of another’ (Lakoff and Johnson: 1980: 5), but is actually *experiencing now in terms of then*, and entails that present acquaintance with the world has a non-

linguistic *explanatory* dependency upon the entire embodied history of sentient sensori-motor structural coupling. A ‘first-person’ experience of someone else’s ‘third-person’ linguistic explanation is therefore an epistemological difference, but not a fundamental ontological difference: *de dicto* explanations appear in primary experience, yet primary experience is a phylogenetically-informed explanation, only differing from linguistic explanation by degree of cognitive enhancement, for both are indirect ways of representatively modelling the world.

There are two implications to be drawn from this excursion into the neuroscience of perceptual cognition. Firstly, a long history of use means that although most features of primary perception, such as colour, sound and texture are fictional enactments, perception can be relied upon to correspond usefully with the unknowable Kantian way that things are in the world. Secondly, the high proportion of cognitive modification of incoming perceptual information may indicate that there are phylogenetically-embedded impediments to seeing ‘the way things really are’. Thus, although perception may be a reliable correspondence for everyday purposes, it may still be evaluated as an erroneous explanation of the world for religious purposes.

Discussion

Explanation is the predictive modelling of truth-values, containing some components that are empirically true and others that are imaginatively fictional. Belief, doubt and deferred commitment, but not certainty, are reasonable responses to the fallible veracity of explanation. Beyond such epistemological considerations, religious explanation is distinctive, in that as instruction (*upadeśa*) it is intended to facilitate soteriological practice. Like any other explanation, imaginative fiction for the purpose of prediction is likely to play a significant role in that facilitative process.

In comparison to perceptual experience, verbal explanation *de dicto* requires more cognitive processing delay (Pibram 1999: 27, 38), but is no more than a linguistic development of the non-linguistic cognitive intervention that enacts the qualitative content of perceptual experience. To be conscious, and so to see, hear, smell, taste, touch and propriocept is to accept the intervention of an explanation: a model that reduces the world to shapes, aspects, colours and sensory textures that are relevant to human concerns. This representational model depends on the cognitive

assistance of habitual imaginative prediction, made on the phylogenetic and developmental basis of past experiences. In the Wittgensteinian sense of certainty, although the world ‘stands fast for us’ the primary experience of awareness of acquaintance with the world is not as certain as it seems, for it is already permeated by habitual explanation. The participants’ tendency to prefer subjective experience *de animo/de re* to objective explanation *de dicto* is therefore not an assessment between different modes of verification, but a preference for a more spontaneous form of representation, which is enacted so habitually and rapidly that it appears to consciousness with the degree of animal certainty that Jones call ‘facticity’.⁹

The fallible facticity of underlying representations, that is to say, the possibility that cognitive events underlying experience might not always provide a reliable correspondence to a real world, becomes a salient issue in the light of the interview participants’ marked preference for personal experience over scientific explanation.

Bhikkhu Vajiro and Crook both contend that this life is marked by uncertainty, and most participants are psychologically idealist: they take it that experience is a psychological variable. In the heat of conversation the participants do not always distinguish between the two temporal modes of ‘experience’: acquaintance *de re* with the world, as opposed to acquaintance *de se* by means of productions from the memory and imagination. The conflation is unsurprising, for *de re* acquaintance includes habitual cognition, and both forms of acquaintance appear in awareness with the ‘lightning speed of thought’. Amidst the combination in conscious awareness of cognitively-mediated perceptual information about the external world with somatosensory information about the embodied person, it is hard to distinguish the epistemologically variable from the psychologically variable, or truth from fiction. Once the susceptibility of primary experience to cognitive, affective and perceptual variation becomes apparent, primary experience can appear to be without firm foundation, as VT&R suggest. Groundlessness may be psychologically destabilising if animal certainty in worldly embodiment is altogether lost, even though groundlessness as a religious practice may also facilitate psychological change.

When Bhikkhu Vajiro says that ‘...one can go through the whole of one’s life deluded’ he presumably means that, for the unenlightened being (*puthujjana*), the apparently certain ‘facticity’ of perception may be a deluded or erroneous view of the

world. At some period in the development of the species, experience has been moulded by the homeostatic needs of the individual into the imaginative form of an enduring self, and it is the therapeutic task of Buddhism to remedy that habitual misguidance. The usual remedy prescribes repeated attention to conscious awareness by means of ritual behavioural practice of the technique of mindfulness (Kennedy 2004: 149-151), under the provisional guidance of explicit linguistic explanations *de dicto* selected from the traditional Buddhist doctrinal portfolio.

Summary

There are two sorts of explanation, of knowledge and of meaning, differentiated in modern times by their mode of verification, but combined in the unified discourse of the traditional Buddhist *Dharma*. Explanations tend to be arranged into levels of description from the most fundamental quantum levels,¹⁰ through classical, sociological, psychological, metaphysical and soteriological scales, but they may be unified without reduction by the use of ‘bridging notions’ that reflect ‘human dispositional evaluations’ (MacIntyre 1971: 110).

There is a quality of felt certainty about everyday experience that is absent from explanations. Explanations never convey the truth completely, for they are reductive indicative models, which contain contextually useful predictive fictions. Explanations depend on perceptual representations of the world that are also only indicative, and also indirect, because they are cognitively enacted out of a relatively fixed system of qualitative explanatory possibilities. It is the long habituation of ‘structural coupling’ that allows perceptual acquaintance to correspond sufficiently to the way things are in the world to convey a feeling of certainty. In fact both explanation and experience are fallible for the same reason: they depend on a homomorphic isomorphism that is quasi-metaphorical, as the identity of one thing (the external world) is established in terms of another (neuronal autopoiesis) by the structural reliability of sensorimotor information.

Neuroscience suggests that the interview participants would be misguided if they preferred primary experience over explanation on the ground that awareness grants *direct* access to the world, for the world is only indirectly known through fallible isomorphism, and a large part of perceptual cognition is itself a habitual form of non-

linguistic explanation. However, the interview participants are correct in their understanding that the primary experience of awareness is the only means of access through which the world can be fallibly known and explanations of the world can be evaluated.¹¹

Explanation and secondary experience arise together in primary awareness, as two related kinds of fallible, reductive, isomorphic modelling of reality. The fallibility of the constitutive contents of awareness makes the world uncertain; in particular, explanation and experience model features of time and space in ways that are psychologically variable. It is a dilemma of mind, indicated by the difference between the subject *de animo* and the self *de se*, that despite appearances the immediate arena of awareness is neither temporally immediate nor spatially an arena. Embodied humans are clearly spatio-temporal beings, yet despite the apparent immediacy of awareness and its role in the representation of spatial difference, awareness encompasses brief temporal extension, yet no spatial dimension whatsoever. It is the task of the next chapter to understand what these assertions mean with respect to Buddhist mind-theory and with respect to the views of the interview participants.

Notes to Chapter 6

¹ That explanation is only *indication* reinforces the argument that nobody can be taught anything: they find out for themselves by observation (Burnyeat 1999: 286, Wittgenstein 2001: 2, [P.I. 1]). Bhikkhu Vajiro makes the same point when he remarks that a good teacher says ‘teach yourself’, and a similar point when he remarks that ‘the most important *abhiññā* (supernormal power) is the *abhiññā* of being able to teach’.

² That the distinction between knowledge and meaning, science and the humanities is ‘fuzzy’ reinforces Rosch’s argument that categories have an internal structure built around prototypical examples (Rosch 1973).

³ Brahmanic sacrifice presupposes a direct causal connection between ‘is’ and ‘ought’, as if the ritual actions of the human microcosm exert a direct influence on the macrocosm (Collins 1982: 41). It is not necessary to posit such a metaphysical causal link in order to argue that modernity has lost sight of the psychological association between fact and value, or that religion has a contemporary role to play under modernity precisely because it attends to the fact/value association.

⁴ For a discussion of Nāgārjuna and ‘explanatory work’ as a justification for the irreducibility of theories, see Garfield (2001: 511-513)

⁵ The issue, dealt with in Chapter 8, is whether in this context an element (*dhātu*) is a brute fact, or whether it is an emergent property.

⁶ Wilson’s position is that:

...total consilience...argues that nature is organised by simple fundamental laws of physics to which all other laws and principles can eventually be reduced. This transcendental world view is the light and way of many scientific materialists...but it could be wrong (Wilson 1998: 58).

⁷ If Dharmavidya is right in identifying eight different versions of enlightenment in the Buddhist tradition, Buddhists are no better than scientists at identifying the beast on the basis of inadequate information (Brazier 2001: 80-132).

⁸ Homomorphism is ‘resemblance without explicit structural affinity’ (OED). It could also be described as analogical isomorphism: ‘a relationship of resemblance rather than a resemblance of relationship’ (Cazals in Perelman and Olbrechts-Tyteca 1969). French suggests that representation can be based on ‘partial isomorphisms’ with considerable ‘looseness of fit’ (2003: 1479-1482)

⁹ Facticity (*Faktizität*) is an aspect of Heidegger’s *Dasein* or ‘being-there’ (Grondin 1994: 91-100, Philippe 1998: 52-53).

¹⁰ The theory that consciousness depends upon the maintenance of quantum indeterminacy in microtubules (Penrose 1990, 1994) is not discussed in this thesis

because it is a speculation with as yet no evidential support. See Koch and Hepp (2006: 611-612) for a critical assessment of the arguments.

¹¹ Pibram makes the same point, and argues that subjectivity ‘exists as the starting point for *all* enquiry’, which is then a process of ‘progressive objectification’. He thinks that this resolves the ‘hard problem’ of the dilemma of subjectivity versus objectivity (Pibram 1999: 20). I disagree; the dilemma is set up by the attempt to understand conscious experience objectively.

Chapter 7

Subject and self: the activity of mind in time

Introduction

The neuroscience of visual perception indicates that perceptual cognition constitutes a dilemma, because it only provides representative access to the world by means of a closed neuronal enactment, which is as much an indirect explanation of the world as it is an experience of the world. Despite the cognitive penetration of perceptual experience by explanation, the categories of experience and explanation can be clearly differentiated, because the former confronts immediacy, while the latter is a response to duration. According to Llinás (2001: 21-51) and Crook (2002b: 100-101), it is the task of the mind to combine the experience of immediacy with feedback explanations from previous experiences for the purpose of prediction. But attempts to achieve this combination encounter a dilemma in the experience and explanation of time. It is a mark of this dilemma that explanations of mind seek to make organised mental activity over time comprehensible, by modelling time in terms of space: the property of endurance is metaphorically understood in terms of the property of dimension. In effect, the dilemma of mind in time is demonstrated by the split between the first-person intimacies of subjective experience and the third-person estrangements of explanations of self-processes. *The subject and the self are not the same*; they are divided by time into subjective happenings that are ‘fallibly true’ experiences, and imaginations of the self that are ‘veridically fictional’ explanations. The dilemma of mind, in practice, is how to combine these two sorts of representation in order to predict and then cope with the changes that happen over time. The source and the continuity of the dilemma of mind in time can be identified phenomenologically and neurologically, as the mind apprehends itself existing in time by a retrospective awareness of the subject of the previous moment as the ‘horizon’ of the present moment (Varela 1999: 118-119).

The way to an enlightened view of ‘the way things are’ is through close attention to subjective appearances as they occur in the short duration of the existential moment, not by the use of spatial metaphors in order to locate the self-mind in the form of an object enduring through time, for there is no real space in either time or

mind. Although spatial metaphors can usefully characterise affective characteristics, they misrepresent the ontology of mind. Spatial metaphors for time and mind are misrepresentative when taken literally, because they reify the dynamism of property-relations into differences between enduring objects and enduring mental states. Misrepresentation can be partially avoided by the use of cryptic, *kōan*-like statements. These brief indications highlight the dilemma of mind-in-time by transferring the dilemma intact from the master to the novice, instead of indicating a *de dicto* explanatory solution. Some of the interview participants make such cryptic statements, indicating that the temporal division between the subject and the self is a prime source of dissatisfaction (*dukkha*), and sometimes suggesting that escape from the dilemma is envisaged in the form of escape from sequential time. The dilemma can then be recast as an ontological question, as to whether a mind that is not temporally-bifurcated could be called a ‘mind’ in the conventional sense. If the spatial metaphor of the sequential ‘flow’ of time does not point to a literal truth about the constitution of the world, then Llinás’s core predictive function for mind becomes a technical impossibility. If time is not sequential, mind and world are not as they seem. If minds are as they seem, then time is sequential.

Metaphysical considerations about time give rise to different beliefs about minds, but irrespective of differences of belief, minds in this life are engaged in the cognitive manipulation of perceptual representations in time and space. Crook (1992, 2002b) has modelled the possible ‘range of states of awareness’ that can be manipulated. I argue that, amongst the range, to call reflexive states *introspective* is spatially misrepresentative, for they occur on the same plane of awareness as perceptual cognition of the external world. As with introspection, intentional states reduce attention to the external world; they are unconscious attempts to make the world suit the desires of the mind, and have the unfortunate side-effect of erasing the experience of time. Crook (1992, 2002b) argues for a rebalancing between states of intention towards the world, and states of attention to the world. I suggest that such a rebalancing can be promoted by emphasising external relations with the otherness of the world, and de-emphasising imaginatively-internal relations with the self. I also counter three objections to my characterisation of persons as time-beings devoid of space in mind.

The subject of primary experience

The phenomenal moment when awareness happens appears to be pre-occupied by the 'subject' *de animo*, but a brief remark by Crook implies that is not the case; he suggests that the subject is only retrospectively aware of itself (1980: 27). The subject is the reflexive observer in awareness; it is what Pym refers to as the 'unself', and Crook calls 'the attender'. Naming the pre-occupation of immediate awareness as an 'unself', 'attender' or a 'subject' is more precise than the use of terms which carry the 'conceptual baggage' of objective continuity, such as the notions of 'self' 'mind' 'soul' or 'life', which are alternative translations of the Latin term *animus*. The attender only has temporal continuity in so far as it is the subject of a particular event, including the reflexive awareness of its own subjectivity. It is because the subject lacks continuity and objective reality apart from its participation in primary experiential events that Crook can reasonably remark that 'the attender of an experience can only be retrospectively introspected' (1980: 27).

Crook has noticed that there is a delay in reflexivity, such that the subject is aware of the present moment without being aware of itself, yet that very present moment includes awareness of the role of the subject as the 'attender' of the previous moment. All that can be phenomenally introspected about the subject of the previous moment is that it partook of the immediacy of that moment. Thus the apparent *pre*-occupation of awareness by the subject is a misrepresentation; the actual experiential state of affairs is an awareness that the subjective attending function of 'aboutness' was characteristic of the previous moment.

This retrospective explanation of the 'immediate' subject of experience is phenomenological, but raises as many questions as it resolves:

- 1) The manifestation of the subject is limited to participation in an experiential event, but how is such an event delimited?
- 2) How could one experiential moment be retrospectively aware of the previous moment?
- 3) How can the subject be associated with immediate awareness-experience, yet only be identified by its traces in just-seceding experience?
- 4) In what way are experiential events momentary?

5) What is the relation between the apparent immediacy of the subject and the apparent continuity of the historical self?

The answers to these questions are unlikely to be clear: firstly, because all explanations involve reductive conceptual modelling; secondly, because these are reflexive questions asked of minds by minds; and thirdly, because they involve entrenched metaphysical problems about the nature of time, space and objectivity. However, under methodological impartiality with respect to the supervenience or identity theories about the relation between mental events and brain events, the answers to these questions may be illuminated with the aid of neuroscience, in the way that Hardcastle (1992: 419) suggests that lower-level theories can illuminate higher-level explanations. Varela (1999) attempts this illumination by relating phenomenological introspection of the nature of immediacy to the temporal details of neuronal activity. His argument turns on his view of the mind as an embodied dynamic system.

Endogenously constituted integrative frameworks account for perceived time as discretized and not linear, since the nature of this discreteness is a horizon of integration rather than a string of temporal 'quanta' (Varela 1999: 116).

His point, in agreement with Pibram (1999: 22, 27) is that although individual neuron firings are too quick to be consciously perceived, the integration of neuronal groups or 'ensembles' occurs at a slower scale, always conditioned by previous integrations, with sufficient delay to permit global dissemination across the brain and therefore appearance to consciousness. Present brain states depend on previous brain states, yet are discrete with respect to those antecedent states because they are not constituted from quite the same array of integrated neuronal ensembles. The present array has an inevitable relation to the previous array, because its beginning-state or initial 'horizon' depends upon the polarization and de-polarization of axonal action-potentials bequeathed by the cessation of the previous array. In neuroscientific terms, Varela is explaining the same phenomenal intuition as Crook, that the 'attender' of a perceptual moment is only knowable retrospectively, when he contends that the subjectivity of the previous perceptual moment is constituted by the beginning 'horizon' of the present moment (Varela 1999: 118-119).

Varela separates neuronal temporal duration into three scales. Firstly, the ‘1/10-scale’ of the ‘elementary’, ten-millisecond firing of interneurons is too quick to achieve consciousness, but allows sensory stimuli to be unconsciously differentiated. Secondly, at the ‘1-scale’, from a hundred milliseconds up to one or more seconds duration, neuronal firing is integrated right across the brain into synchronised ensembles capable of contributing a representation to consciousness.

In brief, we have neuronal-level constitutive events, which have a duration on the 1/10 scale, forming aggregates that manifest as incompressible-but-complete cognitive acts on the 1 scale. This completion-time is dynamically dependent on a number of dispersed assemblies and not a fixed integration period; in other words it is the basis of the origin of duration without an external or internal ticking clock (Varela 1999: 118).

Thirdly, at the ‘10-scale’, dynamic integration of neuronal ensembles exceeds the duration of conscious ‘nowness’, allowing processes of memory and imagination to create a ‘broader temporal horizon’.

It constitutes the flow of time related to personal identity. It is the continuity of a self that breaks down under intoxication, or in pathologies such as schizophrenia or Korsakoff’s syndrome (Varela 1999: 119).

It is clear that the ‘1-scale’ of primary experience of the ‘lived present’ is *not* immediate, but has a variable duration from fractions of a second up to a few seconds, in dependence on the delay required for the integration of neuronal ensembles that constitute a particular conscious experience.¹ On my understanding of Varela’s neurophenomenology, the self is different from the subject, for traces of the subject are reliably and retrospectively *present* as the beginning horizon of every experience at the ‘1-scale’, whereas the self is retrospectively constructed over the third scale of duration, as a fallible, fragile and fictionally-prospective standard of identity, by means of the imaginative recombination of episodes recalled from memory.² According to Varela’s presentation it is not a succession of distinct retrievals from memory or their imaginative recombination that creates a sense of the momentary passage of time, but the finer phenomenal dynamics of the second scale of duration, as the beginning ‘horizon’ bequeathed by the neuronal depolarization of one synchronous activation of ‘nowness’ has a determinate effect on the next. Without

successive electro-chemical activation of neuronal ensembles over sufficient temporal duration, 'nowness' could not represent change, and the past-present-future structure of time could not become apparent to consciousness (Varela 1999: 119-121). The subject is apprehended at the peripheral interstices of this successive flow of sensorimotor activity. It is this apprehension that enables the mind to perceive time, and, in Augustinian terms to 'know' itself with certainty (Abercrombie 1938: 62, Augustine 2002: 39).

Transformation of time into space

Like all naming, the act of denoting the subject suffers from the disadvantage that it reifies its meaning. The subject is not an object, but a succession of antecedent handover states of varying neuronal ensembles. Recollection that the reference of a name is to an abstract object is not sufficient to prevent the notion of the subject from imaginative cognitive manipulation as if it were an object, for that is the effect of the differentiation achieved by naming. This cognitive achievement is a misperception of the nature of the subject, for the neuroscientific evidence suggests that the subject is not so much an object as a transitional state in a process, and a relational nexus that enables other appearances to manifest in awareness.

The subject-as-nexus is just one aspect of the process whereby different modes of sensory information are combined, a process which Aquinas called the 'sensus communis' (Gilson 1929: 228-229, Arendt 1978: 50). This combination requires an integration of so much sensory information at such a level of complexity that the temporal synchronisation of their communal interconnection emerges in the form of consciousness of the world. Thus the subject is a transitional event in integrated mental processing over a brief length of time, which by its peripheral status as the antecedent 'horizon', creates the temporal contrast that gives the subsequent sequence of neuronal ensemble activation its immediate character of 'nowness'. Appearance to consciousness occurs irrespective of delay required in order to achieve the synchronous combination of all the discrete neuronal ensembles underlying a mental event.

Explanations of the neuronal processes underlying the phenomena of subjectivity and awareness are entangled in metaphysical issues about the nature of time, for

although these processes require a brief passage of time in order to take place, time is a succession, not a *length*, and there is no literal *taking of place*: the retrospective sense of the subject and the present sense of awareness emerge anew with each transition in the neuronal dynamic. When spatial metaphors are used to describe such a temporal process (Lakoff and Johnson 1999: 159-168), the continual and conditioned recreation of the subject becomes reified as a spatial object, with the metaphorical implication of the unconditioned continuity of that object *through* time.

There seems to be no escape from the modelling of temporal processes as metaphorically-spatial objects in the course of linguistic explanation. Metaphors describe ‘one thing in terms of another’ (Lakoff and Johnson 1980: 5), and only in that manner do temporal relationships between processes become apparent, for time is a useless coordinate after the event, unless it is represented as movement in space. Time passes like a stranger, time flies like an arrow, time flows like a river, events happen *in* time as if time were a spatial container. Even the immediacy of a single moment is a tacit spatial division with respect to the next immediate moment, as time is cut up on the spatial chopping board that constitutes explanation. Because time is empty of explanatory power, most descriptions of time are spatial and temporal. Continuity is only explicable in terms of changes to spatial form.

It is argued in Chapter 6 that experience is permeated by non-linguistic explanation. The implication of that argument in this context is that because of cultural neglect of the temporal, as opposed to the spatial, character of embodied persons, the inability of persons to comprehend time without spatial metaphors permeates ordinary experience to such an extent that ‘the way things are in the world’ is not properly experienced.³ It follows that explanations of enlightenment experiences may not be ‘illuminating’ in Hardcastle’s sense, because an enlightened being, by hypothesis, knows ‘the way things really are’, whereas spatial explanations present temporal processes in the misrepresentative spatial form of object-events. It may be, therefore, that Buddhist notions of enlightened realisation refer to a reduction in the spatially-explanatory characteristics of habitual experience, and to a consequent understanding of subjectivity as constituted by temporal succession as much as by spatial embodiment. Subjective time-being does not refer to narrative history on Varela’s third scale of duration, which is the domain of the hypothetical self, but to an

attitude that is attentive to Varela's second scale of duration that produces the qualitative phenomenological experience of the present moment. This appears to be the experiential attitude valued by the interview participants, but it is not clear from their testimony if they would agree that the phenomenological present moment has some brief temporal duration or that experiential immediacy is not the same as a hypothetically timeless, philosophically-atomic moment.

Consequences of spatial metaphors

The imaginative, predictive components of a theory tend not to be as amenable to combination as the empirical components, when unification of explanations is attempted. This is one reason why, as Cartwright suggests, the world appears to be ontologically 'dappled' when different levels and sorts of explanation are taken together (1999: 361). Ontological 'dappling' is a metaphorical description of a set of explanations that are inconsistent because they are not unified. Ontological dappling is exacerbated by the availability of paradigms with different terminologies, in the form of fundamental explanations to which more applied theories are expected to be reducible. Fundamental paradigms such as string theory, quantum theory and Newtonian physics come to mind in science, and dependent arising (*pratītya-samutpāda*) or the emptiness of the inherent existence of anything from its own side (*śūnyatā*) fulfil a similar role in Buddhism.

As Fodor (1980), Hardcastle (1992), Cartwright (1999), Garfield (2001) and Teller (2004) suggest, human scientific and cultural flourishing is reinforced by the attachment of different sorts of explanations to different contexts, from astrophysics to Buddhist mind-theory to economics to psychology and zoology, without any requirement to reduce explanation to a set of brute facts, one part of the world to another, or to deny that the multiplicity of explanations actually refers to a unified web of relations that constitute the 'way things really are'. Arendt remarks that persons do not live amongst events at an underlying causal level, but amongst qualitative appearances (1978: 25). In so doing, persons commonly deploy a multiplicity of naturalistic explanations that specifically address the multiplicity of appearances on their own terms. Since precise laws and concepts that bridge between explanations are sometimes difficult to construct in the light of the (relative)

indeterminacy of translation, attempts to fully unify explanations tend to become mired in terminal confusion about terminology, particularly because explanation is a linguistic form of inexact predictive modelling that depends as much upon metaphorical allusion as upon linguistic precision.

It is unsurprising that time is modelled in spatial terms, since the most common metaphorical allusion is to space. *Ex-planation* is the laying out of conceptualisations after the manner of things in the world, usually according to *agricultural* metaphors of separation: into spatial locations or fields contained by barriers, so that nominal and natural relations can be understood in terms of ‘vegetative’ metaphors (Collins 1982: 22-224), or from a notionally elevated or disinterested perspective. Barriers and fields are concrete objects that are used with metaphorical abstraction to make limiting distinctions. The barrier/field metaphor is paradigmatically spatial, as a typical example of the physical world’s resistance to freedom of movement. The barrier/field metaphor is sourced in ordinary human praxis, and transfers useful properties of definition, control and differentiation from the physical to the abstract order. The barrier functions in its literal and its metaphorical use by the establishment of intransigence and the modulation of permeability; it expresses the control of enclosure both within and beyond a location, and imposes spatial coordination upon non-spatial entities. Barrier enclosures are physically preventative of loss of possession of objects, and metaphorically preventative of loss of meaning and understanding, as if meanings were objects of possession. Barriers are instances of definition, or ‘the setting of bounds’ (OED), dividing physical and abstract phenomena into areas to which attention and intention can be meaningfully directed. In a potentially disorderly world, understanding is participation in a cultural history of exploration and mapping of barriers set up to pattern undifferentiated phenomena by social agreement. This definitional use of barriers establishes order against chaos, culture against wilderness, meaning amongst meaninglessness, until proliferation (*prapañca*) exhausts their utility, as the significance of meaning is dissipated in a maze of differentiations.

Despite the qualities of consistency, clarity and coherence which barrier/field spatial modelling brings to explanation, spatial metaphors can be problematic analogies. The general problem with spatial models is that of rhetorical promiscuity:

barriers are arbitrary with respect to space in general, and their location in explanation can be situated for ulterior purposes unconnected to the model. The particular problem of spatial modelling with respect to mental events is that the model is completely metaphorical, for *there is no space in time*, and apart from the functional neuronal correlates of mental events, *there is no space in mind*, unless the world that is represented is taken to be a part of the mind.⁴ The limit problem for explanation is that spatial metaphors do not literally bestow spatial characteristics of objectivity onto non-spatial entities. Arendt observes that the Aristotelian equation between the two terms of a metaphor is not truly an equation because it is usually ‘irreversible’. The meaning is only ‘handed down’ from one side of the metaphor to the other (Arendt 1978: 103,105).

The irreversibility of the relationship expressed in metaphor...indicates...the absolute primacy of the world of appearances and thus provides evidence of the extraordinary quality of thinking, of being always out of order. (Arendt 1978: 109).

Spatial metaphors from the world of appearances illuminate the ‘target’ of the metaphor, in this case the time required for mental events, by evoking affective qualities that are normally associated with the ‘source’ (Lakoff and Johnson 1999: 264), in this case the experience of space. This is what I interpret Shaw to mean by his description of ‘openness’ or ‘spaciousness’ as one of the ‘three aspects of mind’. Bringing the operations of mind into conscious awareness can evoke feelings that are qualitatively similar to the feelings evoked by the consciousness of space, and the use of spatial metaphors indicates the presence of this affective correspondence. Since they are micro-explanations, the limit-problem of metaphors is the same as the problem of explanations: they cannot represent all the textured information provided by consciousness. Explanatory modelling must always remain incomplete; otherwise it approaches the Borghesian, nightmare of a book without beginning or end (Borges 1979: 89), or a map that is identical with reality.

Placing mind in time

If explanations are inherently spatial, then Buddhist explanations of the temporal nature of being also risk misrepresenting the ‘way things really are’, if they are taken too literally. In particular, the theory of ‘instantaneous momentariness’ (Stcherbatsky 1962: 79-83), entails that moments ‘replace’ each other with causal efficiency yet without any relational connection (Grupp 2005: 51-52), of the sort demonstrated by the ‘horizon’ bestowed by one neuronally-synchronous event upon the next. The Buddhist doctrine of momentariness is just as metaphorical as theories that grant that time has extension, for moments are girded by temporal barriers that bestow the field metaphor on time. If one moment *replaces* another without any association other than displacement, no reason can be adduced for the evident order that emerges from the relations that allow any previous event, physical or mental, to have an efficient conditioning effect on any subsequent event. In consequence, the Buddhist theory of instantaneous momentariness does not provide an adequate explanation for personal continuity (Johansson 1978: 61-62, Griffiths 1999: 31-33, 60-63).

Grupp justifies a philosophical version of the Buddhist metaphysical theory of time by reference to quantum theory (2005: 54-55, 83-85), but does not address how such a theory could explain meaningful life at classical scales, beyond the suggestion that the intuitive, sequential perception of time is conventional or *saṃsāric*, while direct perception of the non-sequential, atomic, replacement-momentariness of time is an ultimate or *nirvāṇic* apprehension of reality (Grupp 2005: 55).

The *nirvāṇic* mind has direct awareness of the atoms that make up empirical reality, and which empirical reality can be reduced to (Grupp 2005: 108).

The practical problem for Grupp’s account is that neuroscience indicates that absolutely-direct perception is impossible because ‘top-down’ cognitive conditioning requires temporal duration in excess of the timeless unit of an atomic philosophical moment (Varela 1999: 119, Pibram 1999: 28-29, Libet 1999: 49).

If the criterion for a useful theory is whether or not it does explanatory work without preference for higher or lower levels, then theories that account for the sequential succession of time are more applicable to human concerns. Thus, although the spatial modelling of time is misrepresentative, it developed because it is a veridical fiction with respect to the context, interests and the existence of the minds of

ordinary human beings. If minds are identical to, or supervenient upon brain processes and brain processes require temporal duration, it follows that temporal duration is required for fundamental theories to be thought in the first place: consciousness depends on event-relations that exceed the momentary.

As Augustine understood, thought (*cogitatio*) is combination (*coactu*) (2002: 66-67), and the combination of different events cannot take place without continuity relations between one moment and the next. Since primary experience requires some temporal duration, mind explanations and brain explanations would fail to represent an orderly world if events in one moment could not be related to events in the next under a sequential ‘arrow of time’: without that relation there can be no such things as brains or minds. If there were nothing like minds, brains, or supervenient combinations of the two by which to perceive, both conventional and ultimate realisation of ‘the way things really are’ could not happen.

The sequence of time sets up a metaphysical dilemma that casts doubt on the possibility of momentary mental events, and a doctrinal dilemma as to whether awareness of a hypothetically-momentary ultimate nature of reality could possibly constitute enlightenment. Because momentariness is an extreme of measurement that is just as metaphorical as the notion that time flows, it cannot appear in enlightened awareness, for it is just an explanation that depends on fictional spatial modelling. Some of the interview participants come close to entrapment in the metaphysical dilemma of momentary time, only escaping because their remarks about time are cryptic, as when Bhikkhu Gavesako says that the Dhamma is ‘*akālika*: timeless at insight’, when Bhikkhu Vajiro says that liberation is ‘not something that is going to happen sometime in the future’, or when Pym says *anattā* ‘is actually the acceptance of the ordinary in the here and now, but free from time’.

Cryptic, *kōan*-like remarks allow the speaker to transfer explanatory dilemmas, leaving their audience with the task of discovering how the combinatory nature of mind and thought, experience and explanation become tacitly entangled with the metaphysics of time, constituting a dilemma which can be wished away, yet cannot be explained away without an equally paradoxical neglect of experience. Of all the participants, Shaw’s expression comes close to an alternative theory of time, when he says that:

...it is important to understand about the world, that it is a-temporal. So that mistake is the same mistake that is being made in every second. That mistake is made with the birth of every thought...and it is only made once as well - the same once that is the birth of every thought (Shaw).

It will not satisfy Shaw, but if time is a property of the external world, then freedom from the sequential flow of time may be a psychological, but not a metaphysical possibility.⁵ Freedom from time is more likely to be 'of the nature of an affect' (Crook), and a state of mind rather than a state of the world.

Thought apparently arises outside perceptual experience and outside experienced time, for the turn of conscious attention to reflexive or imaginative cognition causes temporary neglect of attention to the basic sensori-motor constitution of experience of the world. This neglect leads Arendt to infer that thinking is not only 'out of order' with the world of appearances (Arendt 1978: 109-110, 211), but also out of order with the immanence of immediate time, because the exercise of the imagination entails sequestration from the world and immersion in the archives of memory (Arendt 1978: 78, 84-87). Arendt's argument is not a full-blown psychological theory of time, for she does not deny that time is a property of the world, but she implies that time is apprehended psychologically and as such is a constituent of perceptual experience that may be suspended, depending on the degree to which attention to the external world is overcome by cognitive involvement with memory and the imagination. Arendt's point is that a shift of attention to thought, which amounts to a shift from experience to imagination, is an absence from the world. She remarks that 'time is the thinking ego's greatest enemy', and speaks of 'the old dream of western metaphysics...a timeless region of quiet beyond clocks' (Arendt 1978: 207).⁶

Because one of the primary functions of consciousness is the direction of attention, thinking entails some neglect of attention to the immanence of experience, and this neglect of the world is experienced as a hiatus in time. This hiatus can have consequences for good, in the affective experience of the *nunc stans*, 'a small inconspicuous track beaten on non-time by the activity of thought within the time-space given to natal and mortal man' (Arendt 1978: 86, 210), a state that bears resemblance to being 'timeless at the moment of insight' (Bhikkhu Gavesako).

However, this hiatus could have harmful, even ‘evil’ consequences if consistency of response to the otherness of the world is relinquished. The dilemma of mind, that it is a ‘two-in-one’ (Arendt 1978: 179-183), of self for the imagination and subject for the world, thus encompasses the explanatory nature of experience, the temporal nature of the subject, and the possibly unethical consequences of introspection.

From the subject to the self

In sum, the subject is the ‘attender’ of experience, a phenomenally-known effect of the initial ‘horizon’ of every component of relatively-immediate awareness, which is cognised without need for recall from memory or use of the imagination. The historical self, on the other hand, has a different provenance. It is the creation of imaginative developments of the second-order mapping of Damasio’s ‘proto-self’, and from extended recall and manipulation of qualitatively-veiled episodic memories of past subjective events.⁷ The subject appears retrospectively as the ‘horizon’ of all conscious awareness, whereas the self is a metaphorical characterisation of unconscious processes of ‘top-down’ cognitive functioning. In Arendt’s sense the self is ‘out of order’ with the temporal succession of the world, in that it is a mere name referring to processes that combine episodic memories of past events. Although the self is an imaginative fiction it is vital to the development of feedback predictions of the kind described by Llinás (2001: 21-29) as the prime task of the mind/brain. The notion of the self, the predictive scenarios in which the self participates imaginatively, and the intentions that seek to actualise those scenarios, are not literally ‘out of time’, for they appear in awareness with the ‘lightning...speed of thought’ (Wittgenstein 2001: 89 [P.I. 318], Arendt 1978: 44). This rapid appearance gives the misleading impression of appearance from another time and another place, when what actually happens is the emergence to consciousness of contemporaneous unconscious processes, as they become globally available throughout the brain by means of anatomical interconnectivity and neuronal synchronicity. Mind/brains are rational in the sense that they proceed by step-by-step causal processes, but irrational in the sense that cognitive processes are conditioned by affective processes (Damasio 1995), rather than by logical principles of the sort that are applied in the task of retrospective justification.

The historical self is associated with social judgement in the external world, and with comparison to social and personal standards. It is built out of past relations with the world and generates predictive feedback about relations in the future. As an imaginative fiction, the self is not an object in consciousness, for it is a fictional characterisation of habitual sensori-motor actions over extended periods of time. Though the self is not perceived, it is cognitively manipulated in ‘as if’ processes, as if it were real. This manipulation emerges to consciousness in the imaginative form of the mind as a container with contents that includes the self in the form of a discrete and continuing abstract object.

Overcoming spatial explanation

When asked specific questions about the nature of mind, the interview participants tend not refer to a substantial or essential object, but to mind as subjectivity, experience or awareness; that is to say, they refer to mind as a set of world-happenings around the nexus of a subject of primary experience. However, in the course of conversation they employ the ubiquitous metaphor of the mind as a container for psychological contents. This use of the metaphor of the ‘inner’ also appears in discussions of meditative experience, with clear examples in Pym’s interview description of *vipassāna* meditation, in Crook (1992: 358-359) and Ratnaprabha (Cooper 2003: 134), although Ratnaprabha briefly remarks that ‘ultimately, Buddhism questions the whole basis of the mind-body problem: the very distinction between ‘inner’ and ‘outer’ (Cooper 2003: 69).

Apart from Prasada and Dharmavidya the participants do not reflect on whether spatial containment metaphors are appropriately applied to the mind, for the idea of the mind as an ‘inner’ space is widely used in the ascription of intentions to others. The concept of inner mental space enables the ‘folk’ psychological explanation of social behaviour, yet this is only a prediction of ‘the way things really are’. (Johnston 1993: 198, Wittgenstein 1992: 61-88). The metaphor of the ‘inner’ exerts a subliminal influence on attitudes to the mind, as the metaphorical explanation invokes the spatial representation, and the mind is assumed to be a ‘Cartesian’ theatre in which psychological protagonists perform (Dennett 1971: 96, 2001: 225).

I suggest that Pym and Ratnaprabha's descriptions of the cumulative effects of meditative practice are accounts of the *overcoming* of the metaphor of inner space, and a realisation of the occurrence of all primary awareness on a neutral plane of representation. When the mind is recalled from the imaginative activity of the self to the perceptual cognition of the external world, there is a sense that the boundaries between self and world become 'porous' or less meaningful (Cooper 2003: 133). This change from internal to external attention is not a move from one world to another, but a qualitative difference in the perception of features of the same world, for 'world' is a philosophical reference to whatever is present to awareness, including ostensibly internal mental events. This characterisation of the neutral perceptual cognition of self and world chimes with the Buddhist view that the notion of a fixed self set against an objective world is a fundamental error, a *samsāric* view of the 'way things are in the world'. Because the self – or what the self stands for – is experienced as an internal historical object over against the spatio-temporal world, it is the self, not the subject, which requires the kind of barrier differentiation supplied by internal sequestration, and the retrospective justification supplied by rational explanations. In the process it becomes a fictionally objective surrogate for the 'unself' (the retrospective subject or 'attender' of awareness), in the logical explanation of events over extended time.

There are four temporal divisions in the life of the person, generated by: 1) the immediacy of awareness, which emerges from the short timescale of the electro-chemical depolarization and repolarization of ensembles of neurons in synchronicity; 2) the reflexively-subjective awareness of awareness, which emerges from the beginning-specification of the subsequent array of neuronal discharge by the patterning of its antecedent 3) a memorially-imaginative construction of historically extended past time; 4) an imaginatively-fictive prediction of future time. The first two divisions are generated from the 'bottom-up' by the prototypical functioning of the mind/brain, and are closer to immediacy than the third and fourth divisions, which are unconscious 'top-down' cognitive feedback modulations. Nonetheless, the third and fourth divisions appear contemporaneously to consciousness on a neutral representational plane, alongside perceptual information generated by structural coupling to an external world.

Such a rational explanation of the temporal, imaginative and qualitative variety of mental events is difficult to equate to cryptic and mythological Buddhist understandings of the way things are. This may be because, according to Crook, it is only when a person ‘back(s) off’ from the struggle to achieve rational understanding that ‘the universe is given to you’. The grammar of the gift implies a giver, but Crook is using the word metaphorically to express the ‘other-power’ of the world, *as if* it was the product of an embodied agency, because persons are the prototypical causes of effects for social beings, therefore language usage tends to personify causal processes. His point is not that a divine personage has the universe in their gift, but that the intellectual struggle to achieve certainty by rational means forecloses experience of the world.

Buddhist realisation is not a gift exchange, but a change in mental behaviour, which allows a previously obscured state of affairs to be revealed. I contend that realisation of the pre-given-ness of the universe can be characterised, in the Latin terminology of attitude-formation, as a change from self-location *de se*, which is the adoption of a position with respect to other times and other values, to location in relations *de re*; that is to say, location in the relatively-immediate temporal moment, occurring as the indissoluble connection between the subject *de animo* and indirect representation of the external world.

With this change, awareness is no longer overcome by rational thought or by the imaginative fiction of a fixed self located over and against the world. The psychologically-momentary duration of awareness is enabled by the event-horizon of the subject, which is retrospectively located on the temporal periphery of conscious awareness. In the virtually immediate, non-spatial relation occurring in the form of subjective awareness, not only is the universe metaphorically ‘given’, but the value of relations to things is also given, when not obscured by the needs and desires of the self.⁸ This is primary experience shorn as far as is possible of imaginative commentarial overlay or prior determination by *de dicto* explanation.⁹ This experience involves nothing more than a turn of attention to an ‘open’ or *extentional* awareness of present process rather than restricted *intentional* cognitive manipulation of future possibilities (Crook 1992: 354-357). This seems to be an ‘enlightening’ experience: not full-blown *nirvāṇa* as it is presented in the *suttas* and *sūtras*,¹⁰ but an

intimation of the dismantling of barriers set up to contain the nebulous unity of self-identity. Self-restriction either results from the deployment of a defensive form of ‘intentional stance’ towards the world (Dennett 1971: 90), or from sequestration from the world within a fictionally ‘inner’ mental life-space. In a life of reflexive response to both external and (hypothetically) internal distraction, freedom from restriction is always available, as the realisation that the extended past and future are only cognised by acts of imagination, whereas representations of the external world are relatively-immediate cognitive manipulations of the structural coupling of perception. Such a state of affairs is what I interpret Bhikkhu Vajiro to mean by his cryptic remark that liberation is ‘not something that is going to happen sometime in the future’.

Crook’s model of awareness

Crook provides a spatial model of the possible ‘range of states of human awareness’ (1992: 356, 2002b: 106)¹¹, which incorporates open, non-intentional experience under the category of ‘bare attention’. Crook’s discussion of awareness is a good example of the use of spatial modelling in order to clarify analysis. In most respects his explanatory aim is achieved, but the model cannot be expected to depict the dynamic transitions between different sorts of state, and the left/right modelling of the distinction between intension and extension may be misleading. If it is granted that the plane of representation to primary experience is spatially-neutral, the states to the left of the vertical dimension are only metaphorically *intensional*, although they are mentally reflexive. In other words, by virtue of their appearance in awareness such ostensibly-internal states are not internal at all, since they happen on the same plane as representations of ‘structurally-coupled’ events in the external world. All mental states manifest on the same plane, because they are relationally-appearing parts of awareness, irrespective of their perceived location. Relational representations are contents without any vehicle other than (methodologically identical or supervenient) mind/brain processes, for the constituents of representations are also constitutive of awareness.

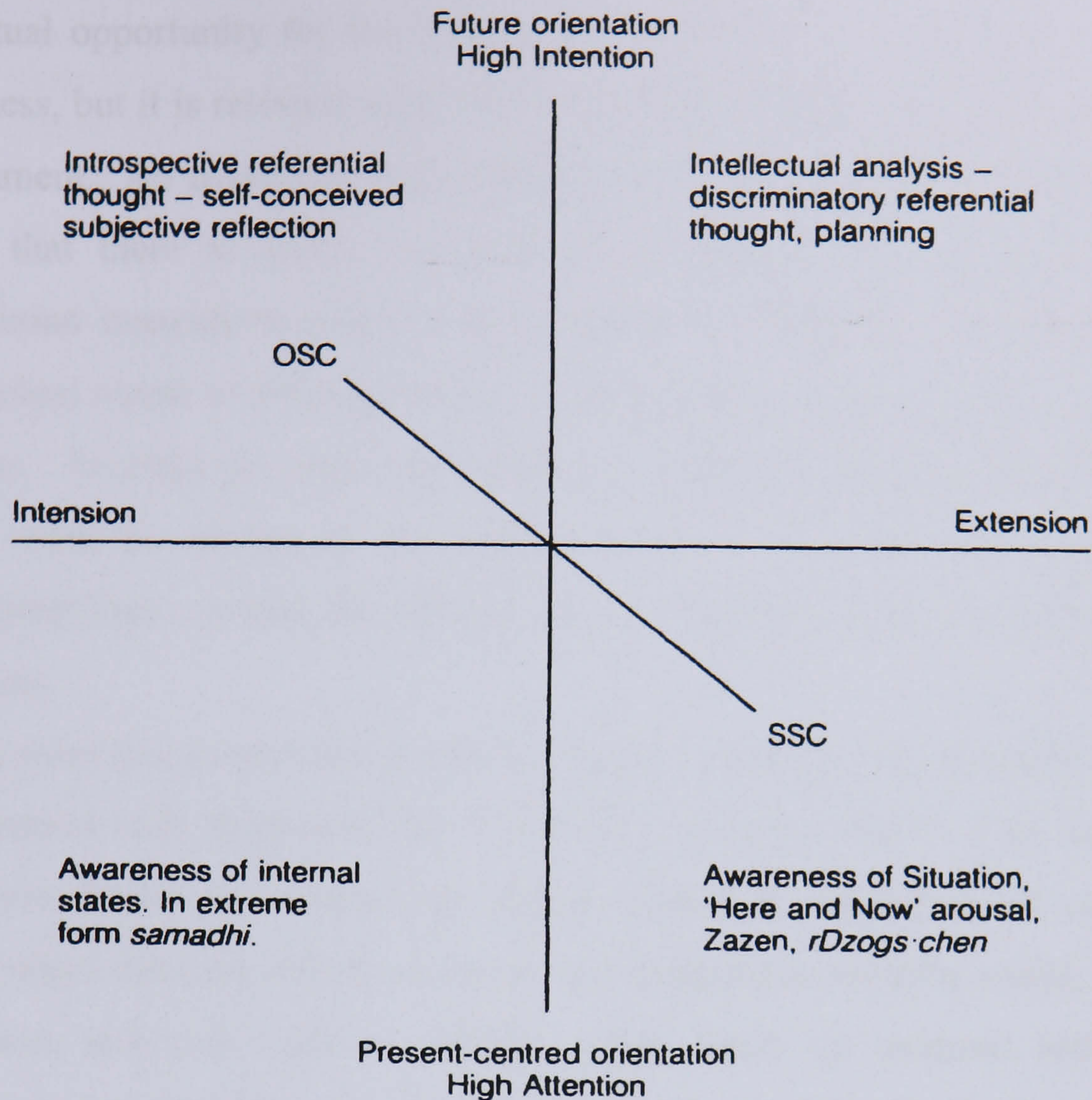


Figure 6. The range of states of human awareness (Crook 1992: 356, 2002b: 106).

Because the notion of intension is part of the spatial metaphor of the mind as a container, the left-hand, intensional side of Crook's model can only metaphorically bestow spatial dimensions upon awareness. There can be qualitative awareness of space when awareness turns to the world (extension), but no space as a property of awareness, whether the object of awareness is a mental intension or a physical extension. The metaphorical attribution of intension does not refer to space *as such* but to a feeling-tone similar to the feeling tone of the quality of external spaciousness; arising, as it were, synaesthetically in connection with ostensibly-intensional types of experience. At one end of a qualitative continuum, that feeling-tone may be constrictive. At the other end, it may be a sensation of freedom from barrier constraints, creatively associated with embodied experience of unrestricted space: the feeling may be *like* space, but does not refer to a mental space as such. This synaesthetic point has little relevance with respect to states that express sensorimotor coupling with the extensive world (the right side of the diagram), which grants a

perceptual opportunity for the feeling of dimensional space to become apparent to awareness, but it is relevant with respect to the reification of the mind as an object of containment. An overly-literal interpretation of Crook's model could perpetuate the notion that there is space, not only in awareness, but in mind; precisely the Augustinian manoeuvre which risks reifying the mind as a substantial, soul-like, independent object containing internal contents, rather than a holistic nexus of world-relations. In order to depict the manner in which awareness actually occurs, the model could be envisaged as folded along the vertically and the horizontally intersecting lines, so that the different types of states emerge on the same plane of awareness.

My point that intensional (mentally internal) space is only metaphorical, can also be expressed with respect to the 'OSC-SSC' diagonal line.¹² This line represents Duval and Wicklund's distinction between states of 'objective self consciousness' (OSC), which take the self as an object for comparison with the world, and states of 'subjective self-consciousness' (SSC), which focus on external activity without reflexive thought for the self. (Duval and Wicklund 1972: 2, Crook 1980: 312-313, 2002b: 104). Quite apart from the psychological instability of intentionality, objective self-consciousness is inherently unsatisfactory, precisely because it depends on the supposition of a hypothetical object trapped in an internal metaphorical space.

Despite my caveats, Crook's model achieves its purpose by effectively distinguishing between the future-orientation of intellective intentionality, located above the horizontal, and the present-centred orientation of attention, located below the horizontal. In effect, a temporal difference is being explicated, as usual, by translation into a spatial difference. Given that time can only be modelled spatially, that is a reasonable manoeuvre, especially since Crook takes care in his commentary to remark that the general function of conscious awareness is to provide feedback monitoring of 'feed forward' processes of intentional prediction (Crook 1992: 354), and since he acknowledges that his model does not represent the temporal dynamism of the relation between present attention and future intention.

The vertical dimension calls for further comment, for it will be clear that high levels of attention often accompany goal-oriented thought and action. What is implied here is, however, the relative degree to which the subject is oriented towards a desirable situation in future time (intention expectation, etc.) or, conversely, oriented towards the

quality of on-going present moment experiencing in which focus on alternative conditions is absent. The dimension defines what is essentially a difference between concern about a desirable or non-desirable state other than the 'Now', and a non-judgemental observation of the actual passing moment. (Crook 1992: 357).

To reiterate, the vertical division in Crook's model is problematic if it is interpreted to carry the implication that space (dimensional extension) is the same experience on either side: to the left, space is fictitious; to the right it is factitious.

The qualitative experience of space in awareness is different with respect to each quadrant. Space is an entirely illusory quality with respect to the bottom-left intensional quadrant, for this state of awareness is a dimensionless temporal succession, which is spatially-located solely by the inclusion of some recollection of embodiment. In the top-left quadrant, as objective self-consciousness, space can take the form of a dimensionless emotional experience of separation-anxiety, as the acute differentiation between self and others, but it can also take multiple fantasy-forms in dependence on imaginative functions. It is not obvious if the imaginative recollection of past events in past spaces, or the imaginatively-predictive creation of future events in future spaces, ought to be located in the bottom-left or the top-left quadrant, but to the extent that memory and imagination are both involved intentionally in the temporal constitution of the self, both advert to the top left quadrant. Once again this is a temporal division, and spatial mapping does not fully explicate the complex relation between attention and intention in each case. Crook equates mental activity in the bottom right and left quadrants to attention without undue intention. Attention could be to the occurrence of representations of the external world, or to a gradual meditative silencing of the mind until there is 'consciousness without an object', meaning no occurrence of mental representations whatsoever. From a neuroscientific perspective, consciousness of nothing would be a contradiction in terms; it would be the cessation of consciousness, or a concept without reference. The notion of meditative cessation of consciousness is an example of Buddhist mind-theory at its most problematic (Griffiths 1999: 111-113), and a conceptual exposition standing in dire need of the confirmation of experience. It is significant that Crook should remark that in the absence of thought processes 'unconscious monitoring of situation seems to be present throughout' (Crook 1992: 358).

To complete the modelling of differential awareness in different quadrants, in the top-right quadrant space is the metaphysical abstraction of generalised co-ordinates from the full texture of attention to awareness. Attention to coordination and assessment of the future behaviour of objects constitute most of the information that is required of the world by a mind entirely bent on the fulfilment of an intention. Space is only experienced with the full texture of dimensionality in respect of Duval and Wicklund's subjective (SSC) orientation to the world (1972), modelled by the bottom-right quadrant referring to 'bare attention'. Freed from the cognitive cunning of intentionality, 'subjective self-consciousness' is experienced as a sense of relationality with the world, and very much an *experience* rather than an *insperience*.

In the discussion of his diagram, Crook maintains that states of awareness are out of balance in modern western cultures, because there is too much time spent above the horizontal division, in intentional states, and too little time spent below the horizontal, in attentional states. In Buddhist terms, increased attention to the world opens up the beneficial qualitative experience of *suchness*: an unmediated experience of relationality, of the interdependence of objects, and of engagement with the world, with the consequence that the intellect is as much affected by present experience as by ingrained reflex responses to past attitudes. After so much theorising, the empirical question arises: is such an attentional mode of being as hypothetical as Lewis's hypothetically hyper-rational person? (Lewis 1979). Perfect stabilisation of attentionality may be an ideal, but quantitative and qualitative realisations along a continuum of attentional states are a possibility.

To summarise the key elements of the critique of space in mind, so-called 'inner' mental space is a metaphorical location, a representation of imagined alternatives in the form of past or future external spaces, which places immediate awareness of present time and space under 'erasure'. My critique is therefore of spatial interpretations of mind, not of Crook's reasonable motivation to explicate the range of states of awareness by means of a spatial model. All that is required to guard against over-interpretation is the caveat that metaphorically spatial elucidation does not entail, by analogical reasoning, the conclusion that the mind possesses inner spatial qualities additional to the spatial dimensions of the brain, which although normally hidden form part of the external world.

Trouble with intentionality

A distinction has been made in Chapter 5 between, firstly, the basic mental property of intentional ‘aboutness’, which directs animal attention to the world and is the motivator of all conscious awareness, and secondly, the more complex development of intentional goal-orientation, volition or ‘will’ in higher animals. The equation between this distinction and Buddhist terms for intentionality is fraught with difficulty because although ‘psychological concepts slide into each other’ (Johnston 1993: 49), conceptual discriminations in Abhidhamma texts strive for exactitude. According to Govinda, basic aboutness or ‘spontaneous attention’ (*manisikāra*) is an initial arousal caused by the perceptual object, and volition (*cetanā*) is a separate ‘instinctive volition bound by previous causes’ (1969: 116). Buddhism is concerned with the modification of karmically-active intentions, which can take either wholesome or unwholesome forms. Goal-orientation of *cetanā* is a psychological attitude, broadly of desire, which is seen as being initiated by the individual. *Manasikāra*, on the other hand, is relational, because it is initiated as much by the presence of the object as by the perceiver (Govinda 1969: 116-119).¹³

The Abhidhamma discrimination between types of intentionality is conceptually refined, but is problematic because there may be no opportunity for experiential verification. This is because the concepts of spontaneous attention and intention are explanatory characterisations factors (*cetasika*) that exert a subliminal or unconscious influence on conscious states (*citta*). A similar problem attends Crook’s discrimination between intention and attention. He is able to differentiate states above his model’s horizontal line by reference to qualitative differences between intentional and attentional states, but that does not entail that intention and attention actually appear to awareness as such. Intention and attention become apparent to conscious awareness in the form of percepts, propositional thoughts, and emotions, but like the *cetasika*, intention and attention are antecedent conditioning motivations, not apparent in consciousness as such, therefore a conscious event can only be retrospectively characterised along an intentional/attentional continuum.¹⁴

According to Hulse, Read and Schroeder, consciousness depends on the world: it has a ‘mind-to-world direction of fit’, because perception depends on ‘how things stand’ in the world (2004: 74, 79). In the case of any discrepancy of fit it is the

perception, or belief in the perception, which is in error and must change to fit the world. They add that, amongst the ‘propositional attitudes’, desires and intentions have the opposite, world-to-mind fit, for if a desire and intention is misdirected it is the world that must be changed to fit the desire or intention. Hulse, Read and Schroeder cite neuroscientific evidence from stimulation studies to support their contention that consciousness depends on sensory cortical regions of the brain, and is concerned primarily with an ‘episodic’ demonstration of ‘what the world is like’ (2004: 78-79). Only when non-episodic dispositions such as desires and intentions give rise to urges and actions that are episodic, and therefore can be sensed, do they become part of consciousness.

As Hardcastle (1992) predicts, and like Varela (1999), Hulse, Read and Schroeder use ‘lower level’ neuroscientific explanation to illuminate conceptual problems in ‘top-down’ psychological explanations, such as the notion that intentionality is a conscious state.¹⁵ In the absence of ‘lower-level’ neuroscientific support, ‘folk’ psychological concepts such as ‘thought’, ‘desire’ and ‘intention’ are tacitly assumed to be accurate labels for conscious states that are apparent to phenomenological reflection. If the phenomenality of intentional attitudes is illusory, because attitudes only manifest to consciousness in the form of subsequent propositions or physical urges and acts, then the way in which consciousness is conceived of is more permeated by imaginative explanation than it seems.

As an extrapolation from Hulse, Read and Schroeder’s view that desires have a ‘world-to-mind fit’, it is a result of lack of restraint on unconscious intentionality that human beings try to construct a world fit for the satisfaction of their desires. Along these lines, Crook suggests that ‘educational bias under cultural pressure’ reinforces future-oriented thinking, to the detriment of attention to the present.

The function of intellect is to rehearse action in scenarios that will produce a future state or lead to a comprehension of what has happened – and which could happen again. In all cases the experiential context of intellect lies primarily in the upper half [of his diagram]. Introspection is essentially an intellect focussed upon its own nature and social status. An understanding of intellect in this perspective is thus only half an understanding of the mind... (Crook 1992: 361).

Pym makes it clear that such a temporally-absented intellective mind is not at all like the Buddhist ideal:

...to me the enlightenment of the Buddha...is that he always spoke from a sense of now...I have met this with other, what I call, spiritual beings – people who are totally with you at that moment (Pym).

Crook and Pym's point is reinforced if Hulse, Read and Schroeder are correct in their argument that intentional desires are not conscious states. The implication is that contemporary minds are developmentally imbalanced by excessive time spent predictively addressing the future in the light of the past, and that obsessive concern for the future amounts to a transcendental and psychologically-harmful abstention from existential time: from embodied and conscious relations to the immanent world of appearances in the present. For Crook, this imbalance causes a 'continuous concern with degrees of self-esteem and social coping', and is the source of 'personal alienation in western cultures' (Crook 1992: 361-2). His conclusion is that human well-being requires 'optimum balance between purposive action, present awareness, and creative reflection' (Crook 1992: 362).

Persons sequestered in their imaginations, desirous of some intentional world-to-mind fit, are not wholly within present time or wholly aware of actual space. They inhabit a hypothetical second world which lacks 'real' time and space: life under occlusion, which Derrida calls 'erasure' and alienation from the world is the likely consequence (Derrida 1997: 181-182). The difference between presence in a first world or retreat into an imaginative second world is attenuated if Varela Thompson and Rosch are correct in their internal 'enaction' view of the mind; the difference is considerable once it is allowed that there is an external or hylic world (Lusthaus 2002: 26-29), as an incontrovertible part of 'the way things really are', prior to the addition of human representations, values and intentions. This can lead to the awful modern intuition that despite the order of meaning (the 'ought' of MacIntyre's is/ought dichotomy), humanity is dispensable.

Pym's suggestion that the Buddha always responded from an awareness of the present is given a different formulation by Dharmavidya and Prasada, who suggest that at the time of the Buddha the mind was imagined to be a location in an environment of time and space, and that it was not until the Yogācāra development of the concept of the store-consciousness (*ālaya-vijñāna*) that the idea of the mind as an

inner psychological container took hold (Brazier 2003: 45-55). This point-instant location view might appear primitive if it is thought to involve the illusory projection of *really internal* psychological contents into the world in mythological form, but if those contents are only metaphorically internal, and if ‘folk’ psychological concepts refer only to general classifications of unconscious states, then the earlier view, which mythologically externalises unconscious intentions as the personification of natural forces, is as perspicacious as the modern view, which personalises unconscious processes in the form of the imagination of an objective internal self. Psychological projection suits pre-modern *Gemeinschaft*: the immersion of the individual in the immediacy of the social group and the natural world. Psychological containment suits modernity’s *Gesellschaft*: the discrete individual who can be differentiated, alienated, and manipulated by technological modernity.¹⁶ In the face of such diametrically alternative views of human being-in-the-world, the rhetoric of the ‘Middle Way’ springs to mind as a characterisation of the individual subject and the objective world as an interactive relation. As Crook, Ratnaprabha and Jones suggest, subject and object can be functionally differentiated, but in appearance to awareness they form a holistic continuum.

With all due respect, I interpret Ratnaprabha’s description of ‘expanded awareness’ (Cooper 2003: 132) and Pym’s description of the effects of *vipaśyanā* meditation, in a manner that differs from their own. The expansion of awareness is the abandonment of the socially useful metaphorical fiction of the ‘inner’, which diminishes the mind by characterisation as an internal space. ‘Expanded awareness’ is not the same as the cognitive enrichment of Damasio’s ‘extended consciousness’ (Parvizi and Damasio 2001: 140), but an experience that transcends the spatial explanation of a Cartesian lair occupied by a hypothetical self. Relinquishment of an introverted self is a turn from self-location to subject-location, attended to by what Pym describes as the ‘unself’. The resulting experience is what Crook and Jones refer to as ‘suchness’. In more Buddhological terms, it may be a step along the road to the state of liberation referred to by Bhikkhu Vajiro, ‘where every blade of grass is liberated’. These interview participant accounts mark a turn away from metaphor-induced introversion to a more externally-relational understanding. They are cryptic

characterisations of ‘the way things really are’, rather than attempts at analytical explanation.

Without this externally-relational understanding, the notion that properties of mind occupy a separate internal location has the effect of importing not just separate dimensionality but separate temporality, so constituting mind as a discrete object with enduring parts. The phenomenally space-less experience of mind is normally restrained by internally-spatial explanation, and in this respect belief in the very existence of mind is a self-location, in advance of any *de re* evidence from phenomenal acquaintance. As examples: senses are said to leave (dimensional) impressions, which memory places in storage (spatial location), the unconscious constitutes an asylum (spatial location) from which foregone childhood versions of the self emerge (spatial traversal) into imaginative scenarios (second-world event-spaces). If all of these things happened as metaphorically described they would demonstrate spatio-temporality, yet spatial and temporal dimension is absent from the ‘lightning speed’ of the occurrence of thoughts and percepts to awareness (Wittgenstein 2001: 89, [PI. I. 318]).

There are several objections to the denial that the mind is an inner psychological space: that the properties of mind inhabit a dimension that is outside the normal spatio-temporal order, that metaphors do not refer to literal reality, but produce it, and that imaginary mental space forms a necessary and a creative refuge.

First objection

The objection that the mind inhabits a second world-order is a metaphysical belief that cannot be gainsaid, but some of the supporting arguments can be refuted. It is objected that ‘folk’ psychological properties of mind such as feelings, emotions, thoughts, dreams, and personality (self) differ radically from externally-experienced sensory properties such as sights, sounds, smells, tastes and so forth, in being inherent to the mind. Some of these ‘folk’ psychological properties continue when sensory properties are disabled by trauma or age-related degeneration, therefore properties of mind must be sourced from another dimension that can be characterised metaphorically in ‘inner’ spatial terms.

The counter-argument is that non-sensory properties of mind can also be removed by trauma. As with sensory properties, their proximate cause is in embodiment and as with the elimination of sensory transport the relevant trauma is to neural tissue. Despite the conceptual obscurity of the topic, explanations of mental properties can be deconstructed into parts that are verifiable, and parts that are imaginative. They are true in the sense of being useful when suggestive and indicative of phenomenal modes of experience, yet imaginative when ordering experience into modes that cannot be found by paying 'bare attention' to awareness. Internal mental spaces fall into the imaginative category.

Second objection

The second objection is that strictures against the use of spatial metaphor for mind are too literal. The presumption that metaphors misreport an independently existing objective reality ignores the cognitive enrichment of perceptual experience by the creative functions of metaphors (Johnson 1988: 66-67). This valid criticism is based on the sound quasi-idealist point, made by Varela, Thompson and Rosch (1991) and by several of the interview participants, that perception of reality is not simply a matter of trustworthy and accurate conveyance of sensory impression to the mind, but is constituted by a mixed process of perception and cognition. This view is only problematic when it leads to the extrapolation that the external world of the 'hyle' is mind-made, and therefore illusory.

With the world in doubt, it is not possible to rely on an 'objectivist' theory (Johnson 1987: 66), whereby a metaphor is just the 'substitution' of a literal meaning by a metaphorical meaning (Black 1979: 27), instead it is the metaphor that structures the world. Black states that meaning is generated by metaphor, as the invention of a new 'implicative complex' of relationships between concepts, with a consequent enrichment of understanding (Black 1979: 28-29). Enrichment notwithstanding, Black admits that metaphor depends on 'isomorphism' between one system of implications (the target) and another (the source), and that some of the implications are more contextually appropriate than others. The most basic metaphors are productive of many implications, not all of which are equally isomorphic, therefore 'every metaphor is the tip of a submerged model', and the 'implicative system' of the

metaphor (in this case, variations on the theme of the mind as a container for an objective self) is a ‘mixed lot’ of ambiguous ‘projective relations’ (Black 1979: 31). In effect, metaphors create a certain view of the world. Black suggests that they ‘can yield insight into how things are’(1979: 39-41). I suggest that they can also show things as they are not. The problem with the metaphor of space in mind is that it has become a ‘metaphysical archetype’.

...there is an ever-present and serious risk that [an] archetype will be used metaphysically, so that its consequences will be permanently insulated from empirical disproof. The more persuasive the archetype, the greater the danger of its becoming a self-certifying myth (Black 1962: 242)

The belief in some degree of representative isomorphism between awareness and a hyletic world is based on a foundationally-realist, structurally-coupled view that perception has some reliability of reference that enables a fallible truth-correspondence between perceptions, descriptive explanations and embodiment in the world. My neuroscientifically-informed conclusion is that the spatial properties ascribed to the external world are not replicated in any inner mental location except in a metaphorical sense. My contention, in the context of Buddhist soteriology, is that the ‘implicative complex’ of the spatial metaphor for the mind is not invariably useful and can be harmful if the metaphor is taken to be literally the case, rather than an imaginative production.

Basic metaphorical micro-explanations such as the ascription of space to mind have wide ‘implicative’ possibilities. The wider the implicative scope the more an explanation is capable of obscuring ‘the way things really are’. The obscurantism of the prediction of space in mind is caused by the gap between first and third person modes of access, for spatial characteristics proper to the third-person mode are being ascribed to the first-person mode. It might follow that a refutation of the notion of the ‘inner’ as a home for psychological objects such as a self ought to amount to a refutation of the distinction between subjective and objective access to the mind.

Wittgenstein’s radical supposition is that this is so, and that persons have no privileged access to their own thoughts. He implies that that no more than the expression or suppression of demonstrative utterance distinguishes first-person from third-person access. (Wittgenstein 1992: 92, Johnston 1993: 154-157, 170-172). The

point is intuitively difficult to accept for experience remains a private mode, inaccessible to neuroscience and only partially revealed by utterance and by testimonial. First-person privacy restricts the assault on the use of spatial explanations of mind to precautionary words about how the existentially-momentary nature of subjective awareness can become erased by a metaphorical fantasy of minds as objects containing enduring selves. Outright elimination of the use of spatial metaphors for mind is impossible, not least because Wittgenstein makes it clear that the 'inner' is a socially useful fiction which grants the juridical status of personhood to embodied human continuities, and enables the motivations and feelings of others to be explained.

The Inner is not a brute reality, a set of experiences or a set of brain states; rather it is the concept that lies at the heart of all our mutual interaction and understanding (Johnston 1993: 187).

The deconstruction of metaphorical spatial explanation is one facet of a more general cautionary tale about how explanation should be received. It may be empirically useful, but only in the form of fallible, approximate, reductive correspondence to the external world, for only primary awareness of the world conveys the *affective* sense of 'facticity' (Heidegger 1962: 82), and only a history of awareness of the world makes that facticity certain (Wittgenstein 1979: 25-36 [OC. 275]). The upshot is that explanation *de dicto* should not be assimilated thoughtlessly, without the test of attention to phenomenal experience.

Buddhist mindfulness meditation is a practical phenomenal testing technique (Kennedy 2004: 150). Mindfulness is a cognitive behavioural way of reinforcing 'bare attention' that is not literally *introspection*, for the things examined appear to awareness, not 'in' the mind. Because of the first-person privacy of awareness, this form of checking is not observation in the scientific sense, for it cannot be replicated (Wittgenstein 1992: 7, 10, Hacker 1990: 59, 189, 191, Johnston 1993: 157). The individual is left without the warrant of empirically-verifiable knowledge, without the warrant of replicable introspection, but with the animal sense of certainty or facticity warranted by subjective experience. Although the interview participants do rely on attention to subjective experience, that does not mean they assume that certainty is a foregone achievement: they are aware, both because they sense it in their own lives

and because Buddhist explanation tells them so, that experience of the world can be affected adversely by psychological conditioning.

Third (and fourth) objection

The third objection has a fourth as its twin; they are structurally similar, but the motivations are different. The argument is that the metaphor of internal psychological space fulfils two vitally useful functions. Firstly, internal space is a refuge from external experiences that are burdensome. Secondly, as Virginia Woolf appears to suggest in *A Room of One's Own* (1977), the flowering of creativity is literally and metaphorically dependent upon the availability of a remove from the world.¹⁷

In view of the Buddhist diagnosis that all existence is impermanent (*anicca*), not-self (*anattā*), and marked by suffering or dissatisfaction (*dukkha*), The foreclosure of any means of relief from acute suffering would not be compassionate, so if belief in a metaphorical mental space enables temporary relief from harsh reality, it ought not to be gainsaid. But acute suffering has a different feeling-tone to existential dissatisfaction, which is generated by unfulfilled desire for permanence and for a permanent self. Such permanence is not to be found in any metaphorical space because such a space is produced by the imagination. As Augustine realised, the imagination, which he called 'fantasy', can only manipulate memories of objects and spatial relations recalled from prior perception of the external world (Augustine 2002: 100). The tension between the possibility of temporary escape and the impossibility of permanent escape into an inner, imaginative world is reminiscent of the tension in Buddhist doctrine between a conditioned and an unconditioned view of the mind. However beneficial, imaginative retreat into a metaphorical second world is a temporary retreat, not an escape to an unconditioned realm, and without self-deception some tension between the imaginary and the real is inevitable. Denial of 'space in mind' is not a denial of the ability of the mind to therapeutically construct imaginary worlds, just the denial that the experience of imaginary worlds can be found anywhere other than in awareness, 'on all fours' with the rest of experience.

Retreat into an imaginary space entails the temporary erasure of some elements of experience from conscious awareness, by virtue of the ability of consciousness to

focus attention intentionally, thereby denying awareness to irrelevant percepts. This capability has a neuroscientific explanation (Llinás 2001: 168), albeit a mainly theoretical (imaginative-predictive) one until the neural correlates for consciousness mechanisms are more clearly understood. However beneficial access to a second world of mental imagination may be in extreme circumstances, second worlds could not be unconditional, because their constituents are sourced from embodied relations in a first external world. This is precisely Arendt's point when she says that the mind is only knowable by metaphors 'derived from the world of appearances' (1978: 108-113). From a Buddhist point of view, it is significant that refuge is found in the Buddha, *Dharma* and *Saṅgha*. The Buddha exemplifies an ideal way of relating to the world, the *Dharma* exemplifies an ideal truth about the world, the *Saṅgha* exemplifies an ideal social community, and 'Going for Refuge' signifies confidence that these qualities are amenable to practical realisation. As ideals, they are imaginary, and whatever they represent with regard to subsequent lives, they are applicable in practice to external circumstances in this life. Dharmavidya argues that an exclusively individualistic 'other-worldly' interpretation of these ideals is a betrayal of the Buddha's this-worldly social message (Brazier 2001: 28-61).

With respect to the fourth objection, that the imagination requires space for creativity, I accept Woolf's thesis that women have been deprived of the material opportunities for the exercise of creativity, and that, as opposed to worldly repression '...there is no gate, no lock, no bolt that you can set upon the freedom of my mind' (1977: 72). But her concern is as much for the material as the non-material conditions for creativity (1977: 101). Even though her interest is in the production of fiction, the space for women's creativity that Woolf calls for is not so much a sequestration for imaginative fantasy as a withdrawal that allows for a response to reality that is as much heroic as reclusive.

...the writer, I think, has the chance to live more in the presence of reality. It is his business to find and collect it and communicate it to the rest of us...when I am asking you to earn more and have a room of your own, I am asking you to live in the presence of reality, an invigorating life... (Woolf 1977: 104-105).

It is not clear what Woolf means by 'the presence of reality', but she seems to suggest a response to the world that is reminiscent of an epiphany or peak experience.

She implies that, in the past, access to reality was impeded for women writers whose minds were pre-occupied by the excess baggage of masculine opinion (1977: 29), but despite her use of spatial metaphors for the mind Woolf does explicitly argue that an internal refuge for the imagination can be an adequate substitute for an unrepressed and unimpeded relation to the world as the real source of creativity.

Summary

That the mind constitutes a temporal dilemma becomes apparent once it is realised that because of indirect access to the world experience is permeated by habitual explanation, yet a temporal difference obtains between experience and explanation and between the human subject of experience and the human self of explanation, which cannot be resolved by the use of spatial descriptions for temporal duration. Epistemologically, the dilemma emerges as the fallible truth of the subject, in contrast to the imaginative fiction of the self. The onset of the temporal dilemma of mind can be illuminated at the neurological level, as the initial 'horizon' of the subject in a continuing sequence of neuron-ensemble synchronicity. The onset can also be discerned phenomenologically, as the retrospective awareness of the subjectivity of the previous moment in the course of the present moment (Varela 1999).

Spatial metaphors for time can transfer affective qualities from their source to their target, but not literal qualities, for on the experiential plane of human awareness there is no space in time or in mind. The temporal division between subject and self is a source of existential dissatisfaction (*dukkha*), which motivates desire to escape the consequences of change. Mind out of time could not be mind in a conventional sense, for there would be none of the duration required for the predictive functioning of sensori-motor feedback activity. Irrespective of metaphysical beliefs about minds and time, minds are able to psychologically manipulate the experience of time and space in different states of awareness. It is spatially misrepresentative to call reflective states 'introspective', because they appear on the same plane of awareness with perceptual cognition of the external world. Both so-called introspective states, and states motivated by unconscious intentional desires, induce qualitative attrition and even obliteration of the awareness of experiential time. Crook (1992) considers

that some of the suffering of humanity can be alleviated by balancing the influence exerted by intentional motivation against the influence exerted by simple attentional awareness of the world.

Notes to Chapter 7

¹ The duration required for consciousness can mean that intentions are formed, decisions made and actions initiated, before the relevant situation becomes apparent to consciousness. (Libet 1965: 83, Libet et al 1983: 623, Freeman 2003: 177-186)

² Duval, Silvia and Lalwani suggest a ‘dual systems theory’, whereby an ‘internal representation’ of an ‘object self’ is judged against ‘internal representations of behaviours, thoughts and feelings encoded deeply in memory’, which constitute ‘standards of correctness’ (2001: 4-5). Whether this conceptual duality between self and standards is replicated in the form of different neuronal systems remains to be investigated.

³ The argument that humans are embodied time-beings is propounded by Dōgen in the *Shōbōgenzō* (Cleary 1988: 76-83)

⁴ In Black’s terms, the concept of space is a ‘strong’ metaphor: space is a theme that is ‘emphatic’ because it has no alternatives, and that has ‘resonance’ because it is amenable to elaboration (1979: 26-27). Unfortunately, the metaphor of space in mind carries the implication that mental relations are so isomorphically *like* relations between objects in space that the comparison is one of abstract identity. In fact mental relations are homomorphically isomorphic, a resemblance without likeness of structure, so that the comparison is one of abstract representation (Llinás 2001: 65). Black remarks that strong metaphors are isomorphic indications of ‘how things are’ in reality (1979: 40-41); I am unsure if the metaphor of space in time is indicative of an isomorphism, but I am convinced that the metaphor of space in mind is not.

⁵ Observations of cosmic background radiation suggest that the arrow of time is caused by the negative curvature of space (Allahrerdyan, A. E. and Gurzadyan, V.G., 2002).

⁶ According to Augustine (2002), the rumination of thought is the work of the imagination or ‘fantasy’. Ordinarily, the inner vision or fantasy is simply one of the finite number of impressions retrieved from memory, but Augustine also envisages that the will can selectively retrieve and combine parts of those impressions, to construct a potentially infinite number of imaginary fantasies:

But because the mind possesses the great power of forming images...it often fancies that something is so and so, when it knows that it is not so, or does not know that it is so. In doing so it must take care that it does not lie so as to deceive, or hold an opinion so as to be deceived. (Augustine 2002: 70)

⁷ Findings in neuroscience indicate that memory is more than one faculty or process, facilitated by neuronal systems widely distributed in the brain, as synaptic connectivity becomes functionally-dedicated and strengthened by use. Memory can be short or long-term, semantically factual, or episodically contextual. The temporal cortex is particularly implicated in semantic memory, and the hippocampus is

particularly concerned with the establishment of memories, and with episodic memory. (Freeman 2003: 137-157)

⁸ I take this to be the meaning of Paul Fuller's strong assertion that, for Buddhism, 'is' and 'ought' are not separable (personal communication).

⁹ The relinquishment of the prior determination of experience is referred to by Dōgen as 'shedding' (Cleary 1992: 87-88, 134).

¹⁰ Gombrich remarks that *nirvāṇa* in early Buddhism is a metaphor for the 'blowing out' of the three fires of 'passion, hatred and delusion', and that its 'emotional quality' is 'ineffable' (1997: 6), yet he considers that the truth of the achievement of *nirvāṇa* can be expressed propositionally. I suggest that the metaphor only indicates the means to a state of affairs, not what the state is like in itself. It is therefore unsurprising that there should be many different explanations of the nature and meaning of enlightenment in the Buddhist tradition as a whole. (Brazier 2001: 80-118)

¹¹ I am grateful for John Crook's permission to reproduce his diagram of the range of states of awareness.

¹² Crook envisages his model working in three dimensions, with the OSC-SSC line occupying the third. I am only able to envisage it in two dimensions. Duval and Wicklund's OSC-SSC distinction is also explained in Crook's interview summary on page 78.

¹³ Contact (*phassa*), feeling (*vedanā*) perception (*saññā*), intentionality (*cetanā*), one-pointedness (*ekaggatā*), vitality (*jīvitandriya*) and attention (*manasikāra*) are omnipresent conditioning factors (*sabba-citta-sādhāraṇa*). They constitute the group of *cetasikas* that arise to some degree with every conscious event (*citta*). See van Gorkham (1975: 4-6), and Sangharakshita (1998: 72-99).

¹⁴ There is nothing derogatory about saying that certain processes are unconscious if minds are only usefully conscious. If consciousness is a functional feedback system for speed of prediction, dispositions may unconsciously initiate conscious events. Confusion about the unconsciousness of dispositions perhaps arises because humans have highly developed capabilities of pretence and detection of pretence in the manifestation of their unconscious dispositions (Wittgenstein 1992: 33, 59, Johnston 1993: 172-181).

¹⁵ Crook considers that 'top-down' ethology can provide more useful explanations of behaviour than can 'bottom-up' neuroscience (1992: 350). I think that they can usefully be unified and employed together.

¹⁶ Mellor (1989, 1991) argues that western Buddhism is a 'Protestant' form of religiosity because it is individualistic in comparison to indigenous forms.

¹⁷ I am indebted to Kim Knott for this twin objection. For further discussion of the real and metaphorical use of space see Lefebvre (1991) and Knott (2005: 35-58)

Chapter 8

Freedom of mind in homeostatic relations

Introduction

Thus far in the thesis, investigation of a model of the activity of the mind has enabled some conclusions to be drawn about the four notional categories of explanation, experience, self and subject. That model, which emerged from Lewis's explanation of the formation of attitudes, also arose from a discussion of the interview participant's attitudes towards the scientific 'standard view' of mind/brain identity, a discussion that took account of their preference for the warrant that is uniquely afforded by subjective experience.

This chapter briefly recapitulates previous conclusions about the four categories. In broad agreement with the prevailing attitude of the interview participants, I isolate the *de re* category of relational experience of the world as being mainly responsible for warranting the suitability of explanations. That relation occurs during primary experience, which compresses structural connection to the external world, and the cognitive and affective commentary on that connection, into one swift, interrelated temporal process. By making the on-going state of mental relations immediately evident, experience provides the feedback access required for effective monitoring of strategies capable of modifying habitual relations with the world. This modification can occur in spite of, rather than because of, attempts at rational cognitive control, and Crook and Prasada both describe means by which this psychological sleight of hand can be achieved. In the course of examining ways by which acquaintance with the world can be psychologically modified to become more suitable to function, I argue that the underlying function of mental activity is to create circumstances that are conducive to homeostasis, and that an extension of the biological concept of homeostasis can be equated to ideal religious concepts of 'enlightenment' and 'the sacred'.

Buddhism asserts the possibility of freedom in the midst of determinism, but freedom is a paradox if minds are identical to or supervenient upon determinate biological systems directed towards the achievement of homeostasis. I suggest that mechanistic micro-explanation only refers to causal determinism, but that at the experiential level addressed by psychological explanation an affective sense of

freedom can arise from psychological modifications that contribute towards the achievement of both embodied and psycho-social forms of homeostasis. This affective sense of freedom is not freedom of choice in the strict philosophical sense, but it is freedom from the effects of habitual imperatives that become homeostatically-destabilising in situations complicated by multiple external variables. Both 'freedom' and 'spaciousness' are useful metaphorical characterisations of the sense of release from suffering that accompanies approximation to homeostasis.

It is clear from the interview testimonies, especially from Jones, that acceptance of the otherness of the world does not entail the elimination of all intentionality. There is a purpose for the imaginative functions of the mind, for fiction is vital to prediction, and reliable prediction provides vital guidance towards homeostatic balance on all explanatory measures. In perceptual cognition, in imaginative scenarios, and in explanatory modelling, 'veridical fictions' are all forms of what Shaw calls 'the good *upadeśa*', which are designed to exert beneficial effects. If not the precise actuality, then the functional reliability of these percepts, myths, and teachings can be verified by experience *de re* in the form of alterations from bad to good habits, from deliberation to spontaneity, and from feelings of suffering to feelings of freedom.

The broad argument advanced in this chapter is that the incomplete, internalist model of the mind is a source of suffering. This socially-useful but illusory model reinforces intentional self-grasping by making insufficient allowance for the dependent relation of the individual upon the otherness of the external world. Since the mind/brain is literally and figuratively senseless when functioning apart from the external world, the world had better be considered to be part of the mind, and the mind had better be conceived of in terms of its complete set of relations. This holistic perspective stretches the common meaning of the term 'mind', but it conforms to Crook's view that 'we have to get away from this strict dualism of mind and matter towards something that is more holistic' and is in conformity with Jones's interest in 'the way that the subject, person and the object that is out there interact to form a relative experience in the subject, and in that sense everything is mind'.

Although it is an alteration to common usage, it is more applicable to the way things really are, to say that the brain/world relation is identical to the mind, or to say

that the mind supervenes on the brain/world relation, rather than to say that the mind is identical to, or supervenient upon the brain alone. Since it is not just the brain, but the entirety of the eighteen *dhātu* that constitute the seat of consciousness (Ñānamoli 1995: 926 [MN 115. 4]), both the identity and the supervenience theses offer incomplete models of the mind. On the supervenience model, the concept of mind refers to an abstractly-real entity, which is an ‘out of order’ fellow-traveller with the ‘All’ (Arendt 1978, Woodward 1993: 8, Bodhi 2000: 1140 [SN 35. 23]). On the identity account, the concept of mind refers to only one half of a relational totality. From the perspective of the ‘All’ there is no such objective ‘thing’ as a mind, yet there is an orderly pattern of property-relations that can be denoted by the term. Awareness that the self-imprisoning internalist view of mind is not ‘the way things really are’ (*yatha-bhūtam*) is conducive to an affectively transfiguring, and metaphorically ‘free’ or ‘spacious’ experience of relationship with the world.

My conclusion, that the ideal of homeostasis and the concepts of explanation, self, subject, and experience are senseless without reference to external circumstances, is reinforced by the Yogācāra revisioning of *pratītya-samutpāda* in terms of the ‘other-dependent’ aspect of mind (*paratantra-svabhāva*) (Harris 1991). The location of a mind/world barrier is a socially and juridically useful aspect of models of the mind, but can lead to the over-valuation of individualism in opposition to the otherness of the world, and the reification of sentience, as if sentience could be decoupled from the dynamism of its causal matrix. Buddhism does assert the individuality of mind-streams and the individuality of effort, but because Buddhism is polythetic, other more holistic perspectives can be found, or devised, which also have social and psychological relevance.

The four-fold model of mind

The model of the mind, put forward in Chapter 5 on the basis of a modified version of David Lewis’s account of the formation of attitudes, can be restated in the light of the basic neuroscientific information in Chapter 3 and the conclusions reached in Chapter 6 on explanation and experience, and in Chapter 7, on the subject and the self.

Explanation is a cognitive commentary on experience of the world. Explanation is not entirely logical, not just because it is permeated with imaginative fictions which inform reasoning by analogy, but because the decision-choices that inform explanations are heavily constrained and modified by ‘somato-sensory systems’ (Damasio 1995). The logical component of explanation is a subsequent justification that tends to disguise the role played in decision-making by emotional constraint. Although explanation is indicative communication to others, explanation is not entirely distinct from experience, because it appears in the form of utterances or records of utterances, only knowable as a mode of experience. Although emotionally-constrained, explanation is flexible: it can be simplified, improved, proliferated, imaginatively ornamented, and it can be firmly believed, provisionally believed, treated agnostically or ignored. It is a symbolic, imaginative and mainly linguistic higher cognitive development of the functioning of neural systems. The function of explanation, apart from its communication to others, is to assist complex neural systems in reliable, effective and timely decision-making about complex predicted scenarios (Llinás 2003).

Basic conscious experience emerges as bodily awareness in the course of homeostatic monitoring and response undertaken by the thalamo-cortical-brainstem sensori-motor system, described by Damasio as the ‘proto-self’ (1999), and by Panksepp as the ‘Simple Ego-type Life Form’ (1998). Pathways associated with cognition and pathways associated with expression of bodily feeling and emotion interact to enrich experience in the form of ‘extended consciousness’. ‘Cognition’ and ‘emotion’ are actually bridging terms, or ‘folk’ psychological concepts for reasoned and bio-regulative forms of knowing. ‘Top-down’ cognitive and ‘bottom-up’ emotional systems can be differentiated conceptually, physiologically and anatomically. Cognitive functioning, which is often compared metaphorically to computation, is mainly neocortical and responsible for the convergence and association of current and memorised sensory information, and for predictive decision-making. Emotional functioning is mainly limbic, and responsible for increasing the speed of response to urgent scenarios by imposing constraints on cognitive decision-making. These two systems cooperate, but the ability of the limbic pathways to condition and control higher cognitive systems may be

underestimated when the brain, as in this thesis, is described as a neuro-connective system rather than a neuro-chemical system (Thagard 2002). The ubiquity of socially acceptable and unacceptable pharmacological routes to altered states of consciousness is a testament to the role played by chemical neurotransmitter modulation in determining the computational efficiency of cognition and the qualitative nature of experience (Thagard 2002: 430, 439-442). Directly via axonal signalling, and indirectly via modification of the neurochemical environment, the limbic emotional pathways play a vital modulating role in cognitive decision-making and in determining the feeling-tone accompanying appearances to consciousness.

Perceptually, experience is a fairly fixed form of explanation of the world because conscious experiences 'emerge' from the habitual 'top-down' cognitive commentary on information arriving from all sensory modalities (Varela, Thompson and Rosch 1991: 94-96). The fairly fixed patterns of conscious qualia are associated with veiled instances of similar patterns in episodic memory and with names in declarative memory. The result is the enrichment of the 'proto-self' and of primary experience by means of the recall of information about previous or 'secondary' experience over time. Recall enables an imaginative expansion of the range of possible future scenarios beyond those envisaged unconsciously and determinately by fixed action plans and fixed emotion plans (Llinás 2001: 133-153). These imaginative scenarios resemble primary experience because they are entirely constituted from recall of previous perception, but with the imaginative addition of a hypothetical self in place of a real subject of the scenario. In non-pathological circumstances the resulting cognitive familiarity reinforces the emotional restriction of imaginative scenarios to those from which a timely and effective selection can be made.

Primary experience is not immediate, because conscious events are products of the 'phase-locked' synchronicity of neuronal ensembles, requiring temporal duration in the 0.3-1 second scale (Libet 1965: 83, Varela 1999: 116-118). Although past and future imaginative scenarios can appear in primary experience as hallucinations, it is questionable whether the self/standards dyad (Dulal, Silvia and Lalwani 2001: 41), which attends to those scenarios is ever consciously experienced other than nominally in the form of an explanatory thought, that is to say, as a symbolic representation of

an imaginative construct that is always either retrospective or prospective with respect to experience. In theory, this absence of the self from conscious awareness includes the ‘Simple Ego-type Life Form’ of the ‘proto-self’. That primitive sense of self is the image of what has just taken place, and the standard of homeostasis that ought to take place, whereas the primary experience of awareness is a qualitatively-approximate temporal sequence of representations of ‘the way things really are’ from the sensori-motor location of the individual. The apparently-enduring self, which acts as an agent in imaginative recall and prediction of past and future scenarios, develops continually out of the history of the participation of the individual as the embodied locus of their own primary experience. The self, therefore, is a purely imaginative construct, which is only registered in primary experience in the form of thoughts about a fictional presence in imaginative scenarios. Duval, Silvia and Lalwani associate the hypothetical self-construct with a hypothetical standard of judgement (2001: 31-40), but self and standards are categories that are only conceptually-differentiated by their reference to the past and future respectively, for they arise as unconscious processes that combine to cognitively constrain decisions that are also emotionally-constrained (Damasio 1995). The imaginative construction of the self relates to a norm that is retrospectively constituted as an ‘essential’ version of the self (Lakoff and Johnson 1999: 282-284). It is ideal in the sense that it is believed to exist as an abstract object capable of a non-dynamic or unconditioned resting state (Collins 1982: 95). This ideal of self-homeostasis, I suggest, finds expression in religion as belief in the survival of the self after the death of the person.

Unlike the hypothetical self, the subject is always present to awareness. It is a peripheral presentation because it is marginally retrospective, as the end-state of the previous moment of neuronal synchrony, and therefore the beginning ‘horizon’ of the present moment of neuronal synchrony (Varela 1999). Asserting such a liminal origin for the subject makes it seem insignificant, but such an impression would be a failure to pay due regard to the very large numerical scales of complex associations that are dynamically enacted by neuronal-ensemble sequencing throughout the brain. It is the presence of the beginning ‘horizon’ in all these interconnected associations that constitutes the intimacy of the individual subject. The subject does *not* signify the presence of the self in immediacy, and has nothing whatsoever to do with the self,

because the subject is a-historical, it possesses no qualities, and adverts to no ethical or homeostatic standards. As long as the human brain is in a 'structurally-coupled' relation to the world, then the beginning state of one neuronal ensemble sequence generates the indifferent continuity of subjective being on the basis of the end-state of another neuronal ensemble sequence.

Although explanation, experience, self, and subject all contribute to the formation of attitudes, the *de re* experiential relation of 'suitable acquaintance' with the world takes precedence. Experience is *like* a spatial arena, within which information from perceptual cognition is exhibited, along with information from imaginative cognition and an awareness of the continuing 'horizon' of the subject, but there is no arena apart from neuronal processes of integration and binding of information from different sources. The vehicle or arena of consciousness is constituted by the unification of its contents (Treisman 2003: 95-98), and its contents are enacted by neuron firing in 'homomorphic' relation to the external world (Llinás 2001: 65).

Consciousness is the primary experience of relatively immediate awareness, and integration and binding is the relational act of structural coupling, not just of perceptual information from the world external to the brain, but between different functional neuronal processes that respond reactively and predictively to the external world. The relative ascendancy of each structurally-coupled process, in relation to the other processes, is bound together, possibly by the claustrum (Crick and Koch 2005), to constitute the apparent unification of consciousness. These processes are dynamic events, not static states of affairs. Most of their relations occur habitually and unconsciously, but the more these relational events are disseminated across the neuronal system, the more likely they are to take the time to modify all interconnected feedback systems and so appear as conscious events. The more complicated the task, the more systems are involved and the slower the speed of response (Pibram 1999: 22). If sufficient systems are involved their interrelation is experienced across the hierarchy in the form of consciousness.

The possession of human consciousness, then, relies upon the phylogenetically, ontogenetically and developmentally-organised structural connectivity of the brain. That connectivity and evolutionary history is necessary but not sufficient for consciousness. Crick and Koch's (2005) hypothesis implies that the claustrum only

correlates with consciousness in the sense that it provides the connectivity required to create the global dispersal of perceptual, somatic, emotional and cognitive information that could give rise to synchronisation in the form of qualia representative of external circumstances. The mind, therefore, is not *just* identical to or supervenient upon brain events, because consciousness depends crucially upon *de re* acquaintance-relations in the form of ‘structural coupling’ to a world external to the brain.¹ Suitable acquaintance *de re* with the world does not only provide contents for consciousness, but is necessary for the evolution of brains, and necessary for the enrichment of consciousness, whether or not consciousness has an identity or supervenience relation to neuronal events.

This study has focussed on mind/brain congruity, and thus far has adopted an impartial stance with respect to the conflicting ontologies of mind/brain identity and mind/brain supervenience, because in the absence of personal knowledge of disembodied circumstances any other attitude would be a conjectural matter of personal belief. Both identity and supervenience ontologies permit neuroscience to illuminate mind explanations, and allow ‘folk’ psychological mind explanations to illuminate brain explanations (Hardcastle 1992: 419). In both cases unification of explanation is achieved with the aid of bridging terms referring to human dispositions (MacIntyre 1971: 120-121).

Intentional and attentional acquaintance

The interview participants present a positive view of what they call ‘subjective experience’, and I call *de animo/de re* acquaintance with the world. They rely on subjective experience organised according to religious practice as the anvil on which teachings *de dicto* are tested in order to determine whether adherence to any particular explanation is personally and socially beneficial.² In effect, the practice of appropriate attention to primary experience is expected to naturally warrant suitable attitudes towards the world, towards others, and towards oneself. Shaw describes this emphasis on experience and practice as ‘a positive tradition’, and as ‘clarity and awareness being the essential nature of one’s being’. This experiential strand running throughout Buddhist tradition is what primarily concerns him; it is why he places greater emphasis on the influence of teachers (*adḥistāna*) than the guidance of

doctrines. He dislikes negative doctrinal formulations, ‘a bunch of scholarly tricks’, which he discerns in the Pāli commentarial and Madhyamaka traditions, and which he considers to be designed to distinguish Buddhist from Hindu attitudes towards the self. For Shaw, any logical explanation designed to refute meditative understanding interpreted within another tradition misses the point, because all explanations tend towards *prapañca*: an ‘elaboration or proliferation of views’, or ‘structures of delusion or grasping’. Logical understanding of doctrinal expression is less important than ‘insight’, and ‘if you want to get insight...you’ve got to talk about what your mind is like’ (Shaw).

What the mind is normally like, according to Crook and Prasada, is structured by underlying intentions that are deluded, grasping, and proliferating. Crook calls for a rebalancing of awareness, which, I suggest, implies a psychological form of homeostasis, achieved by reducing the amount of time spent in attentional states as opposed to intentionally-motivated states, and/or more attentional awareness during intentional activities. Occurrence in consciousness usually indicates that an object is the focus of attention, because the individual anticipates a need to develop judgements and intentions with respect to the object (Nelkin 1993: 420), therefore intention and attention normally occur hand-in-hand. Despite making the attention/intention distinction in his spatial model, Crook notes that attentional awareness does occur during intentional states: it is just that attention can be widely focussed during more attentional states, but is narrowly-focussed during intentionally-motivated states (Crook 2002b: 105).

Initially, religious practices for the modification of psychological states involve training to turn a deliberate modification of awareness into a habitual and spontaneous modification (Kennedy 2004: 151-152). In neuroscientific terms, neuronal pathways are being reconfigured or reinforced by means of Hebbian plasticity (1949: 69). In Hulse, Read and Shroeder’s terms, a ‘mind to world’ expectation is transmogrified into a ‘world-to-mind’ direction of fit (2004: 74). If the expectation is fulfilled, the result from a Buddhist point of view is the replacement of a harmful with a beneficial response, for goal-oriented intention (*cetanā*) generates *karma*, whereas spontaneous attention motivated by the basic *de re* quality of

‘aboutness’ (*manasikāra*) does not (Govinda 1969: 115-116) and can be beneficial if it is proper to circumstances (*yoniso-manasikāra*) (Nyanatiloka 1980: 115).

Crook considers that a balanced mind should spend more time in subjective self-consciousness and in wide attentional states than is wont to happen these days, and his point is reinforced, not undermined, by the criticism that intentional states are not conscious states at all. The desired consequence of such a relocation of awareness is not the elimination of intention, but an ethical alteration to intentional motivation as a result of greater awareness of ‘the way things are in the world’, rather than the ways things ought to be for the benefit of an imaginary self. Crook’s model can be related to the Buddhist discourse of compassionate wisdom (*karuṇā*), for awareness reveals that the susceptibility of all existence to change is felt by sentient beings to be unsatisfactory (*dukkha*).

Attenuation of craving

Lewis (1979: 540) admits the definitional vagueness of his *de re* condition of ‘suitable acquaintance’ with the world, but ‘acquaintance’ presumably means structurally-coupled experiential access to the object of an attitude, and ‘suitable’ indicates that the understanding gained from access is sufficient warrant for the ensuing attitude. In terms of Buddhist psychological theory, ‘suitable’ presumably means whether or not acquaintance is karmically-conditioned by an attitude such as craving (*taṇhā*), for a conscious event (*citta*) always arises with attendant conditioning factors (*cetasika*), most of which can be evaluated for good or ill (Rhys Davids 2002: 175-177, Rowlands 1982: 9-10, van Gorkham 1975: 12-13). The notion that cognitive events are habitually combined with evaluative dispositions explains why the epistemological ‘is’ and the ethically-evaluative ‘ought’ are not considered separately in Buddhism (Fuller 2005: 9). While western philosophy tends to separate moral suitability from suitable acquaintance under the rubric of epistemology, Buddhism emphasises the ubiquitous arising of psychological conditioning factors that make acquaintance with an object morally suitable or unsuitable (Govinda 1969: 99). Not only are ‘world-to-mind’ action-decisions conditioned by those factors, but ‘mind-to-world’ perceptual cognitions cannot be trusted, as they are in the West by Augustine (2002: 79), until unwholesome

conditioning factors such as greed or attachment (*lobha* or *rāga*) hatred or aversion (*dosa*) and delusion or ignorance (*moha* or *avijjā*) are restrained. This is the context in which Prasada and Dharmavidya refer to the Buddhist dispensation as a ‘psychology of addiction’.

Prasada interprets the basic formulations of early Buddhism, particularly the Four Noble Truths, the five *khandha*, and the ‘omnipresent conditioning factors’ (*sabbacitta-sādhāraṇa*), as a diagnosis of the predilection to escape into the self from a world existentially experienced as *dukkha*. She calls this escape ‘both a protection and a prison, creating a *cordon sanitaire* between the person and the world’ (Brazier 2003: 33). The basic diagnostic formulations give rise to therapeutic prescriptions for re-conditioning the mind until it is freed from both *dukkha* and the ‘self-prison’. These prescriptions work by enabling more ‘direct’ forms of acquaintance with the world to act as antidotes to modes of acquaintance that are considered to be indirect in the sense that they are conditioned by habitual, self-constituting responses (Brazier 2003: 69).

Prasada refers to *cetanā* and *manasikāra* as ‘subdivisions’ of consciousness (*viññāna*) (Brazier 2003: 101).³ Together with three other ‘omnipresent factors’, attention and intention motivate the subject/object orientation which guides the day-to-day doings of individuals. Prasada associates the operation of the *khandha* and the omnipresent factors with selfish individualism, as the cause of ignorance of the way things really are in the world. For her, the form of every mental phenomena (*rūpa*) is conditioned by ‘self-investment’, therefore fails to be a ‘direct’ perception of the ‘thing-in-itself’ (*dharma*) (Brazier 2003: 68).⁴ Although persons are conditioned by the objects they perceive, they condition their own perception of those objects. By investing objects with preferential qualities, they identify with objects, their personality is reflected by objects, differentiated in contrast to objects, and the objects are felt to be possessions, with the result that the apprehension of objects is implicated in the creation and reinforcement of an imaginary, objective self (Brazier 2003: 63). Prasada argues that the mode of relating to external objects is deeply implicated in the mode of relating to the self. Self-investment is not just an aspect of intentionality (*cetanā*), but adheres to each of the *khandha*, and to each of the ‘omnipresent factors’ of the perceptual stages of a mental event: contact (*sparsā*),

feeling or ‘reaction’ (*vedanā*), perception or ‘entrancement’ with imagery associated with a percept (*samjñā*), volition or intention (*cetanā*) and attention (*manasikāra*) (Brazier 2003: 100-105). This systematic, Abhidhamma-based account is conceptually complicated in comparison to Crook’s relatively simple notion of rebalancing intentionality and attentionality. In particular, the psychology of behavioural change is complicated by the hypothesis that each of the omnipresent factors, including attention (*manasikāra*) can be self-invested. Prasada’s thesis is that change is possible at the appearance of each factor, for where there is self-investment there is the possibility of self-disinvestment. She describes psychotherapeutic techniques for self-disinvestment with respect to each of the omnipresent factors, and with respect to each of the five *khandha* (Brazier 2003: 79-115).

Because Prasada’s explanation is more systematic than Crook’s, the opportunities it affords for psychotherapeutic exposition may appeal to some practitioners, but not to others, like Shaw, who feel burdened by the ‘proliferation’ of scholarly Buddhist explanation, especially if the referents of the terms used are not necessarily found by phenomenological observation. As with any *de dicto* account, there is a risk that the existence of things is assumed simply because they are conceived of and named in a particular context. It is likely that the *khandha* and the omnipresent factors will exceed the powers of phenomenological observation, because they are ‘folk’ psychological analytical categories rather than discrete parts of experience: they dissect parts of the world that are normally conjoined.

Neuroscience indicates that cooperation between cognitive and emotional systems occurs before neuronal event-synchronicity is sufficiently globalised across the whole brain to appear as consciousness. This indicates that the ‘omnipresent factors’ are not discrete mental events in their own right: contact, reactive feeling, associated imagery, volitional disposition and heightened attention become bound for appearance to consciousness as one phenomenal event. In other words, *citta* and *cetasika* are thoroughly combined by the time a cognition (a representative imagination) or a perceptual cognition (an indirect representation of the external world) appears to consciousness. The omnipresent factors may be logically conceivable independently, but not cognisable as discrete phenomena.

The self is apparently the most discrete of the ‘folk’ psychological categories. It is a symbol for the historical person, but in ordinary discourse both ‘self’ and ‘subject’ commonly denote the ‘I’ as if it were an enduring abstract object. Thus, self becomes confused with the subject *de animo*, in the dual meaning of that term, firstly as the initial and transitory ‘horizon’ of every experience, and secondly as a hypothetically eternal soul. From a neuroscientific point of view the self is not an abstract soul-like object, but the transitory arising of habitual feedback processes that produce unified effects in consciousness. Damasio (1999), Llinás (2003) and Panksepp (1998) have described some of those processes in the thalamo-cortical-brainstem system, and Damasio (1995) has hypothesized the cooperation of top-down cognitive self-process functioning under ‘somatic’ control in the medio-ventral prefrontal cortex. It would appear that there is a self, in the neuroscientifically-restricted sense of the habitual patterning of cognitive/affective neuronal feedback processes, but Prasada makes it clear that there is no self, in the philosophical sense of an abstract, enduring, spatially internal object, capable of meaningful possession of external objects of desire (Brazier 2003: 31-32).

Homeostatic control

The attitude of equanimity or indifference towards the ontology of mind, displayed by most of the interview participants, is not the same as methodological impartiality. Equanimity does not prevent the equable advancement of opinions, ranging from Crook’s rejection of the possibility of a ‘body-mind dichotomy’ (Crook 1980: 14-36), through Jones’s preference that mind and body should not be distinguished, Ratnaprabha’s preference that they should be distinguished, to Shaw’s transcendental ‘neo-idealism’ and Wistreich’s view that mind/brain identity is ‘just a joke’. Their equanimity is not based on absence of opinions, but on an ability to put irresolvable or transitional ontological questions to one side, in order concentrate on psychological issues that can be resolved in this life.

The participants’ concern is for subjective experience and for those doctrinal explanations such as the Noble Truths, *śūnyatā* and the *skandha*-theory, which indicate practical means to alleviate the suffering that is characteristic of embodied being. They use Buddhist ethical and psychological ways and means to modify the

effects of selfish intentionality on their own subjective experience, and on the experience of others. They are not particularly interested in whether a particular doctrine can be improved, for imperfections in explanation are expected to be clarified in the course of experiential realisation. The *Dhamma* is considered to be an ‘ancient path’ (Bhikkhu Gavesako): it is the truth about the world whether it is correctly explained or not, and whether it is correctly realised or not. With a belief that there is a path to truth, there is less requirement for absolute faith in the *Dhamma* as a once-and-for-all revelation requiring no experiential testing, because past realisations are expected to be replicable in the future.

The Buddha is obviously very important as the founder of this process and as, in my opinion, a very, very great teacher. (It is) well worth listening to what he says - but it is not absolutely crucial to know - ‘did he really say this or did somebody add it later?’ What matters is, for me at least, does it work or not, is it useful or not? (Ratnaprabha).

What matters is how to traverse the path to realisation, which means how experience of the world is altered under the guidance of fallibly-true explanations of an ideal pre-existing truth. If Hulse, Read and Schroeder are right about the nature of consciousness, such alteration would initially be a ‘mind-to-world’ direction of fit under the *de dicto* sway of a teaching, but a ‘world-to-mind’ direction of fit as the experience approximates to ‘the way things really are’. This suggests, firstly, that during religious practice the mind is altered to conform to an explanatory ideal of imperturbability, and secondly, that the alteration is an unconscious performance, because the disposition to make an alteration is an intention or desire, and there is no such thing as a conscious desire (Hulse, Read and Schroeder 2004: 75). From a physiological point of view, the affective sense of unease or suffering that unconsciously motivates desire is a manifestation of the work of systems monitoring homeostasis. Approximation to homeostasis is therefore experienced as an affective sense of freedom from suffering, as the outcome of a succession of emotionally and cognitively-guided sensorimotor manoeuvres in response to a succession of developing homeostatic imbalances.

The religious notion of the ‘sacred’ can be envisioned as referring to culturally significant evaluations of events conducive to homeostasis in all possible situations. Thus, the notion of the sacred can denote thoughts, emotions and actions by

individuals and by groups, sometimes with respect to objects and places, either with immediacy or over extended time, which have direct and indirect bearing on embodied homeostasis. The category of the sacred can therefore include its profane antinomy, because it is a way of making sense of or propitiating events such as childbirth, coercion or mortality, which are liminal or antithetical with respect to the homeostatic ideal. Since the Buddha's enlightenment is traditionally respected as an event of ultimate significance it can, I contend, be ascribed to the western category of the sacred, and can be understood by comparison to the ideal of homeostatic balance, the ideal of cessation of striving for homeostasis, or 'middle way' approach to recurring approximations to the homeostatic ideal.⁵

'Homeostatic balance' prototypically refers to the stable maintenance of the internal environment of an embodied organism. The view that mental operations such as imagination, concept-formation and logical reasoning are all derived from embodied experience of the external world is propounded by Johnson (1987), with respect to basic 'image schemata' of containment, force, and balance (Johnson 1987: 80-100). These are not images as such, but 'a means of structuring particular experiences schematically, so as to give order and connectedness to our perceptions and conceptions' (Johnson 1987: 75). Johnson argues that balance is a pre-conceptual ability acquired through embodied activity, prior to the intervention of 'rules' or explanation (Johnson 1987: 74).

We...come to know the meaning of balance through the closely related experience of bodily equilibrium, or loss of equilibrium. We understand the notion of systematic balance in the most immediate, pre-conceptual fashion through our bodily experience.

...the *meaning* of balance begins to emerge through our *acts* of balancing and through our *experience* of systematic processes and states within our bodies. (Johnson 1987: 75)

Johnson is not only describing the sensorimotor integrating mechanisms of those parts of the mind/brain, loosely denoted by Aquinas as the *sensus communis* (Gilson 1929: 228-229), which integrate perception and motor response; his remarks also encompass the phylogenetically-ancient brainstem processes of bodily homeostasis, which, according to Damasio, give rise to the 'proto-self' (1999: 158-161). Balance and homeostasis are structurally similar bodily events, with some overlap of identity, involving equilibration of forces. The difference consists in the forces evoked, which

in acts of balance are mainly muscular on the basis of neuronal transmission, whereas in embodied homeostasis all the bodily action systems are involved, mainly under the influence of autonomic neuronal and endocrine hormonal transmission. In its limited scientific sense, homeostasis means ‘the maintenance of metabolic equilibrium within an animal by a tendency to compensate for disrupting changes’ (OED) but the term can be meaningfully extended to include the maintenance of bodily equilibrium within an external environment. It is common to extend the use of ‘balance’, but less common to extend the use of ‘homeostasis’, to refer to the maintenance of psychological and social equilibrium. The psychological use of ‘homeostasis’ is partly rhetorical, for it reinforces the message that the mind is embodied, but unlike the psycho-social use of ‘balance’, the psycho-social reference of ‘homeostasis’ is more synecdoche than metaphor, in that psychological equilibrium is a contribution to bodily homeostasis in any event.

We have seen that Crook (1992) argues for a balance between intentionality and attentionality. In his interview he gives a simple explanation of what that means:

Now, it is clear that human beings have needs: needs for food, needs for sleep, needs for shelter, needs for sex, and human beings also have *need*, which means you want more of whichever of these it is. And this is related to the development of comparisons between people: he or she is better than others, so you begin to get values which are really ratings of self versus others, and we turn these ratings and values into desires. Not needs: desires. Now needs could be said to belong to biology; desires belong to psycho-sociology, but of course they are connected. [Here we arrive at] what the Buddha called the second Noble Truth, [which] refers to desire. Desire is related to values; we value the world and then we set about desiring it or not desiring it as the case may be, wanting or not wanting, and that of course is the source of suffering, as the Buddha said, in my view perfectly accurately.

If you are thinking in terms of some kind of homeostatic model, it is clear that only when those desires have either diminished or been totally satisfied is one going to reach some point of balance, otherwise the mind is going to be continually disturbed and therefore suffering in some form or another is also going to continue. So the Buddhist answer is to examine very tightly and closely what those desires and wants are, and of course ultimately whether there is a self which really is there, or is the whole thing just a cognitive construction? The answer, of course, is that it is just a cognitive construction.

So what is all this about? The aim of Buddhism is to reach a point where you do not bother anymore with these desires, and that is freedom in a sense...but then a critic would say, ‘but that just means

doing nothing at all'. No, because the biological needs are still there. You still need to live a life that has food, satisfactory social relationships, sex and children and all the rest of it. All of this is biological, but you do not have to encumber that with all the extraordinary business of egotism and self-aggrandisement and desire, and finally wars, murders and quarrels; none of that is actually necessary. But if you manage to reach equilibrium more or less with respect to that, you still have an active life to live; you still have to be a farmer or a banker or something or other, so the idea that finding some kind of homeostasis would mean inactivity is not in my view correct. (Crook)

A psychological homeostatic model does not achieve stasis because, as with balance, homeostasis is maintained by a succession of corrective activities. The regulation of bodily homeostasis is largely automatic, but Damasio suggests that it is precisely the modelling of sensorimotor responses to the disruption of homeostasis by external 'objects' that gave rise to the evolution of self-consciousness (1999: 159-161). The notion of homeostasis can therefore be extended to include conscious relations between embodied beings and the external world, and to include psychological and social processes. As a 'Middle Way' between asceticism and hedonism (Ñānamoli 1993 [SN. 56.11]), Buddhist practice is quite literally a psychological and physiological means to homeostasis, and on that basis it is reasonable to suppose that enlightenment in this life (*saupādisesanibbāna*) refers to an ideal psychological and ethical achievement of balanced relations with the world, which is felt in the form of liberation from suffering.⁶

In contemporary developed societies under peaceful circumstances, where many gross forms suffering are alleviated, palliated or sequestered within institutions, speed of response to external causes of homeostatic imbalance becomes relatively less important than the quality of judgemental deliberation over complex choices, but there remains an imperative to attend immediately to deviations from bodily homeostasis, along with a requirement for psychological and social rebalancing over extended time.

Different sorts of homeostatic rebalancing impose practical constraints on freedom of choice. Both body-system rebalancing and psycho-social rebalancing depend on the control and maintenance of permeable barriers against the world: the bodily barriers are physical and obvious, whereas the psycho-social barriers are imaginary projections of bodily barriers. The individuality of persons not only

depends on overt embodiment, but on ‘autopoietic’ barriers (Maturana and Varela 1998), which, according to Varela Thompson and Rosch (1991) constitute a division between the mind/brain and the external world at physiological levels of explanation, so the imperative to make sense of the division between mind and world constitutes a dilemma at all levels of explanation. At the underlying causal level, there is the dispute between enaction and representation theories, discussed in Chapter 6. At the ‘level of appearances’, the greater the psychological sense of personal individuality, the more the mind/world barrier becomes impermeable, and the more that psycho-social relations with the world become disfigured by inappropriate habitual reactions. Both Pym and Ratnaprabha remark that enlightened relations with the world are characterised by creativity rather than reactivity. Their suggestion goes with the grain of evolution, for in comparison to animals human beings have developed an ability to respond to the present with cognitive creativity in the light of information from the past, rather than reacting exclusively by triggering the ‘fixed action patterns’ restrained in the basal ganglia (globus pallidus and putamen) (Llinás 2001: 135-136), which are of phylogenetically-ancient ‘reptilian’ origin (Maclean 1989: 35). Creativity of response is an indication of the freedom with which unusual options are initiated, rather than being constrained by fixed emotional patterns which trigger fixed action patterns.

The problem, for human animals, is that creative responses are still unconsciously conditioned by the emotional responses that trigger fixed actions over short timescales. These quick responses often turn out to be bizarre, destabilising or destructive when they have psycho-social effects over extended time. The psycho-social effects of emotional destabilisations can be alleviated cognitively, by the use of language to refer symbolically to intended objects, because the experience of symbols does not generate the same degree of emotional response as experience of their associated objects (Panksepp 1998: 319). It may be that the inhibition of inappropriate short-term emotional responses to long-term situations is a contributory factor in the evolution of language, as a development of gesture in place of action. Imaginative explanation, as a symbolic, cognitive form of experience, can stand in for extreme forms of experiential engagement, but explanation alone cannot eliminate

occasional breakdowns of psycho-social homeostatic control, leading to outbursts across the range of emotional modalities.

Of course, the interchange between cognitive and emotional processes is one of reciprocal control, but the flow of traffic remains balanced only in nonstressful circumstances. In emotional turmoil, the upward influences of subcortical emotional circuits on the higher reaches of the brain are stronger than the top-down controls. Although humans can strengthen and empower the downward controls through emotional education and self-mastery, few can ride the whirlwind of unbridled emotions with great skill (Panksepp 1998: 301).

Symbolic representations of bodily and social homeostasis, such as self-image, personal standards or religious or patriotic values, may be swept aside when they are tested by external circumstances beyond habitual control. In those cases the operation of ‘top-down’ cognitive intervention is overwhelmed by emotional responses initiated by the diffusion of chemical neurotransmitters. In practice this means that freedom of choice in the midst of determinism may be habitually over-constrained by Llinás’s fixed emotion and action patterns, unless those patterns are themselves modified by long-term behavioural conditioning. That hypothesis is a justification for Buddhist practices that incorporate ‘bottom-up’ behavioural techniques designed to encourage emotional balance in stressful and non-stressful circumstances.

The structure of homeostatically-functional neuronal systems is part of the evolutionary heritage of what it is to be a human being. Homeostatic monitoring is inherently valuable, but when immediate personal survival is not the primary issue the mind may respond to complex long-term situations in ways that destabilise psychological and social homeostasis. Religious practices function psycho-socially to moderate, mitigate or incorporate inappropriate responses, and in the process to provide an occasion for the generation of significant meaning.⁷ Most emotional responses are phylogenetically-habitual, but they are also developmentally-habitual over a lifetime, and are in theory modifiable by both ‘top-down’ cognitive and ‘bottom-up’ kinaesthetic techniques, sometimes involving intentional manipulation of ascetic or hedonistic embodiment, but mainly involving ritual practices, including meditation, which deal with embodiment attentionally by the development of ‘mindfulness’ (Kennedy 2004: 150-151). *Vipāśyanā* and tantric *sādhana* practices do

use ‘top-down’, that is to say, cognitive linguistic or *de dicto* explanations that mainly involve language and visual manipulation centres in the cerebral cortex, but most ritual Buddhist practices are directed towards ‘bottom-up’ alterations to habitual modes of acquaintance with the world, involving repetition of somato-sensory activations of the thalamo-cortical-brainstem system. By so doing, Buddhist soteriological techniques partially circumvent the philosophical problem of how ‘top-down’ cognitive freedom can be implemented in a causally-determined world.

Freedom in determinism

In the course of her explanation of the psychology of addiction, Prasada characterises the mind as engaged in compulsive processes that serve to reinforce the notion of an objective self (2003: 21-26). The importance of reinforcement feedback in mental processes is confirmed in neuroscientific terms by Varela Thompson and Rosch (1991), Llinás (2003), Damasio (1999) Panksepp (1998), and by Grush (2003: 68-71) in terms of systems theory.⁸ Feedback reinforcement constitutes a closed system, hence it may seem paradoxical that Prasada emphasises the possibility that the rise or origin of a response (*samudaya*) to affliction can be a choice (Brazier 2003: 11-13, 21, 26, 33, 80), although only a choice in the sense of the containment of an afflictive emotional response (Brazier 2003: 84). Amidst the determinist causal law of dependent origination (Pāli *paṭicca-samuppāda*, Skt. *pratītya-samutpāda*),⁹ Prasada observes that a ‘choice-point’ (*samudaya*) arises, which allows an individual to either attach to a percept in a way that reinforces their sense of self-worth or to escape from the ‘self-prison’, as ‘spiritual practice provides a means of breaking through the compulsive patterns that make up the self to a direct encounter with the world’ (Brazier 2003: 100). But where and when in the course of ‘spiritual practice’ does the choice-point occur? As Prasada describes it, it is not absolutely clear that the turn away from self-investment is a conscious intentional act. As Crook describes it, the turn is not a conscious decision; it just happens to be the case that someone who ‘focuses upon ongoing activity irrespective of personal agency’ experiences freedom from stress, whereas intentional activity based on taking the self as an object is a comparative mode, often a socially-comparative mode, which generates anxiety (Crook 2002: 104, 1980: 312-314). Prasada’s use of the word ‘choice’ sets up the

dilemma of how an intentional act can lead to freedom from intentional acts. Crook only avoids that dilemma because he does not address the question of how the turn from intention to attention is initiated, in other words, how Duval and Wicklund's intentional 'objective self-consciousness' (1972: 2-6) comes to be replaced by more attentional 'subjective self-consciousness' in a religious context.¹⁰

Buddhism affirms that the world is patterned in an orderly fashion in accordance with the law of dependent origination, yet because a person's actions have consequences, there must be 'a sufficient measure of free will' (Basham 1981: 8, 224). This was a significant issue for early Buddhism, for it differentiates the Buddha's teaching from the proto-Ājīvika tendencies of Pūrana Kassapa (ethically-antinomian) of Makkhali Gosāla (fatalism or *niyati*), and of Pakudha Kaccāyana (Parmenidean immobilism), as described in the *Sāmañña-phala Sutta* (Rhys Davids 1992: 65-95 [DN 1:47], Basham 1981: 15-18). The prospect of freedom in the midst of determinism remains a philosophical conundrum, although neuroscientific explanations for mental events appear, despite appeals to quantum indeterminacy, to have tipped the balance of the argument in favour of determinism (Honderich 1988: 334-336). However, if the conscious properties of mind only emerge at a certain level of neuronal complexity and organisation, then they might be capable of downward causative effects (Varela and Thompson 2003: 275), which would amount to freedom of action in the midst of determinism. Against the notion that emergent properties exert downward causation, Klee argues that in most cases, emergent 'macro' properties remain determined by causal connections between 'micro' properties at the lower levels of a system (1984: 44-57). Only if emergent properties constitute another system altogether would they escape the causal determination of the system from which they emerged (Klee 1984: 58-62). Such systematic independence could not, however, be considered an emergent property, unless some mechanism could be shown by which a property could sever causal relations with the micro-level events that maintained its emergence. That leaves the possibility that consciousness is independent of brain activity in a relationship of *prior* supervenience that allows time for causation (Wallace 1999: 161), rather than a non-causal relationship of contemporaneous supervenience (Kim 1993: 177-178). In the current state of knowledge an independent property of mentality remains only a hypothetical

possibility, whereas neuroscientific trauma and stimulation studies have empirically demonstrated a causal micro-determinism between brain events and many types of conscious event (Penfield 1950: 6-7, 157-159, 160-181). However, Damasio's 'somatic marker' hypothesis implies that neo-cortical development has enabled automatic feedback responses to reach such a level of complexity that they can at least be *described* as decision-making, albeit under the constraining limitation of emotional systems (Damasio 1995: 1414).

In Chapter 6 I have cited work in the philosophy of science, which argues that the reduction of psychological discourses of the sort that admit the possibility of freedom of choice, to lower-level scientific explanations of the sort that imply determinism, is unnecessary, because different levels of discourse can be unified without reduction if they perform explanatory work that can only be done at that level (Fodor 1980, Kircher 1976, 1989, Hardcastle 1992, Jones 1995, Teller 2004). It may be that an action undertaken freely according to 'folk' psychological explanation is in fact micro-determined by internal and external variables, but the complex causal relations between those variables are likely to be untraceable for all practical purposes. 'Folk' psychological, intentional, choice-based explanation forms a traceable causal explanation that is relevant to lives lived on the level of appearances, and therefore at that level the concepts of personal freedom and personal responsibility remain meaningful. Above and below that level, meaningful explanations are functionalist and determinate. Other than a rigorous demand for philosophical consistency,¹¹ there is no reason why useful free-will explanations should be reduced to determinate explanations at other levels.¹² However, once the unification of levels of explanation is accepted, approximate indications of the underlying determining causes of events can usefully guide explanations couched in terms of free choice, for they can indicate the reasons why intentional decisions taken in conformity with 'the way things really are' are less likely to be thwarted by the micro-determinacy of underlying causal events.

Crook's interpretation of his states of awareness model implies that bare attention, as a diminishment in the urgent intentionality that normally motivates choice, is a step on the road to enlightenment (*bodhi*), because it is a process of becoming awake to the world that resembles the practice of mindfulness under the *śamathā* meditative

technique. It is a doctrinal question as to whether a psychological technique of intentionality-reduction is sufficient support for a Buddhological doctrine of enlightenment, but a practical question as to whether habitual intentionality could be eliminated from the cognitive and emotional management of sensorimotor response. If intentional dispositions are not conscious states, as Hulse, Read and Schroeder (2004) suggest, then habitual intentional dispositions are unlikely to be subjugated by the ostensible freedom of conscious cognitive control. If intentionality is not only a developmentally-acquired habit but a phylogenetic function instantiated along ancient neuronal pathways, then intentionality may be modifiable, but is unlikely to be eliminable. Although an intention is not a conscious act, it is alterable by choice, yet a choice is also an intentional act. It follows that intentional choices are not conscious acts, and from a restrictive neuroscientific perspective they are not even acts of mind, because only consciousness is ‘minding’.

If the brain makes decisions by unconscious feedback processes that are reported second-hand to consciousness, then freedom of choice is a fictional component of explanation. But imaginative fiction plays a vital part in the mind’s feedback processes for the purpose of prediction, loosely delineating the future time and space in which actions are predicted to be effective. Because choice involves imaginative prediction about what ought to happen in a determinate world that it can only approximate to freedom, and it is because free action is subject to external curtailment that the concept of freedom elicits an emotional response, which gives it an affective quality. In Japanese Pure Land terms, choice is own-power (*jiriki*), and its external double is other-power (*tariki*). Both Jones and Pym associate other-power with *any* external circumstance, not just with the personification of Amitābha. The implication of their interpretation of Pure Land teaching is that freedom is a balance, or a suitable equation between other-power and own-power, as the dilemma of choice in the midst of determinism is resolved experientially on each occasion.

If intentionality is not a conscious state, then Prasada’s *samudaya* tipping point, as the realisation of the Second Noble Truth, is an unconscious cognitive/affective occurrence *prior* to consciousness, when intention to grasp the desired object either does or does not happen as a motivation to action. In order to facilitate the relinquishment of grasping, therefore, Buddhist attitudes and behavioural practices

must take effect in advance of ostensibly free and rational decisions. If sedulously followed, ‘bottom-up’ Buddhist behavioural practices take advantage of the micro-determination of choice, restraining addictive emotional responses of craving (*taṇhā*) and grasping (*upādāna*) and carrying the individual beyond the tipping point without need for overt action in the form of a free choice.¹³

On this interpretation of Prasada’s scheme the most significant choice-point is the decision to engage in Buddhist practice, whereupon the subsequent relinquishment of grasping, because it is a systematic effect of non-intentional states of mind, dissolves the anomaly of freedom in determinism, at least at the level of intentional behaviour.¹⁴ I associate this possibility with Crook’s remark that the relinquishment of grasping enables the world to be ‘given’. The difference between the world experienced with and the world experienced without the motivational disposition (*cetasika*) of grasping or attachment (*upādāna*) may be that qualities of relationality become as apparent as qualities of objectivity. According to Crook, the difference is ‘of the nature of an affect’, thus it is not a rational confirmation of a philosophical view, or a fundamental change in sensory object-recognition. The world experienced without grasping is the experience of being *of* the world, rather than *in* the mind, in other words, the realisation that all appearances to consciousness, sensory, affective or cognitive, are equably apprehended on the same plane. That is not a denial of the external hylic world, or a denial that appearances correspond representatively to the external world: it is a denial that there exists an internal world of unconscious psychological events, which happen to have the same form as conscious events, as if they were like conscious events. This is a denial of internal space inhabited by real referents for ‘folk’ psychological categories.¹⁵ Such a metaphorical space is a socially-useful fiction, but is not ‘the way things are in the world’. The internal world is only neuronal, and consciousness is an emergent property, or a supervenient property, micro-determined by very large scales of mutual neuronal interconnectivity. Mind, apparently, is either identical to that property, as ‘minding’, or it is supervenient, not just on the general property of consciousness, but on the functioning of every detail of every interconnected neuronal part that instantiates the emergent property of consciousness. Out of the micro-complexity of feedback processes there emerges the semblance of freedom of choice. Out of the conformity

of decisions with the way of the world, arises approximation to homeostasis, and an affective sense of freedom.

From the perspective of the four-fold mind-model based on Lewis (1979), the paradox of choice arises from the activity of self-constituting processes, not from the activity of subject-constituting processes. As a real but passive beginning ‘horizon’ to each conscious moment, the subject is utterly indifferent with respect to intentions about things appearing to consciousness. The self, on the other hand, is a fictional denotation of the activity of cognitive agency that becomes characterised as an abstract object and an ideal standard version of itself. Only the explanation of the self as an abstract object in metaphorical space is fictional, for the underlying transitory processes are real and neuronal. ‘Self’ is a mere name that is useful in the ‘folk’ psychological explanation of embodied actions, and in the context of those explanations the imaginative prediction of freedom in determinism is also useful, therefore both self and freedom of choice are ‘veridical fictions’, which are experientially true in the context, and the level of explanation, at which they are used.

Self is also useful as an evaluative bridging term in the unification of higher-level psychological explanations and lower-level functional neuroscientific explanations. On one hand, if neuroscientific explanations were bereft of unification by ‘bridging terms’ to higher-level psychological explanations, they would be functionally meaningless descriptions; on the other hand, the ‘explanation extension’ of neuroscientific theory reveals that the presumption that the self enjoys freedom of choice is functionally problematic. The conception of a self acting freely without determinate constraints overwhelms the possibility of a more relational experience of ‘the way things really are’. The category of the self, therefore, is not entirely an ‘idle wheel’, for the term denotes a cognitive function performed under emotional or ‘somatic’ constraints, in relation to a set of developmentally-acquired standards by complex and determinate neuronal feedback processes.

The Buddhist *sutta* and *Abhidhamma* resources that are deployed by Prasada and Dharmavidya offer considerable insight into the different ways in which choice is emotionally-constrained. In a nutshell, Prasada and Dharmavidya describe perceptions and actions that are addictively-determined by appetitive and repulsive craving (*lobha*, *dosa* and *moha*) and by ‘self-investment’. Release from addiction

may not be the result of free choice in the philosophical sense, but it is a freedom from imprisonment in habitual patterns of response that cause existential suffering.

With respect to the four-fold model of mind, could freedom be attained without *de dicto* forms of acquaintance with the prior guiding experience of others? Members of the category of *Pratyekabuddhas* are indeed surmised to achieve enlightenment on their own initiative, but they presumably respond to their external context, rather than only to themselves, as if they were part of a ‘brains-in-a-vat’ thought experiment.¹⁶ Similarly, the Buddha is reported to have achieved liberation without the prior insights contained in his subsequent teaching, but he did have the prior conditioning of his times, upbringing, teachers and experiences, and on the mythological account, of his previous lives. It is awareness and acceptance of this relationship of acquaintance to context, rather than specific acquaintance with doctrine, which allows a sense of freedom to arise. The most soteriologically effective Buddhist *de dicto* explanations may be those that merely indicate that relations *de re* are the only ‘the way things are in the world’. In Shaw’s terms, they are ‘the good *upadeśa*’, designed to convey an effect to the listener, but a soteriological rather than a rhetorical effect.

Crook argues that ‘we have to get away from this strict dualism of mind and matter towards something that is more holistic’. The holism he seeks does not happen in the form of truck between a self-existent self and self-existent objects, but as a complete set of relations between properties on either side of the mind/world division. The theory of ‘autopoiesis’, and Varela and Singer’s observation of the top-down cognitive suppression of initial perception in binocular rivalry (1987: 10, 19), suggest that qualitative percepts only indirectly represent the external hylic world, yet at every stage in perception, property-relations are occurring across the ‘autopoetic’ barrier, in advance of the ascription of the form of objects to bundles of properties.

As Prasada makes clear, a self-invested person ordinarily thinks of the self as an abstract internal object that exhibits intentional attitudes towards external concrete objects (Brazier 2003: 100), but what is required for the elimination of suffering is unmediated encounter with the externalism of relations, which on the Buddhist account gives rise to a spontaneous ethical attitude that is naturally compassionate, once it is realised that concern for the self cannot transcend concern for others without becoming a form of self-imprisonment. This ethical response, which

emphasizes relations *per se* rather than object-relations, chimes with Lyotard's view that 'the Other is prior to the Self' (Lyotard 1997: 111).¹⁷ It is the history of relations with external otherness that constitutes the self-centred habitual responses of attraction, indifference and repulsion. The way things are in the world is therefore better expressed in terms of the priority of relations, and the realisation that neither the person nor the other can escape a mutual relational dependence, which is most soteriologically effective when it approximates to homeostatic balance.

Minimally, therefore, the concept of freedom in the midst of determinism refers to a psychological change of acquaintance with the world from object-relations to property-relations, and from addiction to individuality to balanced relations with otherness. This change is very like the Yogācāra notion of 'revulsion of consciousness' (*parāvṛtti*) (Govinda 1969a: 82), and very like an intuitive understanding of *śūnyatā* as the absence of the inherent existence of anything, including the mind. There is no escape from the world into a metaphorically-internal mind, for that form of escape is the route to what Prasada describes as 'self-imprisonment'. As a form of 'objective self-consciousness', internal self-imprisonment is a natural source of anxiety (Duval and Wicklund 1972: 15-28). It is on the basis of a thoroughly experiential immersion in the relationality of the external world that 'is' and 'ought' are combined in experience, and a sense of freedom is expressed in the form of a 'somatic' feeling-tone, as conditioning of consciousness by unconscious desire is reduced.

A history of reliable relationality is the basis for all predictions, including predictions that extrapolate beyond observable states of affairs. With the aid of these relational resources ontological beliefs become capable of expression and metaphysical projections can be made, such as Shaw's 'pseudo-idealist' view that the entire mind-world system is a projection of transcendent Mind. It is on the basis of conditioned relationality, and the prototypical role of individuals as causal agents, that it becomes possible to imagine and predict conscious interference in the causal procession of events, ways in which the mind could exert causal effects on the universal macrocosm, and ways in which psychological change might lie on a continuum with ontological change in the physical embodiment of the individual and the world (Johansson 1979: 32-34).

As a result of these predictions a tension arises between ‘is’ and ‘ought’, or between the conservatism of epistemology on one hand, and the liberalism of ontological prediction on the other. In Buddhist mind theory the unification of ‘is’ and ‘ought’ glosses over the combination of conditional and unconditional systems that are inconsistent because they depend upon different ontologies. These inconsistencies have been exposed by Dharmavidya in his characterisation of eight different accounts of enlightenment in Buddhist tradition (Brazier 2001: 80-118). Inconsistency can be blurred by exegetical rhetoric, but is apparent in interpretations of the early doctrine of elements, which can either be understood in terms of objects, or in terms of phenomenal properties.

Continuity and the six-element teaching

The doctrine of elements that appears in the *suttas* (Ñānamoli 1995: 904-905 [MN 112.7]) is a development of the system that was common to Indian and Greek thought (Girill 1976: 383 n.3). Simply stated, it asserts that objects in the world are constituted by objective combinations of earth, water, air, and fire. To this list of material elements Buddhism adds space and mind, neither of which is apprehended by the senses to display material qualities of form. The inclusion of space and mind complicates the basic four-element form, for space is an absence of elements, or a co-ordination of elements. Although mind is a perceiver and knower of the other elements, it is not clarified in the simple expression of the element theory whether mind possesses any objective status of its own, or whether it emerges as a result of the combination of the other elements, for the psychophysical person becomes conscious only in contact with stimulation (*phassa*) rather than by act of mind alone, and ‘without bodily functions, the mind would not be stimulated’ (Johansson 1979: 33).¹⁸

The element doctrine also supports a metaphorical interpretation based on the properties of objects: earth, water, fire, air, space and mind denote typical properties, and categorise the combinations of properties that are typical of particular kinds of phenomena. These properties, such as the extension and resistance of earth, the fluidity and cohesion of water, the aggregation entailed by the dis-aggregation and radiation of fire, the vastness and openness of space, and the immateriality of mind,

are all phenomenal intuitions on the basis of primary experience of the world. The use of the term ‘element’ (*dhātu*), then, refers to properties and relations as facts known phenomenally by subjective observation and does not necessarily refer to substantially existing objective entities, although such entities are not denied (Hamilton 1999: 84). Observation of a phenomenon is just the apprehension of sensible relational properties, for objects encountered by the senses are distinguished by their property characteristics, not by any ontology known by any other means (Wood 1991: 57-58, 243-244 n.1).

It is normally assumed that where there is a property, it is the property of an object, but that assumption is just a manner of speaking, for physics has yet to find a philosophically-atomic object. Phenomena may be conventionally described as objects, but are observed to be efficient properties. The doing of properties is known in the form of their structural relations (Ladyman 1997: 422), but the being of objects is just a unification of properties that ‘cohere’ at a particular location of space-time.

The moral here is that however realists choose to construct particulars out of properties, they do so on the basis of a belief in the existence of those properties. That is the bedrock of realism (Chakravarty 2003: 876).

Although he argues that objects are ‘useful ontological conventions’, Chakravarty concludes that ‘our knowledge is constrained by the relations of which things are capable’ (Chakravarty 2003: 877). This insight is applicable to the proto-scientific doctrine of elements, in that they phenomenally represent properties, and only conventionally represent objects or ‘things’.

In the application of the doctrine of elements, minds are considered to be subject to property-conditioning through cooperation with the four gross elements, in conformity with the doctrine of dependent arising or conditioned co-production (*pratītya-samutpāda*). But Buddhist tradition also contains a line of thought which considers mind to be inherently unconditioned. Minds may be ‘defiled’, but not causally-conditioned by other properties in the world:

This consciousness (*citta*) is luminous, but it is defiled by adventitious defilements. The uninstructed average person does not understand this as it really is. Therefore I say that for him there is no mental development.

This consciousness is luminous, and it is free from adventitious defilements. The instructed ariyan disciple understands this as it really

is. Therefore I say that for him there is mental development (trans. Horner in Conze et al 1954: 33 [AN I. 10]).

There is an inconsistency between the notion of mind as an element in the sense of an unconditioned object and the notion of mind as a property emerging from the causal conditioning of other properties, and continuing to be causally-conditioned by other properties. Neuroscientific and Buddhist conditionality-accounts indicate the property-based option, whereas Buddhist unconditionality-accounts suggest that mind is a brute fact, an abstract object that is inherently unaffected by its relations with the world.

The mereological consequences of the difference between a brute property and an emergent property have been addressed in Greek thought. To deal briefly with a complicated discussion: in ‘Empedoclean’ systems macrocosmic properties inhere in all the relevant microcosmic parts, whereas in ‘Democritean’ systems, the macrocosmic properties do not exist at microcosmic levels of organisation and explanation, but emerge at a higher level, as a macrocosmic effect of the combination of the properties of the microcosmic parts (Girill 1976: 388-390, Klee 1984: 50). For instance, the properties of chemical compounds depend upon, but are different from the properties of their constitutive elements. It is unclear whether Buddhist element theory is intended to be a teaching about the properties of objective, atomic Empedoclean parts, or whether it is meant to refer to the phenomenal apperception of properties, which may or may not turn out to be Democritean emergent properties.

Buddhagosa linked the notion of luminous consciousness (Pāli *pabhassara citta*) underlying adventitious defilements to the concept of residual mind (*bhavaṅga*) that is thought to maintain mental continuity between one actively discerning *citta* and the next, and also between lives (Collins 1982: 247, Harvey 1995: 145-146). This line of thought is re-formulated in the Mahāyāna as the store-consciousness (*ālaya-vijñāna*) and as the mind’s latent potential for enlightenment (*tathāgata-garbha*) (Harvey 1995: 166). The degree of synonymy between these terms is a matter of opinion, but they all refer in some way to the idea of mental continuity, which is naturally problematic for the Buddhist doctrine of momentariness, which entails that the mind (*citta*) cannot be an *ātman* or eternal soul in the extended, second sense of the Latin term *animus*.

Acquaintance with the phenomenal properties of the four gross elements, and of space, requires subjective experience. It is because the mind is vital to the apprehension of the other elements, yet is reflexively enigmatic, that there is an impetus to elaborate doctrine in order to characterise the nature and continuity of mind. This elaborative process on the basis of the element doctrine does not succeed in resolving the dilemma of whether or not the mind is a brute fact or an emergent property, and the dilemma is perpetuated by the interpretative weight attached to particular terms. Exegesis accommodates both conditioned and unconditioned mind in one element theory, with the implication that the only type of emergence is of the naturally luminosity of an ‘Empedoclean’ mind after the removal of conditioning defilements. Philosophical hermeneutics opens out the implications of Buddhist mind-theory, by observing the unexplained difference between a mind (a consciousness) that is implicated in the maelstrom of causal conditioning, and a mind with a nature that is unconditioned, yet obscured by defilements. Mind either is subject to conditioning or it is not; if not, then it is an *ātman* by another name, for it has enduring self-nature. It is a remarkable example of Buddhist polythetism that these two different points of view survive within the same tradition, despite their apparent philosophical inconsistency.

The tension between self-nature and conditioned-nature accounts of mind with respect to mental continuity is not a modern problem, for it surfaces in debates about positive and negative doctrinal formulations and the *tathāgatagarbha* (Ruegg 1989: 43), which occasionally erupt into strong disputations about soteriological technique, as at the Council of Samye (Ruegg 1989: 138-141), in the ‘Sudden and Gradual’ dispute between Shen-Hsui and Shen-Hui (Dumoulin 1963: 80-87), and most recently with the excoriation of innate Buddha-nature (*hongaku shisō*) teaching, by the Japanese Sōto Zen scholars Matsumoto and Hakamaya (Hubbard and Swanson 1997: 6-18). Any religious teaching is not only at the service of soteriology, but also at the mercy of institutional politics, and these three examples suggest that the ontological tension in Buddhist mind-theory has adverse effects on institutional practice when there are social motivations for the misuse of doctrinal debate as a surrogate for a political quarrel.

The interview participants are generally concerned to understand the political causes behind the philosophical framework of doctrinal disputes, rather than to perpetuate those disputes, but that does not prevent views from being advanced. Dharmavidya argues, in conformity with Matsumoto and Hakamaya, that *tathāgatagarbha* and *śūnyatā* should not be interpreted as representing universal essences (Brazier 2001: 146-148). Crook advances an etymologically interpretation of *tathāgatagarbha* in terms of *śūnyatā*, and Wistreich makes it clear that *śūnyatā* does not mean nothingness in an absolute sense, but absence of the inherent existence of all things from their own side. The full philosophical consequences of these remarks remain a matter for debate, but they may support a ‘Democritean’ ‘emergence’ basis for a property of mind, rather than mind as an element or brute fact about the world. This is not the Gelugpa view, which argues the pre-existence of an effect in its cause (*satkāryavāda*) (Ruegg 1989: 138), an argument that is consistent with the view that the efficient proximate cause of a mental event is its antecedent (Wallace 1999:162).¹⁹

Mind according to Yogācāra

Unresolved problems of causal similarity and continuity in the early Buddhist accounts of mind leave the door open for the elaboration of explanations. *Abhidhamma* accounts take up the challenge by isolating discrete mental events as occurring sequentially in the flux of consciousness, then listing, labelling and ordering them into comprehensible processes (Rhys Davids 2002: 135, 193-198). These processes are activated in accordance with the ethical law of the continuing effects of intentional action (*kamma*): by not guarding against the harmful influxes (*āśava*), by ignorance, and by the three poisons of greed, hatred and delusion. There is less clarity about how mental processes occur and endure, for underlying problems of mechanism are dealt with in metaphorical terms, at the same causal level as psychological explanation. It is argued that ‘a phenomenological theory of causation does not necessarily require mechanism’ (Wallace 1999: 161).

Even if the Buddhist account of mind postulates that effects are contained in their causal ground, the problem remains of explaining the nature and continuity of extended momentary sequences such as memory, *karma* and re-emergence of

consciousness from meditative cessation (Griffiths 1999). In early Buddhist accounts the stream of consciousness (*viññāṇa-sota*) is seen as able to store memories, including recollection of past lives, and to transmit the effects of *kamma* between lives in succession, but no mechanism is suggested to cross any temporal gap between a cause and its effect (Johansson 1978: 61-62). Such details as the integrity of persons over one and several lives, selectivity of remembrance, and the qualitative attrition of memory over time (Smith 1996: 311-314), cannot be fully understood without some explanation at an underlying causal level. Continuity of memory and *kamma* are therefore specific examples of the more general dilemma of how similarity and continuity can be coherently explained by a system based on the insubstantiality and impermanence of momentary events.

Yogācāra theorists sought to overcome problems of temporal delay and dissimilarity of kind between cause and effect by extending the Sautrāntika metaphor of the seed, and providing a mental basis or ‘store consciousness’ (*ālaya-vijñāna*) in which karmic ‘seeds’ mature and come to fruition. Griffiths sees the store-consciousness as an ‘*ad hoc*’ category, designed to deal with problems that, on the prevailing Vaibhāsika and Sautrāntika models, could not be explained’ (1999: 93). The Yogācārins have hypothecated a consciousness that is unintentional, and paradoxically ‘not conscious of anything’, in order to account for an explanatory gap in Buddhist causal mind-theory (Griffiths 1999: 105-106); by doing so they have succumbed to the predilection to explain mind as an internal space (Rhys Davids 1999: 198, Brazier 2003: 50-53). To characterise the ‘store’ as a consciousness avoids the unpalatable implication that in the absence of immediately antecedent mental causation there can only be a physical basis for the continuity of later mental events. This manoeuvre is reinforced by suggestions that Yogācāra thought asserts that everything is ‘mind-only’: If all events are mental events, the problem of causal similarity loses relevance.

However, there is disagreement about whether the Yogācāra or Vijñānavāda system of ‘mind-only’ (*citta-mātra*) or ‘representation-only’ (*vijñapti-mātra*) marks a genuine break with earlier Buddhist realism by asserting absolute idealism and denying the existence of a hylic world of objective ‘things-in-themselves’ external to consciousness. That was the conclusion of the previous generation of twentieth

century commentators (Kochumuttom 1986: 1, n.1-4, Wood 1991: 191).²⁰ Slightly more recently, Griffiths broadly supports the idealism interpretation, yet notes Schmithausen's observation that the inaccessibility of the world is a meditative insight with only a phenomenological basis (Griffiths 1999 (1986): 80-83, 177 n.18); Wood suggests that the Vijñānavādins wished to present a mind-only view but failed to do so consistently because of the exegetical requirement to conform to the realism of earlier doctrines (1991: 192-195). Kochumuttom (1986), Anacker (1984), Harris (1991), Wayman (1996), and Lusthaus (2001) all argue against the idealist interpretation. On both sides of the argument the issue turns on the precise philosophical meaning of 'classical' Yogācāra statements in the works of Vasubandhu, but those who dispute the idealism interpretation are more hermeneutically inclined to take context into account, by paying attention to the soteric intentions of the author, of the school as a whole, and of its embedding in the qualified realism of the early Buddhist and Madhyamaka traditions (Kochumuttom 1986: 11-14, Harris 1991: 90-91, 98-99, Wayman 1996: 449-469). I am not qualified to comment upon the philological and historical evidence advanced by Harris and Wayman, but I note that, as with Kochumuttom, their arguments against interpreting Yogācāra thinking as idealist turns on the absence of explicit denials of the existence of an external world of 'things-in themselves'. The thrust of their argument, which is remarkably similar to Varela, Thompson and Rosch's (1991) 'autopoietic enaction' view of the cognitive closure of the human nervous system, is that the physical senses do have direct access to an external world, but the associated perceptual consciousnesses do not. Conscious events are indeed 'representation-only' in that, by virtue of the interference of dispositional modifications (*cetasika*) they are inaccurate, deluded or partially-imaginative representations of the external world, because they are warped by mental construction (*parakalpita*). But consciousness depends upon contact (*phassa*) with an external, hyllic world (*bhājana-loka*) (Wayman 1996: 451-2, 454, 457 Lusthaus 2001: 25-26). If *saṃsāra* and *nirvāṇa* are epistemic orientations to one 'ontic realm' (Harris 1991: 2), then the world is not so much ontologically 'dappled' (Cartwright 1994) as epistemologically-dappled. Confusion about Yogācāra thought is then confusion about the role of explanation, which can indicate but cannot directly teach or convey the full texture of experience (Reddy 1979,

Kochumuttom 1982: 5-11, Burnyeat 1999, Wittgenstein 2001: 2 [P.I. 1]). Yogācāra explanation points to experiences that may or may not come close to accuracy of representation, along a continuum that is more or less direct. If Reddy is right about the indicative status of explanation, and Kochumuttom about the practical purpose of Yogācāra theory, then the concept of 'nature' (*svabhāva*) is not an ontological reference but an experiential aspect. The *trisvabhāva* doctrine then denotes a theory of cognisable aspects of the mind, rather than three alternative ontological natures. But the doctrine falls prey to the dilemma it illuminates, for until it becomes an experiential realisation of the absence of the imagined nature in the dependent nature, it has a 'mind-to-world' 'direction of fit' as both an imaginary cognitive construction and an ontological belief (Hulse Read and Schroeder 2004: 74).

It is clearly stated by Vasubandhu that unenlightened experience is an imaginary aspect (*parakalpita*) – I should say in terms of both explanations *de dicto* and underlying cognitive conditioning *de se*. The second, other-dependent aspect (*paratantra*) stands in the theory for the other-dependence of all phenomena (*pratītya-samutpāda*), while the perfected or accomplished aspect (*pariṣpanna*) is just *paratantra* without any trace of *parakalpita* (Harris 1991: 125-126). An explanatory and ontological dilemma arises, because until it is realised experientially that the other-dependence of a mind can be freed from imaginary mental construction and thus be meaningfully cognised in an 'accomplished' or 'perfected' mode (*pariṣpanna*), such a mode can only be an ideal. As an ideal, it is an imaginative construction (*parakalpita*), and a belief, in which case it is an ontological assertion about the future existence of a mental state of affairs. The imagined nature (*parakalpita*), on the other hand, is a currently-existing, misguided mental state of affairs, yet the ontological assertion is made that it does not exist: it is an illusory obscuration of the real state of affairs, which is the other-dependence of mental experience (*paratantra*). The assertion that mental construction is illusory is extraordinary in the context of a supposedly idealist system, because it amounts to a tacit refutation of the inherent internalism of idealist theory, and a refutation of the existence (ontology) of objects denoted by the 'folk' psychological concepts used to construct an intentional view of the mind. Since 'mind' is one of those concepts it is logical that it should be described as not-mind (*acitta*).

The *triṣvabhāva* doctrine encapsulates some of the insights and dilemmas of the Buddhism of the past, and poses some dilemmas for the Buddhism of the future. Notwithstanding Augustine's *si...falbr, sum* (if I am mistaken, I am) (Augustine 1968: 532 [CG. 11. 26]), it is a dilemma that the mind mistakenly knows itself to be a self, but the elimination of that error eliminates the mind in the conventional sense of the term, for if the mind is truly other-dependent it lacks the barrier-enclosure that constitutes it as a separate mind at all: as *paratantra* it is no-mind (*acitta*). As a tentative resolution to the dilemma, I suggest that the mind is individual because it is prototypically *located*, but structural dependence on the external world at least partially obviates the spatial distinction that enables minds to be considered to be individual entities. The possibility of the dynamic elimination of the imagined aspect from the dependent aspect constitutes another dilemma: the experience of the non-dual perfected aspect constitutes 'suchness' or 'thusness' (*tathatā*), but, empirically, does it ever happen 'thus'?

It [thusness] is a pointer at reality, and eschews making a substantive prediction about reality. Where it does make a claim, it maintains, originally on the basis of an interpretation of meditative experience, that reality can be seen as it truly is in itself. Now this is a substantive claim, indeed, though primarily about human beings and only secondarily about reality as such. It is a claim that human beings are such that through an intensive and extensive transformative process (Buddhist practice) they can become capable of seeing reality as it is in itself. It is a claim, secondarily, that what is being experienced on the part of one who has undergone this transformation is reality as it is in itself (King 1997: 185).

The hypothesis, sourced in Varela's neurophenomenology (1999), that the subject is not the self, suggests that 'seeing reality' without the duality of the self/other or grasper/graspable distinction is a technical possibility. Unfortunately that does not entail that the reality seen is 'reality as it is in itself', for the representations constituted by mental events are subjected to 'top-down' modification by cognitive processes of the sort described by Varela and Singer (1987). These cognitive processes are real events, having effects that appear to experience. They are the work of neural pathways that are as old as the human species, and cannot be transformed without transformation of the whole species. Perceptions under the influence of self-processes may indeed be imaginary, but they are also real to the

extent that they are appearances to consciousness, and it could not be otherwise without major reconstruction of connective pathways in the brain. Until such a reconstruction happens, the *trīsvabhāva* formula stands in need of reinterpretation in the context of the realistic limitations discovered by neuroscience as to the extent to which direct perception is possible, and the extent to which self-processes can be controlled. As a provisional step, it is reasonable to note the epistemological status of *pariniṣpanna* as an ideal, and presume approaches to that ideal to be a succession of acts of accomplishment. As Ratnaprabha implies, this means taking *nirvāṇa* as a verbal reference to a movement of approximation to an imaginative ideal.

The other-dependency of *paratantra* is comparable to Crook's suggestion that the mind/world system be viewed as a relational whole, irrespective of the precise location of any structural mind/world barrier, and irrespective of obsession with ontological questions of realism and idealism. As a 'Middle Way' teaching, the Buddhist soteriological path is less concerned with the reality of objects (*artha*) than with psychologically-induced changes to ethical functioning. But as Crook also suggests, interpretation may have an effect on perception, and the perception of Yogācāra as a form of idealism lends support to the western misapprehension of Buddhism as an entirely 'other-worldly' or escapist religion (Weber 1965: 266-270, Dumont 1986: 25-35, 51). Being philosophically aware that the world cannot be accessed directly or with certainty is very different from believing that the world is wholly a creation of the ordinary mind. Any view that denies the external relation between mind and world is liable to be characterised as extreme: a tendency towards absolutism or eternalism, rather than a 'Middle Way' position (Wood 1991: 191-195). It is significant that none of the interview participants adopts the idealist view outright. Shaw's 'pseudo-idealism' has similarities, but rather than internalising the external world in the mind, he includes it alongside the ordinary, functional mind as an erroneous perception of the full manifestation of transcendental Mind.

The salient issues, for a unified explanation of 'the way things are', remain how mental continuity is possible, and whether changes in psychological experience, which are microcosmic mind/brain enactions, could exert a macrocosmic causal effect on external events without the causal intervention of physical action. The Vedic assumption is that this is possible, but without any hypothesis of mechanism

the explanation is mysterious. The notion that *nirvāṇa* is the complete cessation of *karma* and the round of rebirth implies that micro-macro causal effects are possible, but no explicit mechanism is given and the mystery is unresolved. The explanatory gap ethical cause and macrocosmic cessation effect suggests that there ought to be another level of explanation, of the kind that is afforded by neuroscience.

According to the ‘explanatory extension’ of neuroscience and the bridging notions of psychology, the micro-macro relation is utterly experiential: the microcosmic effects inhere in the representation of the world to the individual, and only advert to the world as an external macrocosm when the individual is moved to undertake action. As well as being a statement about cause and effect, this is a statement about the location of notional barriers. By dispensing with a mind/world barrier the micro-macro distinction is lost in conflation, and the functional distinction between phenomenal experience and the hyllic world is also lost. The mind/world barrier therefore fulfils a useful categorising purpose in functional explanation, but is less useful in the categorisation of experience, because it does not account for the permeation of perceptual experience by non-linguistic, explanatory forms of prior cognition.

The only way that empirical ‘is’ features and predictive ‘ought’ features of the world can be unified with consistency is if they are ascribed to different levels of explanation, allowing conditional systems that rely on dependent origination to be considered empirically, and the sympathetically mysterious systems, which rely on unknown causal mechanisms or unconditioned absolutes, to be considered as fictional predictions. The provisional unification of apparently inconsistent explanations may be soteriologically useful in religious practice and might, or course, turn out to be accurately predictive. No prediction is known to be the case, but no possibility is impossible. Provisional acceptance of partially true, partially predictive explanation is no worse than the combination of partially-isomorphic theoretical models in science (French 2003: 1474-1477), by means of conceptually-indistinct propositions, approximations and idealisations (Cartwright 1983: 4, Teller 2004: 442).

Whether or not the idealist or the hyllic-realist interpretation of the Yogācāra ‘representation-only’ argument is correct, the sum total of empirical and fictional appearances to consciousness are considered in early Buddhism to constitute the

world or the ‘All’ (*sabba*) (Woodward 1993: 8 [Samyutta Nikāya 35.23]). This system of sensory objects, sense-faculties, and sense-consciousnesses is a sufficient phenomenological description of the world. Idealism versus realism is an argument about the location and relevance of the definitional barrier that situates the five sense-objects externally, and the sense faculties and consciousnesses internally. Although ‘the All’ form a brief categorisation of everything, the system, like Yogācāra mind-theory, is not an exhaustive answer to all the questions that might be asked of it, since it is ontologically indeterminate. The notion of ‘contact’ indicates that this is a realist theory, for in the absence of an understanding of underlying physical mechanisms, the faculties are considered to actively project to apprehend their objects, including the body, and the bodily parts of the faculties themselves. Space, the absence of objects, is itself an object for the mental sense-faculty. Thus an apparently realist theory is also amenable to an idealist interpretation, or a phenomenological interpretation that ignores ontology, for the internal/external boundary plays only an incidental role in the presentation of phenomena to consciousness.

Simple explanation in primary experience

Although theoretical models appear in experience, or they would not appear at all, explanations are distinct from the experiences to which they refer, because they present a context-dependent, interest-dependent and predictive perspective on an experience, not the experience-in-itself. Explanations make the unobservable observable, usually by linguistic versions of spatial modelling. Even though expressions and models are present in awareness, they only become confirmable by the rest of experience once their referents are explicitly observed.

As I interpret Fuller (2005: 8), the *simple* Buddhist explanations of dependent arising and the Four Noble Truths of *dukkha*, its arising, cessation and the means to its cessation, do not need to be adopted as views because they are knowable in primary experience, that is to say, both the explanation and the explananda become evident and lead to ‘an attitude free from craving and attachment’ (2005: 157-8). Because *śūnyatā* and *paratantra* are Mahāyāna re-expressions of dependent arising, it follows that these teachings may also be amenable to experiential verification. These explanations imply the possibility of an immediate evaluative awareness of the way

things really are, and thus can be characterised in Buddhist terms as ‘right view’ (*sammā-diṭṭhi*).

More complicated predictive explanations referring to matters that are not ordinarily observable in experience, only observable at second hand or only observable over long temporal durations, cannot be confirmed by primary experience with the same validity as relatively simple immediately-observables. The interview participants make this implication when they place greater reliance on subjective experience than on scientific theory or indirect instrumental observations, but the argument cuts both ways, for fine-detailed psychological *Abhidharma* explanations, or propositional statements about Buddhas and Bodhisattvas, are not normally observable in primary experience. It cannot be certain that these explanations will be confirmed by experience, for they may be inaccurately predicted, imagined or described, and may involve the inappropriate metaphorical transference of literal qualities from the source-metaphors in the ordinary world, to their targets in transcendental worlds.²¹ Buddhist doctrines such as those pertaining to rebirth, to the detailed operation of karma, to the powers and stages of the path, to Buddhas, Bodhisattvas and the location of Pure Lands, are not normally confirmable by ordinary experience. None of the interview participants had the benefit of experiential confirmation of any of these doctrines, although Wistreich, Jones and Pym are inclined to accept the *ad hominem* accounts of those who report remembrance of previous lives (Storey 2000).

The way things really are in the world may be qualitatively different from metaphorical descriptions in explanation. Shaw appreciates that explanations are inherently fictional, because they are not the thing-in-itself to which they refer. He does not think that this is to the detriment of reliance on Buddhist explanation, because in the final analysis Buddhist reliance is not on explanation, but on experiential realisation. If the resolution of the Buddhist path does not resemble indicative explanations at all that is of no consequence to Shaw, so long as the explanations (*upadeśa*) accompanying the path usefully exert their soteriological effect, otherwise they are proliferating structures of discriminating delusion (*prapañca*).²²

Conclusions

It is characteristic of the Buddhist practice of the ‘Middle Way’ between asceticism and hedonism (Ñānamoli 1993 [SN 56. 11]) that *de re* experiences of acquaintance with the world are most ‘suitable’ when they are conducive to physiological and psychological homeostasis. The origin of the category of the sacred, and of enlightenment, arises from the imperative sentient beings have to create conditions that are conducive to approximation to a homeostatic ideal, which is reported to consciousness in the form of an affective sense of freedom from physical and psychological suffering and often described metaphorically as a sense of spaciousness.

Choices conducive to homeostasis and to enlightenment are intentional and, if Hulse, Read and Schroeder (2004) correctly argue for the ‘impossibility of conscious desire’, they are unconscious determinations, rather than conscious decisions. It remains fortuitous, or a mystery, why any individual makes an initial choice to follow the ‘top-down’ guidance of Buddhist explanations. The ritual practices they undertake are efficient precisely because they are practised, for they are ‘bottom-up’ behavioural techniques conducive to the unconscious abandonment of intentional, self-grasping behaviours.

Such techniques attenuate the notion that the self has objective characteristics, a notion that is reinforced by attachment to other objects. Ritual practice opens the way to a holistic appreciation of the dependent relationship between mind and world, not in terms of relations between substantial or essential objects, but of relations between properties. Freedom of choice between objects is notional, for the ascription of objectivity to collocations of properties is an imaginative cognitive qualification of perception. Object-identification is vitally useful to the mind’s speed of prediction, which is identified by Llinás (2001) as the main function fulfilled by developed neuronal systems. Although choice between notional objects is functionally necessary and apparently verified by experience, that verification is by virtue of the perceptual apprehension of properties, not of the objects ‘in themselves’, for the ‘structural coupling’ between brain and world only crosses the ‘autopoietic’ barrier in the form of sensorimotor relationships between properties on either side. Mind can be said to emerge from this holistic property relationship in Democritean fashion, as

an effect that is only partially similar to its heterogeneous physical and abstract causes (is not contained in its ground).²³ The mental ability of consciousness is like its cause under some explanations, for it can be described as the exhibition of relationships between properties. According to this property-relations perspective, which bears comparison with ‘externalism’ in the western philosophy of mind (Putnam 1975, Burge 1979), both mind/brain identity and mind/brain supervenience are inadequate as ontological explanations of mind, because they fail to take account of the fundamental importance of the *de re* relation of acquaintance with the external world. *De re* acquaintance is the epistemological signification of the fundamental ontology of ‘the All’ as emptiness (*śūnyatā*) other-dependent aspect (*paratantra*) or dependent origination (*pratītya-samutpāda*) rather than an essential or substantial nature (*dhātu*). It is possible to assimilate this relationally-holist or property-relation description of the mind to the perplexing notion of being ‘without mind’ (*acitta*) (Wood 1991: 55-60 [*Triṃśikā* 29]). Since the ordinary activity of mind is a dualist grasping onto the objective self-other dichotomy, avoidance of grasping is abiding in mind-only (*vijñaptimātratva*), and is abiding without mind in the conventional sense of the word. In Heideggerian terms it is being-in-the-world.

We have seen that complex conceptual explanations, Buddhist and western, are predictions that only approximate imaginatively to the truth. There is therefore, logic in Pym’s maxim, which he sources in the *Kālāma Sutta* (Woodward 1989: 179 [AN III. 7.65]), to ‘believe only those things that are helpful to you’ (Pym), for the criterion of a good explanation or a ‘good *upadeśa*’ is as much utility as verisimilitude. This pragmatic point of view warrants the utility of freedom of choice explanations in the face of causal determinism, and warrants the utility of progressive explanations of enlightenment, with the caveat that progression is recurrent convergence on an imperturbable ideal of homeostasis. My equation of the notions of homeostasis and enlightenment is suggested by the neuroscientific view that behavioural modification is a continual rebalancing of affective and cognitive systems. It turns out that the long-running western philosophical obsession with the cognitive faculty of reason as the ideal functional form of mind (Damasio 1994), is a view that is not shared by either Buddhism or neuroscience. A balanced account of mind, which allows room alongside logic for affect and imagination in the generation

of attitudes and the generation of prediction, can also allow that fiction has a significant part to play in experiential and explanatory roads to truth.

An explanation, which transcends mind/brain identity or supervenience to include the external world within a relationally holistic definition, strains the conventional usage of 'mind', to the extent that a truly relational mind could be characterised as without mind (*acitta*) in the conventional usage of the term. From this perspective, both identity and supervenience explanations are imaginative fictions, veridical to a degree. They are only partial understandings, to be believed or disbelieved as a matter of utility and metaphysical preference.

Crook argues that with the relinquishment of explanations 'the universe is given to you'. Similarly, Pym's Pure Land practice is guided by a *kōan*:

Just as you are,
really,
just as you are.

The implication, which may or may not be wishful thinking, is that relationally-constituted minds, like Buddha-nature (*tathāgata-garbha*, *Buddha-dhātu*) have no temporal journey to make in search of an ideal, for the truth of relational dependency manifests in immediate subjective consciousness when left to itself without grasping at the self-object distinction. It is a dilemma of mind that a good deal of guidance from explanation, experience and practice has to be undertaken, before minds can transcend the constraints of autopoiesis and of self-investment, and transcend concern for self-other distinctions in an approximate equation to homeostatic relations. It is a dilemma for the understanding of Buddhist teaching in the context of neuroscience, that the imperative to organismic homeostasis gave rise to the self-other distinction in the first place.

Notes to Chapter 8

¹ In Varela, Thompson and Rosch (1991), structural coupling to an external environment appears to be less important than internal neural enactment of a world, by virtue of the emphasis in that text on the internal ‘closed system’ of neural networks. But the equal significance of structural coupling is unambiguously acknowledged in Varela (1999), when he confirms that his attitude to cognition is based on:

1 On the one hand, the ongoing coupling of the cognitive agent, a permanent coupling that is fundamentally mediated by sensorimotor activities.

2 On the other hand, autonomous activities based on endogenous configurations of neuronal activity (Varela 1999: 116).

The importance of structural coupling is again apparent in Varela and Thompson (2003), where it is suggested that ‘processes crucial for consciousness may cut across the brain-body-world divisions, rather than being skull-bound neural events’ (2003: 282). It can be argued that the notion of closed neural networks exemplifies the ‘internalist conception of experience’ that is criticised by Nöe and Thompson (2004: 22), but supported by Grush (2003: 53). Thompson (2007) will re-assert the significance of structural coupling for an externalist view of mind (personal communication).

² According to Pym and Jones, the requirement for explicit practice diminishes with age and experience, as mindfulness becomes implicit in daily life.

³ Prasada’s list of the omnipresent conditioning factors does not include concentration or one-pointedness (*samādhi* or *ekaggatā*) and vitality (*jīvita*) (Govinda 1969: 115). Prasada (and also Sangharakshita 1998: 72-99) presumably discuss the later five-fold list, which appears in the *Pañcaskandhaka-prakarana* of Vasubandhu (Anacker 1984).

⁴ Prasada explains that by ‘direct perception’ she means notionally-ideal contact with a *dharma* or ‘thing-in-itself’, which is not achievable by an ordinary human being, who can only perceive a representative form or *rūpa* (personal communication). For a similar view see King (1995: 4). Much the same view is retrieved by Hamilton from the *suttas*, when she interprets the inaccessibility of the external world as a form of Kantian transcendental idealism (Hamilton 1999: 85, 2000: 188-198).

⁵ On this homeostatic account, religious phenomena are not necessarily counterintuitive, as is suggested by Pyysiäinen (2001: 18-23), for it is not unusual for cognitive operations to relate to an ideal standard (Duval, Silvia and Lalwani 2001: 31-40)

⁶ Against the equation between homeostasis and Buddhist enlightenment, it can be argued that the Buddhist path is a progressive development. This difference may be nothing more than a difference in spatial modelling. Although the path to enlightenment is modelled as a linear trajectory, is not a spatial movement, since it

occurs within the time-being of the individual person. Approximation to homeostasis, on the other hand, tends to be modelled as metaphorically recurrent or circular, yet the requisite balance of physiological and psycho-social forces develops progressively over the course of one (or more) lifetimes. Between the linear and the circular metaphors, the FWBO notion of 'higher evolution' uses the spatial metaphor of a spiral to associate the recurrent homeostatic model of the 'wheel of life' with a progressive model of the trajectory towards enlightenment as a destination (Govinda 1969: 71, Kennedy 1985: 19-21, Sangharakshita 1998: 87, Cooper 2003: 165). That such spatial modelling is problematic may be indicated by Bhikkhu Vajiro's cryptic remark about the location of liberation, Ratnaprabha's concern that concept of *nirvāṇa* might be better kept as a verb rather than a destination, and Jones's trenchant critique of the notion of enlightenment as a hypothetically future event.

⁷ My woeful misunderstanding of Staal's theory of the meaninglessness of ritual (Kennedy 2004: 149) is corrected by Payne's explication that while ritual is meaningless as such it provides a context for meaning to be discovered and expressed (Payne 2004: 197-199).

⁸ From a systems theory perspective, Grush argues against the view that 'the mind is not in the brain, or that cognition does not require representation, or both' (2003: 53). In effect, he supports the kind of internalism that I detect in VT&R (1991), and criticises the relationally holist, externalist view of the mind that I advocate.

⁹ My point is that, on its wide or abstract interpretation, *pratītya-samutpāda* is a causal law, which decrees ineluctably that the cause or condition of the existence of 'this' invariably giving subsequent rise to the existence of 'that' [SN.2.28]. The narrower twelve *nidāna* version, which describes the consequences resulting from intentional choices, is a conceptual elaboration of the basic causal law (Brazier 2003: 179). For further discussion of issues of freedom and determinism in Buddhist context see Flanagan (2006: 18-27) and Gier and Kjellberg (2004: 277-304).

¹⁰ Duval and Wicklund are not concerned with the religious implications of their theory, and note that attempts to enter into 'subjective self-awareness' can be a sign of discomfort or 'falling short of desired standards' (1972: 187-193).

¹¹ The notion that different levels of explanation can co-exist when they answer the same questions in different contexts is a justification for the Indian 'Two Truths' theory (Basham 1981: 230).

¹² Dennett is of the view that intentionality 'is a feature of' concepts used to explain the operation of computational or biological systems in contexts. Intentional 'strategies' fill the gap when explanations based on designed capabilities, or natural explanations based on knowledge of physical laws, prove to be inadequate' (1971: 87-91).

¹³ Dōgen's strategy for 'not doing evil', in the *Shōbōgenzō*, is a striking traditional account of the paradoxically choiceless reduction of discriminating intentionality (Cleary 1992: 85-94, 128-145)

¹⁴ As with Chapter 1 note 9, I have previously argued that a turn to Buddhist practice by non-ethnic Buddhists is more of a discovery than a free choice (Kennedy 2004: 145).

¹⁵ This is also a denial that Freudian psychological categories are anything other than metaphorical explanations.

¹⁶ Pratyekabuddhas are held to have achieved enlightenment by their own efforts, without assistance of the Buddhist *Dharma* or *Saṅgha*. This conceptual category is obscure, in the sense that it is not clear whether it has ever had any membership.

¹⁷ Lyotard considers that the western Enlightenment view of progress is an inherently unstable, systematic introduction of a developmental third term into a dialectic (Lyotard 1991: 2, 6). This negative assessment is in marked contrast to Dharmavidya's wish to combine the insights and the benefits of both eastern and western enlightenments (Brazier 2001: 78-79)

¹⁸ The Gelug-pa position is that the proximate or 'substantial' cause of a mental event is its antecedent mental event. Physical influences are only 'cooperative' causes (Wallace 1999: 162). There is a striking similarity between this account and Varela Thompson and Rosch's dynamical-systems-enaction/structural coupling account, except that the Gelug-pa ontology is mental, whereas the dynamical systems ontology is physical. See Chapter 1 page 20 of this thesis.

¹⁹ This 'Empedoclean', or 'like cause produces like effect' interpretation is similar to the argument that an effect 'is contained within its ground', which has been used by Rosch to argue that there is a logical circularity in cognitive scientific explanations of consciousness (1994: 50-55, 63).

²⁰ Kochumuttom (1982: 1 n1-4) cites Stcherbatsky (1936), Hamilton (1938) Murti (1955), Sharma (1964) and Conze (1967) as earlier scholars who all held that Yogācāra thought was a form of philosophical idealism.

²¹ Metaphors are not bi-directional: they do not transfer qualities comparatively from the target of the metaphor to the source (Arendt 1978: 105), therefore no information is conveyed from the 'out of order' transcendental world to the world of appearances.

²² An explanation has more chance of being an *upadeśa* if it is orally-transmitted. It may be that writing opens the door to *prapañca* by 'representation of the word detached from the voice of the lineage' (Lopez 1995: 40).

²³ The notion of relational holism is first used by Teller in a discussion of quantum mechanics (1986).

Chapter 9

The relational model of mind in practice

Introduction

In Chapter 8 the conclusion was reached that the term ‘mind’ most accurately reflects ‘the way things are in the world’ when it is used to denote the whole of relations between brain and world as they appear to consciousness. That definition is comparable to the Buddhist concept of the ‘All’ and bears some comparison to externalism in the western philosophy of mind. In this chapter it is contended that relational holism is a useful and acceptable addition to contemporary Buddhist attitudes to the mind, since it provides a counterweight to the excessive individualism of modernity, and may provide some philosophical justification for the construction of a Buddhist environmental ethic. Attentiveness to relational holism may also enable Buddhist organisations enter dialogically into doctrinal argument without fear of conflict or schismatic consequences,¹ by maintaining connection between those who are not persuaded of the value of critical methodology as opposed to those who are, and furthermore are unsure about the metaphysical status of other-worldly strands of Buddhalogical discourse.

The arguments advanced in this thesis can be assimilated to *pratītya-samutpāda*, and follow logically from the doctrine of *śūnyatā*, but their interpretation in neuroscientific terms is my contribution, not that of the interview participants, although similar views are suggested by Crook, and are implicit in some remarks by Jones. In a polythetic, ostensibly harmonious religion there is room for more than one view of the nature of mind, and relational holism as a general theory allows room for a multiplicity of views by emphasising property-relations rather than object-relations, irrespective of the metaphysics of the properties that are brought into relation. If Buddhism is not an essentialist religion, debate should not be about relations as such but about the epistemological (truth-fictional) status of particular relational properties.

Relational holism as a Buddhist view

Although it may remain a minority view, relational holism of mind should be an acceptable view in a religion that is characteristically polythetic, for five reasons.

Firstly, the touchstone for Buddhist teachings is the warrant of experience, rather than affirmation of belief that any particular proposition is true. Secondly, the concept of skilful means (*upāya-kauśala*) facilitates the assimilation of conflicting views without compromising Buddhism's soteriological, psychological and ethical orientation. Thirdly, there is no central Buddhist authority responsible for the arbitration of ideas, which must depend instead upon the conjoint influences of tradition, context and the hermeneutic horizon of personal discovery (Jauss 1989: 199-201). Fourthly, Buddhist holism dissolves the western dilemma of association and disassociation between an abstract internal self and a concrete external world (Abercrombie 1938: 87, Žižek 2001: 55, 58-59), by allowing relations between all processes and properties to be taken account of in the definition of mind, but with the caveat that descriptions of internal mental objects are metaphorical, and objects of belief rather than of knowledge. It is only as parts of explanation that they become parts of experience, the archetypal Buddhist example being that, although self-descriptions characterise self-processes, no phenomenal self can be found. That remark has approximately the same meaning with the substitution of the term 'self' by the term 'mind'. Fifthly, it is an advantage that relational holism provides no evidence for the truth-value of hypothetical relations, the prime example being that of the unobservable supervenience of mental events on physical events. As a result, relational holism can function as a general theory that accounts for reasonable hypotheses with charitable equanimity.

The touchstone of 'right view'

The opinion of several of interview participants, most clearly expressed by Bhikkhu Vajiro, is that the particularity of a person's beliefs is less important than that their beliefs should not contradict the Four Noble Truths. Whatever their ontological and metaphysical commitments with respect to this world or another, it would be difficult to deny the label of Buddhist identity to a person who could transcribe their beliefs into the Noble Truths of life marked by suffering that has causes, which become inoperative when the Eight-fold Path is practiced with consistency. This nesting of particular beliefs within the terms of a concise explanation is not just a matter of conformity to the earliest teachings, but of the

unification of types or levels of explanation. Explanations that have limited scope by virtue of their complexity and specificity should be amenable to translation without reduction into simpler, less specific explanations that have wide applicability (Strevens 2004: 155). Without that nesting of the specific in the general the unification of explanations into a coherent and consistent world-view would be impossible.

The evaluation of any explanation is quasi-judicial, requiring unbiased attention to the assessment of relevant information. Conscious awareness is in receipt of both ‘top-down’ information (explanations of all sorts, whether formulated by cognitive self-processes, *ad hominem* by others, or phylogenetically, by the habitual cognitive modification of perception), and ‘bottom-up’ information (a combination of sensorimotor information and emotional response). If information from either source is to be equably assessed, presupposition has to be set aside. The most significant point made by Varela, Thompson and Rosch (1991) is that information to consciousness is always pre-combined and pre-supposed, because of the heavy load of prior cognition involved in the constitution of every percept.² This hypothesis, which has neuroscientific support (Varela and Singer 1987), reinforces the requirement for equable evaluation of ‘top-down’ religious or scientific explanations that have been subject to extensive cognitive modulation by other minds.

In Buddhism, equable evaluation is characterised as ‘right view’. According to Fuller (2005), this term does not mean the upholding of an opinion against other opinions, nor does it mean the studied avoidance of opinions: it refers to an attitude that evaluates opinions without attachment. This ‘detached order of seeing’ is an attitude that is not wilfully intentional (Fuller 2005: 1, 157). Rather than a sudden leap from one condition to another, the establishment of an attitude of right view may be a gradual change of mind, depending upon the diminishment of intentional influences (*cetasika*), particularly the unwholesome dispositions of greed, hatred and delusion. Such dispositions, which according to Hulse, Read and Schroeder (2004) are not conscious states, find expression in the form of urges to act and emotional feelings that overwhelm conscious sensorimotor states of relationship to the world. As the diminishment of unwholesome intentional attitudes, right view helps the world-relationship to become manifest. The full manifestation of the mind/world

relation can be described as an ‘altered state of consciousness’ in an affective sense, felt as freedom from self-induced suffering. This experiential resolution to the dilemma of freedom in determinism may not be philosophically satisfactory unless it is allowed that the dilemma arises from a presupposition about the existence of a metaphorically objective self-in-mind, which is able to act with soul-like freedom from causally-dependency.

Buddhism maintains that action-decisions are adversely affected by desire, and desire is grasping after something in ignorance of ‘the way things really are’ (*yathā-bhūtam*), which is obscured by greed, hatred, and delusion. Fuller notes that wrong views are particularly motivated by greed (2005: 8); thus the problem of wrong view is not of unwarranted belief, but of craving or *wanting* to believe. Right view does not prescribe the acceptance or rejection of belief in any particular doctrine, but does indicate that desire for a particular belief to be true is a hindrance, and that desires must be relinquished if experience is to become sufficiently detached to warrant whether or not a belief accords with the world.

A belief may be epistemologically wrong, in that it can be empirically contradicted, or ethically and soteriologically wrong because it is produced by attachment or craving. Both sorts of wrong opinions are misrepresentative of the way things are, the former because the world is misunderstood, that latter because the relationship between person and world is misunderstood. Fuller notes MacIntyre’s point that the is/ought (fact/value) distinction is a relatively modern disjunction in the West (MacIntyre 1971: 258), and that the distinction was not recognised in ancient India Fuller (Fuller 2005: 9). In this context he claims that the achievement of right view supports a combination of both factual and evaluative understanding: of the ‘is’ and ‘ought’ of the way things are, rather than just the evaluative ‘ought’ (Fuller 2005: 10).

There may, however, be some natural degree of ‘is/ought’ distinction in experience, if the ‘is-ness’ of things is taken to be their immediate apprehension in bare attention, whereas their ‘ought-ness’ is a cognitive prediction by subsequent moments of experience. Against that point, the distinction may not be clear-cut if, as indicated by the neuroscience of visual perception (Varela and Singer 1987), a significant proportion of current perceptual experience is already a cognitive

prediction on the basis of past perception. The combination of ‘is’ and ‘ought’ in perception means that individuals cognitively constitute their view of the world in two ways: firstly, partially as it is and partially as it ought to be in the hope that needs and desires are to be fulfilled; secondly, partially as it is and partially as it ought not to be, in the fear that desires are not to be fulfilled. The first alternative constitutes a tendency to escape into eternalism; the latter, as a self-fulfilling prophecy, to escape into annihilationism. These two intentional predictabilities are both evaluative modalities of world-enaction, whereupon the gap between the expectation of ‘ought’ and the reality of ‘is’ become causes for suffering, for the external hyletic world does not conform to anthropomorphic predictions of how it ought to be. That actions have determinate consequences despite human desires is a plain fact, but also an ethical assertion about the way that the world *ought* to be perceived, with a minimum of predictive and predicative intentionality, and a maximum of attention, if there is to be harmonisation between empirical ‘is’ and evaluative ‘ought’, and if suffering is to be avoided.

Because Fuller asserts that right view supports not only equitable ethical evaluations but also understanding of facts about the world (2005: 13), it follows that the early Buddhist attitude of ‘right view’ is universalizable to the contemporary context. Appreciation of the simple prescription of the Four Noble Truths, and of wholesome, unwholesome or karmically neutral mental events, is primarily a matter of predicting, on the basis of attention to context, the way in which consequences observed by the individual in the past are likely to be similarly observed in the future. Here ‘ought’ is as much a temporal difference between fact and predicted consequence as it is an ethical imperative. Thus, appreciation of the Third and Fourth Noble Truths depends on the prediction of future patterns of events in the light of observations of the consequences of modifications to previous behaviour. The empirical validation of immediate facts by observation, such as the presence in awareness of a boat, is relatively uncontroversial. Evaluation of events is more difficult, for some duration is required to discover why boats ought not to leak or why a *citta* ought to have been wholesome. When observations are being made for the first time, verification needs duration. For example: memory, recall and cognitive re-combination of events is necessary in order to observe the relatedness of dependent

origination, the effects of wholesome and unwholesome *Dharma*, and the working out of the Fourth Noble Truth of the Eight-fold Path. It is only on the basis of the foundational ‘hinge’ of the habitual commonality of observations, on which life turns (Wittgenstein 1979: 44 [OC. 341]), that an attitude of right view enables rapid experiential confirmation of concise doctrinal formulations, without need for recourse to memorisation and recall over the temporal duration that would allow primary experience to be contaminated by more cognitive influences than need be the case.³ Once time has been taken and attentional observations have been made, the verification of subsequent evaluations is a relatively immediate experience. *Pratītya-samutpāda* or *śūnyatā* might, therefore, be apparent almost immediately,⁴ but the Four Noble Truths as a whole are unlikely to be intuitively certified without an extended period of practice.

As an attitude with respect to most Buddhist doctrines, right view is likely to be a gradual transformation of habitual experience, at continual risk of intentional and unintentional cognitive regression, slowly creating the circumstances for insight on the basis of bare attention to ‘the way things really are’. The attitude of right view does not appear in an intellectual vacuum; it has to be established against a background of traditional doctrines that are liable to become attachments, in the sense of ‘a kind of involvement with: fascination, obsession’ (Prasada). The longer the duration that is required to validate a teaching experientially, the greater the preceding *de dicto* propositional assimilation of that teaching, with the corresponding risk that the attitude towards the teaching becomes an obsession rather than a right view.

I interpret Fuller’s exposition of right view and Prasada’s account of Buddhist psychology to indicate that conscious attention to the relationality of experience naturally gives rise to compassion for self and for others, and consequently the ‘tipping point’ where grasping occurs and the self becomes reified is overcome by right view alone, without any intentional act of choice whatsoever. Ordinarily the self seeks freedom by self-fixation, as a means of escape from suffering in a world where objectivity is obvious but relationality is obscure. Without the intentional fixation that constitutes the person-as-self, the person as the subject of experience is

naturally free, participating as the initial 'horizon' in a relational sequence that is not pre-determined, yet could not be otherwise.

On this account, conscious experience need not be deliberately constrained to eradicate intentional states, but needs to be allowed to manifest free of intentional influence. This distinction between the deliberate modification and the unintentional manifestation of experience does not resolve the philosophical dilemma of the possibility of freedom in the midst of determinism, but it does describe a soteriological method by which the religious practitioner can cross the divide from self-centred choice-making to spontaneously ethical behaviour, on the basis of a naturally arising insight and a naturally arising compassionate attitude.

For the practitioner, the philosophical argument about freedom and determinism may be less relevant than Bhikkhu Vajiro's cryptic question about liberation: effectively he asks an empirical question as to whether, when and where an affective sense of freedom-in-determinism might occur. Apart from any motivation to protect and preserve the *Dharma*, this practical attitude guides the interview participants' emphasis on experiential issues as an alternative to philosophical debates about doctrine. As escape from self-imprisonment, freedom is a qualitative property, a feeling arising from a dependent configuration of the mind-world relation as a whole, not a particular property pertaining to the mind as particular object. It makes sense in these circumstances to use the term 'mind' to refer to the totality of the relations between the structural coupling of the embodied brain and the hylic world, but to do so is a considerable extension of the socially-agreed meaning of 'mind', which normally refers to the so-called 'internal' processes that give rise to conscious awareness. The dilemma here is one of definition, of habitual boundaries between the meanings of words, rather than of boundaries between objects; it is resolvable by extension of the meaning of 'mind' to denote a consistent set of relations between properties, and the history of that set of property-relations, rather than considering mind to be a metaphysically-essential object, envisaged as enduring without regard for the history of its constitutive relations.

If bare attention to the world under the sway of right view is sufficient to enable the change from addictive suffering to affective freedom in a world as it is and ought to be, then doctrine, like any other explanation, is no more than an approximate

indicator of the path of practice. This seems to be what is suggested by Shaw's talk of 'the good *upadeśa*', which may be 'non-literal' or fictional, but which fallibly indicates a truth about experience. This is also suggested by Bhikkhu Gavesako's remark that interpretation is 'how we live, what we do practically with our bodies', and by Pym's injunction to accept and be accepted 'just as you are'. The *Kālāma Sutta* (Woodward 1932: 170 [AN III 7. 65]) expresses this intuitional understanding that certainty is to be found in practice, not in explanations, and in consequence has become a key text for many free-thinking contemporary Buddhists, like Pym, although it is also interpreted in defence of the *Dhamma* by traditionalists.⁵ This conflict of interpretation is another version of the paradoxical rejection of all views yet the assertion of right view, which Burford locates in the *Aṭṭhaka-Vagga* (Burford 1991), but which Fuller resolves with the understanding that right view is not a view at all in the sense of an opinion, but is an attitude of 'transcendence' or non-attachment to views (2005: 8).⁶ In the terms of the four-fold mind-model, right view is not the prioritising of explanation *de dicto* or of extended experience occluded by self-centred intentions *de se*, but of the suitability of subjective attention to experiential acquaintance *de animo/de re*. Right view eventually allows explanation, self-processes, subject and world to become manifest without prior attachment and prior thought-coverings, 'just as you are'. This is not the unobtainable goal of direct experience but it is primary experience as the most immediate and unmediated combination possible between the 'fallible veracity' of 'is' and the 'veridical fiction' of 'ought'.

The arbitration of skilful means

It is part of the genius of polythetic Buddhism that room can be found for views that do not conflict with the Four Noble Truths, or function as 'skilful means' (*upāya kauśalya*) (Pye 1978).⁷ According to Pym:

There's the old saying that religion ought to be a circle that includes everybody and not a circle that keeps everybody, or anybody, out (Pym).

Although Buddhism has spawned plenty of philosophical disputes, its polythetic inclusivity stems from an ability to assimilate new cultural practices. Itself a heterodox stance with respect to Brahminism, Buddhism has managed to incorporate

the antinomian otherness of the Śaivite Tantric tradition (Gray 2005: 52-53), and folk beliefs and practices along the Silk Road (Yamada 2002: 115), in China and Japan (Matsunaga 1969: 16), and in south-east Asia (Harris 2000a: 128-131), as philosophical beliefs tend to be assimilated together with, and in the same manner as cultural practices by an exegetical system of re-categorisation.⁸ The economic and political status of virtuoso religious activity may, of course, be as important a motivation to assimilation as the philosophical imperative to logical and hierarchical consistency.

Contrary to the expectation that 'skilful means' can be used to aid the assimilation of western discourses in contemporary globalised contexts, Green (1989) argues that under contemporary circumstances the 'essence' of Buddhism has been lost by groups that 'unquestioningly accept the cognitive assumptions of modern western society' (1989: 286). Her examples are Sōka Gakkai's contention that ritual practice leads to direct material benefit, and the Scientific Buddhist Association's rejection of the doctrine of rebirth.⁹ Green agrees with Willson's view that:

...rebirth is a virtually inseparable part of Buddhist teaching. It is quite impossible to compress the richness of the Buddhist world-view...into the impoverished mental framework of those who deny it.' (Willson 1984).

Green considers that even if the result of the Buddhist path is the transcendence of views, the path itself requires 'committing oneself to distinctively Buddhist beliefs and attitudes', and concludes that Buddhism should not seek to adapt to 'the materialistic and logical-empirical bias of the modern world' (Green 1989: 289). Green follows Willson in making some sweeping assumptions. They consider it reasonable to dictate what is or is not 'essential' to Buddhism as a notionally-unified religion; they apply western, Christian standards of belief and commitment to an eastern religion, by assuming that a doctrine must be explicitly believed before it can be utilised imaginatively and mythologically; they assert that those who deny rebirth possess an 'impoverished mental framework'; and they reduce the philosophical differential between East and West to a set of 'cognitive assumptions' (Willson in Green 1989: 289).

According to Ruel (2002), belief is a central concept for Christianity. It is a promissory bond of trust, confidence and obedience in God; it is both 'belief in' God

and ‘belief that’ certain propositions about God are true. Historically, this juridical and epistemological commitment takes the form of publicly expressed assent to authoritative creeds that symbolically confer Christian identity (Ruel 2002: 100-103). Belief is not such a central or authoritative concept in Buddhism, yet there is still ‘belief in’ the traditional *Dharma* in the sense of faith or confidence (*śraddhā*) in a general world-view (Hoffman 1985: 381-383), and ‘belief that’ certain propositions expressing the *Dharma* are true. For instance, despite absence of direct evidence, most of the interview participants believe in the doctrine of rebirth on the basis of the *ad hominem* warrant of accounts of past-life memories and out-of-body experiences (Story 2000), or on the counterfactual inference that, without rebirth, justice is unreliable and life has no meaning.¹⁰ In contemporary globalized circumstances it is acceptable to express ‘belief in’ Buddhism as a world-view, and to ‘Go for Refuge’, without the necessity for a public expression of ‘belief that’ specific doctrines are true in advance of their verification in personal experience. Rather than ‘belief that’ particular propositions are true, it is ‘belief in’ the Buddha’s example, and the efficacy of ritual practices and ethical precepts derived from the Four Noble Truths, which bestows Buddhist identity. Buddhist identity only becomes prescribed by putative authorities in terms of ‘belief that’ particular propositions are true when socio-political or exegetical considerations are in play that have little to do with soteriology or epistemology.

Pointing to the difference between ‘belief in’ and ‘belief that’ does not amount to an argument for agnosticism (Batchelor 1997: 19), but merely a recognition that ‘beliefs that’ are embedded in a social context as part of a world-view, yet have provisional epistemological status. Green considers that instead of skilful means, it is ‘cognitive surrender’ or ‘selling out’, to call a traditional belief into question on ‘logical-empirical grounds’ (Green 1989: 278, 280, 289). On the contrary, it is a form of cognitive surrender not to do so, and not to appreciate that parts of a world-view may be predictive and imaginatively fictional. As an alternative to acquiescence to the truth-value of an entire world-view, the participant in a ‘living’ religious tradition can reasonably follow the more cognitively meaningful option of transitionally accepting beliefs about the mind that are conceptually justified, but neither verified or falsified, in the hope and expectation of an eventual resolution to

the dilemma they pose when compared to beliefs about the mind in other world-views. Equanimity about the eventual resolution to differences of view is a mark that an opinion is held without attachment under an attitude of right view, in a manner that is conducive to the continuation of dialogue. The Dalai Lama exemplifies this attitude of right view by his active encouragement of the Buddhism-neuroscience debate about the nature of mind, despite the clear inconsistency between the standard scientific view of mind/brain identity and his own opinion that there are some subtle levels of consciousness or ‘innate mind’, which do not correlate with brain activity (Gyatso 2003: 43). His commitment to continuing investigation and dialogue without rancour, despite the gap between his own view and that of neuroscience, is an example of the application of skilful means at the level most appropriate to the cultural context.¹¹ If its leaders were to refuse to engage in discussion of contentious ‘logical-empirical’ issues, Buddhism would forfeit the commitment to philosophical rigor that has characterised its debates with other faiths over the centuries. Philosophical rigor sets Buddhism apart from the doctrinal ‘bricolage’ of the ‘New Age’ movement (van Hove 1996: 186-187, Philips and Aarons 2005: 217-220), despite the suggestion that ‘there is a close, entangled and ambiguous relationship’ between these religious allegiances (Cush 1996: 205-207).

No central authority

In Britain today, competition between Buddhist sects is relatively dormant for no organisation has expanded beyond ‘niche’ status, (Smith 1996: 320) to achieve significant numerical or ‘brand’ dominance as the representative of Buddhism to the wider community. Rather than competing in a single marketplace, organisations may be attracting adherents with different psycho-social preferences, holding different metaphysical views, who feel comfortable with different styles of practice and teacher-pupil relationship. The majority of organisations cooperate through the auspices of the ‘Network of Buddhist Organisations’. Aside from issues of personal egocentricity and group definition, which in Buddhism *ought* to be restrained by the discourse and practice of compassion and mindful self-examination, the task that all organisations have yet to address is how to offer effective services to the public as well as to the silent majority of self-confessed Buddhists in Britain who have made

no sectarian connection (Bluck 2004), and presumably receive no support in the maintenance of their religious practice. If a relational holist view of mind enabled some of those isolated Buddhists to make sense of Buddhist practice, it would have demonstrated some utility as a ‘skilful means’.

Tradition itself cannot fulfil the role of a central Buddhist authority, because only the simpler doctrines having widest explanatory scope are universally accepted.¹² If relational holism of mind is not incompatible with the Four Noble Truths it may be an impetus to philosophical debate, but not to anathema or schism, otherwise a more traditional exegete could be accused of attachment to a particular view. In any event, recourse to the authority of textual tradition is an inherently hermeneutic process (Lopez 1995, 1996, 1997), and it would be naïve to assert an unequivocal metaphysical consistency among ancient texts that have undergone multiple translation and rescension over the centuries.¹³ For example, the view retrieved by Burford from the *Aṭṭhaka-Vagga* portrays a this-worldly form of Buddhist practice, without metaphysical or cosmological concerns, leading only to ethical perfection and happiness in this life, not to ontological transformation (1991: 1-11). Such metaphysical conservatism stands in marked contrast to the insulation of the mind from causal conditionality that is implied in other *suttas* (Hamilton 1999: 85, Conze et al 1954: 33 [AN I.10], Woodward 1948: 97 [Udana 80]). Despite these canonical instances, Hakamaya and Matsumoto assert that the early dualism of conditioned co-production became subverted by indigenous Brahmanic, Chinese and Japanese forms of grounding in non-dualism, which they call ‘*dhātuvāda*’ (Swanson 1997: 7, Matsumoto 1997: 170). Their view is supported by Dharmavidya (Brazier 2001: 23, 102-103, 146-148). That such inconsistent metaphysical positions co-exist in Buddhist tradition suggests that commitment to psycho-social practice is more important than subscription to particular metaphysical beliefs.¹⁴

Despite occasional metaphysical divergency, Buddhist philosophical discourses all have a natural point of reconnection in the circumstances of embodied life. The early *Aṭṭhaka-Vagga* account may be more ontologically-conservative than later Buddhological accounts, but neither refutes the other with respect to the salient point that psychological and ethical change in this life is the means to personal and social transformation. Although Buddhism’s this-worldly ethical orientation has been

neglected by western analyses (Weber 1965, Dumont 1970, 1986), there is no justification for schism in this world on the basis of metaphysical views about what will happen in other worlds, and no central reforming authority has the power to anathematise or excise any particular view.

Applied relational modelling

My interpretation of relational holism of mind prioritises ‘structural coupling’ between embodiment and an external world. It does not negate the role of internal ‘autopoietic’ neuronal events, but does assert that the conscious correlates of such enactions are homomorphic representations of an external world.¹⁵ Such a realist interpretation does not militate against the possibility of other-worldly metaphysical relations, but awaits reliable evidence that these relations take place. In the absence of that evidence, entailments such as the possibility of mental continuity between lifetimes have the status of fictional components of explanation, imagined for the purposes of prediction, until some warrant is granted by personal experience. This evidential requirement applies as impartially to this-worldly experiences as it does to other-worldly experiences, such as personal memories of rebirth, personal powers (*iddhis*), *bardo* experiences, or *nirvāṇa* envisaged as a subtly-embodied form of existence after death. Minds work predictively by the combination of known facts and unknown fictions, and both fact and fiction are essential features of the feedback processes of ‘top-down’ cognitive activity. Beliefs are not denigrated *as such* by location in either epistemological category, because fiction in religious discourse is usefully predictive, rather than an ‘idle wheel’. Predictive cognitive processes and their emotional constraints are observed, not suppressed, by *vipaśyanā* practices and are deliberately utilised in Tantric *sādhana* practices, and to eliminate the fictional activity of the imagination would be to annihilate a necessary part of mental functioning. The manipulation of fictional hypotheses in cognitive-emotive interaction is the mechanism of predictive explanation in both science and religion. Religious predictions and explanations may not be certain, but they ought to be ‘good *upadeśa*’, or they risk becoming the be all and end all of practice, rather than guides to the psychological alteration of habitual behaviour.

It is significant that psychological change is not envisaged by any of the participants to lead to the complete elimination of intentionality, but to a rebalancing of emotional-cognitive self-processes. Their clear preference for the warrant of subjective experience has motivated the development, in this thesis, of a balanced homeostatic model of the relational mind. This model could be applied to all possible relations, including relations capable of disjunctive metaphysical change from a this-worldly to an other-worldly 'direction of fit'. In the absence of a central authority, whether practitioners choose to work with a this-worldly or an other-worldly version of the relational model is a matter for them, for the point is not that an unknown second world-order cannot exist, but that such a world would also be a matter of external relations if the mind is only metaphorically internal, for although its (identical or supervenient) neuronal correlates are literally within embodiment, they are also literally in the world. The emphasis on property-relations that supports an externalist view of mind must stand on its own arguments, whether or not those arguments conflict with tradition. For instance, according to Stcherbatsky, the Sautrāntika tradition refers to processes rather than properties, and refutes both material and eternal objects by asserting that reality appears instantaneously (1962: 79-82). This view is refuted by the scientific observation of the duration of neuronal events.

Buddhism clearly distinguishes the objective individuality of continuing mindstreams, and, despite the comparisons to idealism by early western commentators, even Yogācāra holds that other minds have independent existence (Wood 1991: 93-96). By contrast, the relational holism perspective can be criticised as a chaotic and counterintuitive turn away from the plain fact of individual agency. Although de-emphasis of individuality may be counterintuitive, relational holism is not chaotic; it is a response to the danger inherent in the bestowal of firm categorical boundaries around things as objects, including the unreflective ascription of individuality to persons. Emphasis on relationality motivates a reassessment of the individual with respect to the social collective and the world, and in so doing provides theoretical support for compassionate social attitudes that are intrinsic to Buddhist practice.

Briefly, for the issue is a matter for a further study, relational holism may also turn out to provide theoretical support for an environmental ethic that is not so intrinsic to Buddhist practice (Harris 2000b), but which is being fashioned pragmatically and retrospectively out of Buddhist responses to contemporary circumstance.¹⁶ Harris criticises the ‘extreme holism’ of the Hua-Yen interpenetrative causal model of Indra’s net (2000b: 124-125), which naturally lends itself to an environmentalist interpretation but the holism advocated in this thesis is not so extreme, for it depends on empirical neuroscientific evidence for structural causal relations, rather than on hypothetically uniform relational ubiquity. But relational holism does entail, equably and environmentally, that loss of habitat and species bio-diversity has similar relevance to the loss of a limb, a memory, or a story, for these are all appearances to the neutral plane of consciousness.

In a marked contrast to the relational view of mind, which depends upon the causal permeability of individual objects, including persons, contemporary Buddhism has been portrayed as subverted by the western emphasis on individualism (Mellor 1989, 1991) and criticised for providing individuals with a mythological means of escape from the relational ailments attending loss of innocence under modernity (Žižek: 2001: 11-15, 63-68). Mellor’s arguments, which were mainly directed against the FWBO, have met with a detailed but partisan response (Sangharakshita 1992), although when asked about Mellor’s critique, Ratnaprabha, who is a senior member of the Western Buddhist Order, remarked that: ‘there may be some truth in what he says, and in a way I am quite pleased about that’. Contemporary Buddhism should pay attention to external assessments like Mellor’s and Žižek’s, for as Jones remarks, serious criticism from outsiders is valuable, ‘like gold’.¹⁷

Žižek characterises humanity’s failure to resolve the ‘Hegelian’ dilemma of the material inhabitation of the ‘Spirit’, and to bridge ‘the gap between the inner being and its external expression’, and suggests that the absent ‘proto-ontological’ status of subjectivity turns into a ‘longing to regain the lost object’ and a ‘split attitude’ (Žižek 2001: 57- 68). The ‘stuck’ inner self or inner voice oscillates between an offering of the ‘Sublime’ and the ‘excremental’, leading to a contradictory ‘compulsion’ to enjoyment (*jouissance*) and to truth, to dream and reality, to a transcendental contradiction between ‘sublime jewel’ and ‘formless shit’, for ‘when our innermost

self is externalized, the result is disgusting' (Žižek 2001: 57- 68). Žižek's thinks that when the dilemma of mind is irresolvable internally it is projected externally, for example into the long standing western obsession with Buddhist Tibet (Žižek 2001: 63-68). His plain point is that fundamentalism is an obsession with the 'Self' whereas multiculturalism is obsession with the 'Other', but both are expressions of a sense of separation or 'loss' (2001: 68-69). He raises significant psycho-cultural issues, but frames them in the Christian psychology of the self, thereby presuming and reinforcing his 'split attitude': the dilemma of dualism between the individual the world.

As a prospective Buddhist view, relational holism does not negate the dualism of the individual and the world, but the theory diffuses the associated internal/external dilemma by exercising hermeneutic suspicion about the resolution of dynamic property-processes into selves and others. That does not entail that Buddhists should exhaust their individuality or that that unique features of individual personality are dissipated by the homeostatic rebalancing of attention and intention. This is because the origins of individuality are not internal: they are manifestations of a history of external relations with significant others. The problem with individual personality is not that it exists, but that it exists in a state of social imbalance, and of self-obsessed greed, hatred and delusion. As an example close to home, Crook mentioned that he could not disagree with an American visitor who made an unfavourable comparison between the Buddhist obsession with self-improvement and the compassionate pastoral concern of the Methodist ministry. Western Buddhists have yet to work out the most appropriate ways to balance concern for self and others, and to express that balance by compassionate activity in multicultural localities with diverse religious allegiances. Religions occupying niche status in globalised societies cannot practice the compassionate attitudes they preach unless they develop appropriate forms of social engagement.

Theorising the difference between the individual and the world has been a western project ever since Augustine reversed the neo-Platonic emphasis on the incorporation of the individual within the world and the incorporation of both within the deity, by locating deity-communication within the mind of the individual (Cary 2000: 31-44). The result, over the centuries, is that the individual has become as

much an epistemological as an ontological concept. Since it has become a prime source of western academic discourse, the significance of the non-western individual has been undervalued in studies of oriental societies (Dumont 1970, 1986), perhaps because the intimate and diverse habitus of day to day cultural contact with others has been anthropologically misunderstood, and literally overlooked (Harris 1993: 33-36).

Individuality springs from an accumulating history of the manifestation of personal capabilities flourishing in dependence on a social matrix, in the East as in the West. Buddhist individuals in Buddhist cultures are embedded in the meanings and values of their social matrix, and conversely, globalisation causes progressive dis-embedding from traditional social matrices. The interplay between individual agency and social structure is an inexact theoretical field (Archer 2000), and there is disagreement about the extent to which social structures can be influenced by individual agency if they are autonomous emergent properties of the generality of individual relations (Kincaid 1985, Tuomela 1990). It may be devastating for the aspirations of a religion holding only niche status in a globalised society, if individual influence exerts little or no effect at the level of social structure. Yet the socially-engaged Buddhism of Dharmavidya and Jones depends on the establishment of a link between individual religious practice, socially-engaged religious practice, and the possibility of significant social change for the better. The same theoretical connection between social levels is implicit in Pym's understanding that Pure Lands are ideal states of mind, which can give rise to ideal states of affairs in this world. It is part of the distinctive message of the Mahāyāna, and according to Dharmavidya also of early Buddhism (2001: 29-31, 56), that progress on the Buddhist path should be as much for the benefit of others and for the world as for oneself. If such rhetoric is to be more than wishful thinking individual self-concern must be balanced by concern for others. That balance of motivation receives theoretical support from the externalism of the relational view of mind, for approximation to individual homeostasis is unachievable over the long term without approximation to social and environmental homeostasis.

As with the disjunction between conditioned and unconditioned ontologies of mind, textual references can be found to lend rhetorical support for any particular view, but there are indications in the *suttas* that egocentric individuality is conducive

to a belief that the reified self is the essential nature of mind (Harvey 1995: 51), and that such a delusion leads inevitably to suffering. This caution about self-reification extends beyond refutation of the Vedic doctrine of a soul-like metaphysical eternal entity (*attā*), and beyond the injunction to abandon attachment to views, to advocacy of social concord as an alternative to individual egocentricity:

So I, reverend Sir, having surrendered my own mind, am living only according to the mind of the venerable ones...reverend Sir, we have divers bodies, but assuredly only one mind...that is that we, reverend Sir, are living all together on friendly terms and harmoniously, as milk and water blend, regarding one another with the eye of affection. (Horner 1959: 201 [MN 3. 128])

It cannot be gainsaid that there are individual mind-streams or individual lines of cause and effect that attract psychological and juridical explanations based on the common-sense extrapolation that since bodies are physical objects, minds must be abstract objects. In fact minds are relational nexuses engaged in the continual integration of interdependent properties of the world into transient forms of consciousness. Just as there are orchestras, there are collections of mental events. There are no objective minds, just as there no orchestras other than a collocation of parts and parts of parts, for at some level of observation all parts are concatenations of properties. Thus, what Ratnaprabha calls the ‘true individual’, may be true in some evaluative sense, but is not meaningfully an individual at all levels of explanation, where the individual is observed to be constituted from impermanent sets of relationships amongst reliable sorts of properties.

Whether or not a ‘this-worldly’ interpretation of relational holism is a useful hermeneutic addition to Buddhist polytheism or, as Shaw suggests, mind and world are manifestations of an ‘other-worldly’ relation to a transcendental Buddhological source, there can be agreement that the exigencies of everyday life constitute the only arena for change under both psycho-social and soteriological descriptions. To accept others is to allow room for other points of view, and to allow room for other points of view is to relinquish the misguidance of emotional investment in one’s own. Equable acceptance of other individuals and other views can be dismissed as utopian, but the supposition that the basic bodily imperative to homeostasis can be universalized to include society and the world supports both a realistic and a romantic opposition to

modernity's ideal of a continual development, which functions irrespective of the constraining influence of human experience (Lyotard 1991: 2, 7, 105). Equanimity is entailed by the establishment of trust in the reliable relational encounter between a selfless self and an indirect world. It is gradual psycho-social modification to the habitual expressions of consciousness that brings about approximation to homeostasis, not an escape from the temporal constitution of the mind into an absent, hypothetically internal state of consciousness, into another reality, or into another world.

Notes to Chapter 9

¹ Gombrich and Obeyesekere remark that : ‘the integrity of the Sangha is conceived to rest not so much on its orthodoxy as on its orthopraxy’ (1988: 446). See page 103 of this thesis.

² Varela and Thompson (2003) argue that the consciousness is constituted as an emergent process on the basis of ‘reciprocal causation’: a combination of ‘downward’ causation by intentional cognition and ‘upward causation’ by somato-sensorimotor systems (2003: 273). For the reasons given in Chapter 8, sourced from Klee (1984) and Girill (1976), the notion of ‘Democritean’ processes instantiating emergent properties is persuasive, but the argument for downward causation freed from upward causal determinism is not.

³ The notion that ‘top-down’ cognition can contaminate consciousness suggests that contamination (*āsava*) can be as much an inflow as an outflow. The mind defiles the world as much as the world defiles the mind (Horner 1993: xxiii)

⁴ Recall that a moment of consciousness is framed within a measurable duration: there is no absolute immediacy of mind (Libet 1999: 49-51, Varela 1999: 117).

⁵ It could be argued that, in the *Kālāma Sutta*, the rejection of a teaching because it ‘fits becoming’ (Woodward 1932: 172 [AN III. 7. 65]) is an argument against the warrant of experience. Since the *sutta* warns against acceptance *ad hominem* ‘out of respect’, the only warrant that is unequivocally advocated is that of ethical intuition. For a more traditional interpretation, see Bodhi (1988).

⁶ Holding an opinion is ‘betting on the truth of a particular formulated sentence’ (Dennett 1971: 19)

⁷ This point, made implicitly by Vajiro, is that if there is agreement about the simple, and essentially psychological, four-fold diagnosis of suffering, its cause, the possibility of its cessation, and the way to its cessation, then dialogue about the meaning and ontological entailments of this formulaic diagnosis should not provide sufficient grounds for the characterisation of opposing views as heterodox or schismatic.

⁸ The Gelug-pa systemize Buddhist philosophy into a ‘hierarchy of tenet systems’ (Klein 1998: 33). Matsunaga describes how, in China, the example of Jākata tales, affinities to Daoism in contrast to Confucianism, the comparable Daoist ‘conversion of the barbarians’ (*hua-hu*) theory, notions of conventional and ultimate truth, the exigencies of translation, and the *upāya kauśalya* teaching were all aids to the systematic assimilation of non-Buddhist deities and doctrines into Buddhist equivalents (Matsunaga 1969: 97-120, 285).

⁹ Green’s remarks about Sōka Gakkai were of their time, and may no longer be accurate representation (1989: 285). I can find no contemporary reference to the

Scientific Buddhist Association, which implies that the organisation is now in abeyance.

¹⁰ The interview participants had varying degrees of commitment to rebirth: Bhikkhu Gavesako prefers Buddhadasa's emphasis on moment-by-moment rebirth (Bucknell and Fox 1983: 104-106); Crook does not believe in rebirth; Wistreich and Jones believe in rebirth, and cite *ad hominem* testimony as evidence; Pym and Ratnaprabha argue for rebirth on the counterfactual ground that rebirth is a guarantee of existential meaning and eventual justice; Pym also remarks that the mechanism of rebirth is not understood. It is not 'cognitive surrender' to reach a personal conclusion on the available evidence.

¹¹ See Chapter 5 note 3.

¹² Ratnaprabha's brief summary of specific teachings invites exegesis and hermeneutic interpretation (see Chapter 5 note 7). Despite their simplicity of expression, his list does not constitute a simple theory of universal scope into which other theories can be 'nested', as do the Four Noble Truths or *śūnyatā*.

¹³ The *suttas* were only introduced into Sri Lanka and committed to writing in a language 'not appreciably different from Pāli' approximately 300 years after the death of the Buddha (Norman 1978: 32). No substantial surviving manuscript is older than the sixteenth century.

We are in a similar position to the editor of Homer, i.e. we do not know either the author or the exact time from which the text tradition started (von Hinüber 1978: 48-49).

¹⁴ It is instructive that, in the *Kālāma Sutta*, particular beliefs about rebirth destinations and the efficiency of *kamma* are referred to as 'consolations' or solaces', and neither debar nor promote acceptance into the *Sanṅha* (Woodward 1932: 175 [AN III. 7. 65]).

¹⁵ Visual images of the Buddha's enlightenment indicate the traditional belief that it was a profound experience as well as an explanatory insight. Like Dr. Johnson's encounter with a stone, the verificatory earth-touching gesture (*bhūmisparśa mudrā*) is a visual demonstration that the enlightenment experience included some relation to an external world.

¹⁶ For example, the Dalai Lama has adopted a negotiating position on the autonomous status of Tibet, which calls for environmental and species protection, sustainable development and the removal of nuclear sites (Gyatso 1989).

¹⁷ See Chapter 4 pp. 97-100 of this thesis.

Chapter 10

Conclusions

Introduction

The constraints and limitations encountered in the course of the research are briefly discussed, followed by some neuroscientific and sociological suggestions for further study, and a suggestion for further study in the traditional Abhidharma texts. The thesis then concludes with a summary of the main outcomes.

In the interviews, detailed discussion of the ontology of mind did not take place, by virtue of the interview participant's overriding concern for applied psychological issues of subjective experience, but ontological speculations are entertained in the course of my hermeneutic interpretation. Using a modified version of Lewis's discussion of attitudes (1979), an examination of the relationship between explanation and experience, self and subject suggests that experience cannot be entirely separated from explanation, but that the subject can be distinguished from the self. On one hand, self-processes are hypothetical, unconscious, intentional constructs over extended time, which can disturb homeostasis unless supplemented by the ethical guidance provided by meditative attention to the way things are in the external world. On the other hand, the subjectivity of sentient experience is a real relation across brief temporal delay, carrying the implication that humans cannot escape their constitution as time-beings. I argue that although the mind is epistemologically emergent it is not ontologically emergent, for although the mind cannot be causally explained in terms of the micro-properties of the physical world, it can be causally explained in terms of the entirety of structural relations occurring within the embodied brain and between the embodied brain and external world.

Problems encountered

The research met with some practical constraints. Firstly, the study could not claim to be quantitatively representative, since a methodological decision was taken not to over-extend the data-collection component by the inclusion of organisations representing populations of ethnic Buddhist origin. The study could only have claimed to be broadly representative of major 'convert' organisations if there had been input from Sōka Gakkai, from the Karma Kagyu group at Eskdalemuir and Holy

Island, from the Order of Buddhist Contemplatives at Throstle Hole, Carrshields, and from the New Kadampa Tradition at Ulverston. In addition, Bluck's analysis of the 2001 census data suggests that 'perhaps even the majority' of British Buddhists are not affiliated to organisations, which indicates that even a complete sample of organisations would not be representative of 'convert' British Buddhist opinion (Bluck 2004).

Secondly, the multi-disciplinary nature of the study placed practical limitations on the communication of information from each discipline. On the neuroscientific side of the data, some physiological information relevant to the neuroscience of emotion had to be omitted. On the Buddhist side, it was not possible to include examples from Abhidharma texts other than those most relevant to the interpretation. For example, discussion of the early Buddhist doctrine of elements was included because the difference between 'property' and 'brute fact' interpretations illuminates the discomfiting mixture of property-relations ontology and object-relations ontology within the tradition as a whole. The 'omnipresent mental factors' were mentioned because they relate to the neuroscientific interest in the sequence of perception and cognition, whereas discussion of the important *skandha* doctrine was not included because it is a higher-level psychological theory that is not illuminated by neuroscience. Discussion of the Yogācāra *trīsvabhāva* theory is included because it illustrates the continuity across the Mahāyāna tradition of the fundamentally relational theory of dependent origination (*pratītya-samutpāda*), despite the essentialist ontology that seems to underpin much mythological proliferation.

Thirdly, although the interview sample was not organisationally representative, the ten participants provided more qualitative information than could be analysed in a single thesis. Some interviews were not fully utilised because they contained information that was additional to the main theme. There is more that remains to be said about mysticism in Buddhism and other world faiths, which was raised by Pym; about the contemporary significance of monastic practice, as exemplified by Bhikkhu Vajiro and Bhikkhu Gavesako, but most notably about the consequences of relational holism of mind for individuality, and for the socially-engaged Buddhism advocated by Dharmavidya and Jones.

Fourthly, the participants' unwillingness to engage with the standard scientific view of mind/brain identity and their preference for subjective experience prevented a study that was solely an analysis of participant's views of the implications of neuroscience. This constraint motivated a hermeneutic interpretation of the significance of the research findings, which incorporated relevant scientific knowledge and information from the Buddhist tradition to produce the relationally holistic hypothesis of the nature and activity of mind. Without necessarily agreeing with the thesis conclusions, the participants did not raise objections to a synopsis of the thesis that was sent to them at a late stage, which suggests that they find the methodological approach reasonably acceptable.

Fifthly, the participant's willingness to be named rather than given the anonymity that is usual in social research placed constraints on the interpretation of their words, which were onerous but beneficial. The naming of the interview participants permits verification of the probity of the research. Naming also influenced the presentation of findings, with interview contributions presented prior to my interpretation in subsequent chapters.

Suggestions for further study

Neuroscience

The argument that relational holism leads to increased awareness of the property-relations that support object-relations implies that it might be possible to perceive the world differently. That seems an unlikely hypothesis, because object-perception is phylogenetically and developmentally determined, yet if attention to relations can become habitual in the form intuitive awareness of ethical consequences, leading to a change in affect or somatic feeling-tone, it might be worth investigating whether such ethical and affective rebalancing causes qualitative alterations to the sensory perception of objects.

The Dalai Lama's interest in neuroscience has stimulated scientific study of meditative states (Davidson et al 2003, Carter et al 2003, Ritskes et al 2003, Lazar et al 2005). In Kennedy (2004: 150), I argue that meditation is part of the broader category of ritual activity. It follows that neuroscientific research into meditation may be addressing only one of the ways in which religious modifications to

consciousness may be correlated with changes to brain capacity and structure. Research should not only involve meditation, but also the practice of other forms of ritual, and be controlled against groups who are highly intentionally-preoccupied. It might also be worth investigating the differences between brain imaging during visualisation meditation, which makes active use of top-down cognitive imagination systems, in comparison to insight meditation (*vipas̥yanā*), which observes mental activity and in comparison to concentration meditation (*śamatha*), which reduces mental activity.

Abhidharma

The relationally holistic view of mind advanced in this thesis would benefit from philological research to identify the appearance, within the Abhidharma literature, of the theory's underlying ontology of structural property-relations, and a philosophical comparison of exegeses that seek to unite the relational ontology with the competing ontology of objective entity-relations. Some examples of concepts from either side of the ontological divide are given on Page 329.

Sociology

This study could be usefully complemented by interviews with representatives from organisations that were not included. The larger organisations have already been mentioned, but there are numerous smaller groups and lineages, such as Rissho Kosei-Kai (Lotus Sūtra), Deshimaru (Zen) Dechen (Sakya-Kagyū), Diamond Way (Kagyū), and Longchen (Nyingma). The study also needs to be replicated with the involvement of representatives from 'ethnic' Buddhist organisations in Britain, in other western jurisdictions and in traditionally Buddhist societies, to determine the extent to which the findings are characteristic of the response to neuroscience across contemporary Buddhism as a whole. It may also be worth replicating the study after some decades have elapsed, when there may be a more detailed scientific understanding of the neuronal correlates of consciousness, and more dissemination of neuroscientific findings into 'consensual' discourse. Contrary to some of the hyperbole that surrounded advances in neuroscience in the late twentieth century, it may take a hundred years or more for the overhang of hypotheses to be cleared and

firm correlations to be drawn between mind and brain events that are sufficient to allow the Buddhist-neuroscientific dialogue to emerge from transition.

Despite the stress laid on subjective experience by the interview participants and despite their criticism of the academic approach to Buddhist study, there remains a role for academic examination of the philosophical consistency of Buddhist explanations of mind, for experiential intuition always stands in need of clear expression. Scholarly approaches to religion were considered by some of the interview participants to be soteriologically worthless forms of academic bias. Against that perception it can be argued that whenever doctrine and practice is not challenged intellectually there is scope for subversion. This issue is not of great moment when only theoretical hypotheses are under consideration, but it does matter when the authority of teachers is grounded in their unchallenged interpretation of doctrine.

The most significant applied research indicated by this study into the Buddhist-neuroscientific debate may be into the sociological implications of a relationally holistic view of the mind. With respect to organisations, the consequences of serious engagement with neuroscientific findings by any Buddhist organisation is worthy of investigation, yet despite the Dalai Lama's initiative no organisation has entered into formal discussion of the relevant issues thus far. However, the discussion in Sangharakshita's (1998a) review of Batchelor (1987: 37) and the article by Lyne (2004) in the *New Chan Forum* suggests that some individuals are interested in neuroscience. With respect to sociological theory, relational holism has implications for Durkheim's metaphorical model of society as a mind (1974: 1-37), and for Minsky's model of minds as societies (1988: 20). It may be possible to bring the two models together, to consider them as being as much literal as metaphorical systems and to make meaningful comparisons between functional neuronal structures and the functional structures of society. On first consideration these systems are not particularly similar, yet they have evolved in tandem with some degree of functional 'fit'. Despite Kincaid's conclusion that the individual/social structural connection cannot be reduced to explanations of individual acts (1986: 492), the key issue is how psychological changes to the habitual run of individual agential acts might be capable of initiating structural change in society. The possibility of such a micro-to-macro

connection is vital to socially-engaged Buddhism, for if psychological change cannot be cashed out in the form of social change there is little hope for Buddhist environmentalism or for the this-worldly kind of Pure Land Buddhism advocated by Dharmavidya, Pym and Jones.

Archer (2000) inveighs against the reductionist ‘conflation’ of individual agency with social structure, which obscures the dialectical interaction between individual identity and social identity as a mechanism for social change (2000: 4-6). Persons strike a balance between their individual and their social identity (Archer 2000: 293), and function at personal, cultural and structural levels by acting variously as individual, collective and ‘corporate’ agents. Persons, cultures and societies all exhibit emergent powers (Archer 2000: 307), which interact in complex ways to cause social change or ‘morphogenesis’ (2000: 265-264). The problem, for Buddhists, is that all these activities depend on temporally-extended self-processes that are liable to gasping and attachment. The depressing conclusion may be that the cumulative effect on society of many individuals acting ethically from a state of equanimity may be less influential than subversion by individuals in the grip of strong self-attachment. Despite a multiplicity of systematic ethical constraints, now joined by the sociobiological analysis of altruism, it can at least be supposed that the structural functioning of globalised society is relatively impervious to the accumulation of individual ethical acts. A contemporary religious studies analysis of that hypothesis could benefit from a neuroscientific illumination of Durkheim’s mind-model of society and Minsky’s society-model of mind.

Conclusions

Introduction

The primary aim that motivated the study has been fulfilled, for the conclusion that the mind is relationally holistic eliminates the dilemma of inconsistency set up by the compartmentalisation of Buddhist and neuroscientific explanations of the same world. In the course of reaching the thesis conclusion I abandon the ‘standard’ scientific view that the mind is identical to the brain. That theory imprisons the mind within the brain, without adequate explanation of the development of brain and mind from external activity in response to the world. Like the Augustinian notion of the

soul as an ‘inner man’, and like the commonsense imagination of an internal self, the theory of mind/brain identity and the theory of mental supervenience both depend on a metaphorical description the mind as if it were the activity of an objective entity in space, rather than an emphasis on the mind as a continuing set of relations over time. Subjective attention directed towards relations can act as a counterbalance to selfish intentional attitudes towards objects, and can facilitate approximation to psychological and social homeostasis.

The significance of experience for tradition

This study could have included an analysis of the opinions of the interview participants with respect to the traditions and the organisations they represent, enabling a categorisation of British Buddhist organisations along the usual model of a ‘spectrum of adaptation’ (Green 1989 Batchelor 1994: 338-340 Waterhouse 1997:25-27, Bluck 2006: 1-2) to the western context. I have not done so because I consider that religion fulfils a multitude of purposes that require separate evaluation, rather than characterisation along a single attitudinal spectrum. The individuals interviewed for this study advanced their own interpretation of practice undertaken according to tradition in the contemporary context. I have based my interpretation on theirs, discounting levels of generalisation in between. That dialogic method was appropriate because the study was never intended to be an anthropological account of British Buddhism as the social manifestation of a tradition undergoing translation into another civilisation, but was intended to be a philosophical examination of the dilemma set up by the emergence of an alternative, neuroscientific mode of explanation.

The interview evidence indicates the importance of immediate experience in the validation of traditional explanation, hence that issue became a significant theme in the study. Sharf (1998) questions the veracity and relevance of mystical religious experience, but others testify that the experiential processes, including imaginary experience, are of primary concern for Buddhism (Gombrich (1997: 7, 11, Hamilton (2000: 84). Gombrich effectively resolves that discrepancy by noting that Buddhist tradition does not attempt to describe mystical experience, but to set it in the context of a religious form of intellectual understanding (1997: 17-18). The contested

symbiosis between private experience and public explanation, including traditional explanation, has been illuminated neuroscientifically in the course of the thesis. Immediate experience turns out to be an indirect explanation of the world, for it depends upon phylogenetically-ancient correspondences between neuronal synchronicity and salient external features of the world. Still, the reliable facticity of experience warrants its use in the justification of explanation.

The attitudinal model of mind

The initial interview questions were designed to discover the extent to which participants thought that the burgeoning hypotheses and findings of neuroscience were relevant to their views of the nature of mind. Despite some willingness to accept sound empirical evidence, the participants' manifest lack of interest in the implications that neuroscientific hypotheses might carry for Buddhist mind-theory meant that, in their interviews, discussion of ontological questions was secondary to broadly psychological discussion of subjective experience.

As an aid to understanding the participants' preference for subjective experience over ontological explanation, Lewis's (1979) model of the formation of attitudes was expanded by the addition of the category of the 'subject' (*de animo*) of experience, and assigned the wider talks of modelling mental activity in general. Despite the delay that occurs in the cerebral cortex during the cooperative activation of higher cognitive systems involved in consciousness (Libet 1965, Pribram 1999), the main distinguishing mark of primary subjective experience is its ability to report approximately immediate events. Thus, whether or not it is deluded in other respects, the mind takes sufficient time to know itself retrospectively as a subject, by means of the end-state of one neuronal ensemble sequence constituting the initial 'horizon' of the next (Varela 1999). As a result of this natural continuity, sentient beings are 'time-beings' (Dōgen 1988: 76-83), retrospectively knowing with Augustinian certainty that they are the subjects of experience, for even if perception is thought to be a mistake, it is self-confirming (*si...fallor, sum*) (Augustine 1968: 532 [CG 11.26], Abercrombie 1938: 62). In addition to the continuity and certainty bestowed by subjectivity, humanity has developed the memorial ability to extrapolate the activity of a self, which is imagined to represent the individual in past and future scenarios

over extended time. Because Lewis assumes that humans are ‘hyper-rational’ beings his model does not incorporate the influence of emotions on the constitution of past and future selves, and does not distinguish between processes that maintain the self, as opposed to processes that maintain the subject. Damasio (1995) explains the emotional constraints that are exerted on cognitive self-processes by somatic limbic pathways, so enabling rapid non-habitual and habitual response to the occurrence of danger and opportunity in primary subjective experience. This is a valuable corrective to the traditional western view of the mind as a rational engine.

The imaginative ability to model and predict is motivated by desire for greater knowledge and control of the future. If all dispositions are unconscious (Hulse, Read and Schroeder 2004), then desires are unconscious dispositions, which only become conscious as they motivate thoughts, actions or utterances. Desire for a determinate future eliminates time by turning conscious attention away from the world towards the satisfaction of dispositions in imaginative ‘as if’ feedback processes. Imaginative experience appears to consciousness on a par with sensory input from the external world, but is capable of preoccupy consciousness to the exclusion of external sensory input. Not only is time lost in the metaphorical spaces of the imagination, but also the rich texture of sensorimotor experience of the world (Arendt 1978). It seems paradoxical that time-beings can become unaware of time, but one possible extrapolation, asserted by Shaw and implied by Pym, Jones and Bhikkhu Gavesako, is that minds are capable of freedom from time. This metaphysical prediction carries the implication that minds are non-material supervenient entities. That might turn out to be a ‘good *upadeśa*’, but remains a fictional rather than an empirical component of explanation until such time as it is verified by immediate experience.

The discussion of cognitive influences on perception in Varela, Thompson and Rosch (1991) suggests that ‘top-down’ cognitive influence permeates the flow of ‘bottom-up’ sensori-motor information, and permeates immediate experience with influences from past experience. This view of perceptual cognition implies that direct perception is impossible, and casts doubt on the notion of enlightenment as a metaphysically disjunctive and instantaneous transformation of consciousness as a result of direct perception of ‘the way things really are’.

Relational holism

Whether direct or indirect, perception is impossible without sensorimotor ‘structural coupling’ *de re* with some sort of an external world, but along with awareness of time, awareness of this coupling can be eliminated from consciousness attention on a moment-by-moment basis by the ‘self-imprisonment’ associated with intentional grasping after desired objects (Brazier 2003: 32). The psycho-social significance of this fragility of conscious attention is not addressed by theories of mind/brain identity or mind/brain supervenience. Neither provides the ‘explanation extension’ (Kitcher 1989: 447) necessary for a complete account of the nature of mind, for they only cover the ‘autopoietic’, metaphorically-internal component of a wider process that inalienably incorporates ‘structural coupling’ to the properties of an external environment (Varela Thompson and Rosch 1991).

Neuroscientific evidence of the structurally coupled nature of immediate experience, along with Buddhist testimony of the significance of immediate experience in the verification of doctrinal explanation, gives rise to the hypothesis that the *mind is a relational category, not an elemental category*. As such, the term ‘mind’ is used too restrictively when it refers solely to mind/brain identity, and when it refers to non-material mental supervenience on material brain activity. The category of mind is more representative of real circumstances, and less of an analytical dilemma, when it is taken to refer to the emergence of consciousness in dependence upon the totality of relations between embodied brains and an external world.

If conscious ‘minding’ emerges on the basis of a structural relationship between brain and some sort of world, it is reasonable to suppose that the mind is constituted from the totality of relevant property-relations, irrespective of metaphysical beliefs. The experience of property-relations is prior to metaphysical extrapolations about whether or not the relevant properties include a hyletic substratum (an external ‘first-world’) or a super-stratum of mental supervenience (a hypothetical, metaphorical ‘second-world’). Minding is just the phylogenetically-mediated organisation of relevant property-relations into ‘appearances’ or ‘semblances’ (Arendt 1978). Appearances now differ from those available at the time of the Buddha, in that they

include objective explanations from functional brain anatomy and physiology, which have been brought to the level of appearances by neuroscientific investigation.

The experience of object identification is a pre-linguistic form of explanation: a commonsense ‘top-down’ cognitive commentary on sensorimotor structural coupling, utilising fairly fixed qualial patterns in the organisation of perception. Object-identification usefully enables speed of prediction in complex scenarios; it is a prototypical way of observing the world in dependence upon spatial organisation. The ubiquity of the prototype obscures the realisation that entities, or objects, are not ontological fundamentals, but merely useful designations. They are cognitive events that obscure the more fundamental relational ontology of the all the properties that are constitutive of consciousness.

From the objective perspective that cognises sets of relations as if they were entities, it is natural to imagine souls, selves, minds, subtle minds, and subtle bodies, and to conceive of them interacting in metaphorical spatial containment, after the manner of parts, wholes, interpenetrations, and transcendences between different worlds. From a more relational perspective, the prototypical cognition of objective entities is set aside in favour of a more dynamic ontology of sets of structural relations. It is because entities are non-linguistic cognitive explanations of enduring patterns of structural relations that relations are conceived to be objects when they cohere at a particular location over time. Examples of ambiguity between the entity view and the relational view may be found throughout the Buddhist tradition. I tentatively subscribe *pratītya-samutpāda*, *paratantra*, and *śūnyatā* to the relational ontology, and *bhavaṅga*, *pabhassara-citta*, *ālaya-vijñāna*, *Buddha-dhātu*, *tathāgata-garbha* and ‘very subtle energy mind’ (Tib. *shin tu phra ba’i rlung sems*) to the entity ontology.¹ I think that the relational ontology is more fundamental,² but both are fallible explanations derived from prototypical perceptual experience of the same reality, and it may be that attention to ‘the way things really are’ leads eventually to the realisation that they represent the same experience.³

I want to stress relational ontology over entity ontology because entities are prototypically processes in stasis whereas relations are prototypically processes of change. Because the only thing that does not change is the ubiquity of change, relationality seems a better characterisation of the way things are in the world. The

psychological problem attending the ontological emphasis on objects, touched upon in Brazier (2003: 36-37), is that the corresponding lack of attention to relationality allows conscious awareness to be overwhelmed by addictive attitudes of greed, hatred and delusion. These unconscious intentions reinforce the imaginary inner self by motivating the possession or rejection of real and abstract external objects.

The priority of experience

Envisaging the mind as the totality of relevant property-relations could be called an opinion: the content of a ‘belief-that’. It can also be characterised as an attitude of equanimity with respect to the unspecified metaphysical status of appearances to consciousness, including the status of doctrinal explanations *de dicto*, constructions of the imagination *de se*, or philosophically realist or idealist beliefs about experiential acquaintances *de re*. Equanimity arises from the realisation that relational experience happens prior to any construction that is put upon it, whether or not a particular appearance in experience is the work of memory, the imagination, structural connections with the hylic substratum of the ‘first’ physical world, or supervenient connections with a ‘second’ or overarching transcendental world.

In everyday experience, Augustinian certainty (*si...fallor, sum*) with regard to immediate experience is combined with Wittgensteinian certainty about the foundational facticity of the external world. The world may be an ‘autopoetic’ enaction or a ‘homomorphic’ representation, but it is nonetheless certain in the sense that it is a suitable *de re* acquaintance of sufficient reliability to form the ‘hinge’ around which the life of the mind turns (Wittgenstein 1979: 18 [OC.116], Stroll 1994: 105-110). The mistake that sets up life as *samsāra* is not a matter of commonsense certainty about the subject of experience or the world of appearances, but of attachment to certainty. That mistake is an unconscious desire for the certain continuity (eternity) or certain cessation (annihilation) of the duality of self and world.⁴ Unconscious desire for certainty motivates attitudes, attitudes motivate opinions, and opinions can ossify into beliefs, before any verifying recourse to the facticity granted by suitable experiential acquaintance *de re*, and without any subsequent sense of freedom granted by acceptance of the determinism of causal relations with equanimity. Given the association between unconscious intentions and

beliefs, the proper attitude towards a belief is that of ‘right view’ (*sammā-diṭṭhi*), expressed as equanimity, indifference or poise (*upekkhā*) with respect to the verisimilitude of an explanation in advance of its experiential realisation. This intimate correlation between right view and equanimity can account, I suggest, for Jones’s ambiguous approach to doctrine, and for the general reliance placed by the interview participants on the warrant of subjective experience, irrespective of their degree of attachment to a selection of traditional metaphysical views.

Internalism and equivocal emergence

Mind/brain identity, mind/brain supervenience, and Varela, Thompson and Rosch’s (1991) ‘autopoietic enaction’ account, are all incomplete explanations by virtue of their emphasis on the internal constitution of mind.⁵ Activity in embodied neuronal systems plays a crucial role in the constitution of consciousness, but always in cooperation with external circumstances, for although there are internal states of the brain, there are no literally internal states of mind. Augustine’s idea of the ‘inner’ mind as a metaphorical residence for an abstract object-self or soul has social and juridical utility, yet it is a fiction that depends entirely upon external criteria (Wittgenstein 1992: 61-63, 84-85, 88). Prasada and Dharmavidya reach a similar conclusion (Brazier 2003: 47),⁶ and Shaw makes an associated point when he suggests that Buddhism does not recognise the existence of unconscious mental events. To restrict mental events to appearances to consciousness not only carries the implication that the mind is not internal, but also that it is a ‘Democritean’ emergence: it is not just identical to, or supervening upon a certain complexity of neuronal events, but emerges as a property of the complex holism of brain-world relations.

The concept of emergence is yet another application of the spatial metaphor. It inappropriately transfers concepts, which are prototypically applied in the recognition and manipulation of objects, from their source in the external world to their target in the explanation of mind. There may be no such abstract or physically objective *thing* as a mind, just a name for integration in the useful, ‘qualial’ form of consciousness of a variety of feedback commentaries on relations between the embodied brain and the external world. Most brain processes are non-linear dynamical systems. Their complex neo-cortical combinations, in further interaction with limbic emotional

systems, appears to exert a qualifying or ‘downward’ causal influence on the relatively more simple, more phylogenetically-ancient, thalamo-cortical sensorimotor processes that guide continual approximation to bodily homeostasis. The emergence hypothesis is that this downward causal influence is of such complexity in humans that is ontologically distinct: it is not determined by the micro-properties of the brain. Taken a step further, the metaphor of emergence suggests, and Ratnaprabha imagines, that the mind could become capable of causal separation from, or ontological transcendence of, the micro-properties of its neuronal basis (Silberstein and McGeever 1999).

From the relational holism perspective, mind naturally transcends the micro-properties of the brain, for it is constituted by structural coupling between the properties of two separate systems: ‘autopoietic’ brain and external world. Mind is a cognitive feedback commentary on the entirety of brain/relations, manifesting as consciousness when there is sufficient temporal delay for intercommunication across the neocortex via reciprocal connections in the claustrum (Crick and Koch 2005). Mind is a ‘Democritean’ rather than an ‘Empedoclean’ emergence (Girill 1976, Klee 1984), in that its conscious properties (qualia) are not the same as the micro-properties of its causal basis (neuronal activity and sensory contact with salient features of the world). But despite the complexity of neocortical feedback processes, mind does not escape determination by its dual causal basis. The spatial metaphor of emergence is meaningful epistemologically, as a psychological-level explanation, but not ontologically, as the way things are in the world.

Rebalancing the mind

Following Tsong-khapa, Crook envisages mental re-balancing in terms of the Buddhist ‘Two Truths’ theory, as occurring between the ‘conventional entitiveness of things’ and the ‘ultimate emptiness of selfhood in a world of dependent origination’ (Crook 2002a: 19). He suggests that ‘models of mind which examine the co-occurrence of these perspectives in human life need a new contemporaneous development’ (Crook 2002a: 19). His presentation resembles my view of the ontological priority of the relational constitution of mind in a causally-determinate world. The balance he seeks is struck by supplementing the objective attitude, which

privileges entities, with the holistic attitude, which privileges property-relations. The objective attitude facilitates intentionality; the holistic attitude is facilitated by attention.

Following Brentano, intentionality is considered to be the mark of the mental (Dennett 1987: 67); it is separated in the West, and in Buddhism, into basic intentionality or ‘aboutness’ (*manasikāra*) and discriminating intentionality or ‘volition’ (*cetanā*). In *Abhidhamma* these terms refer to unconscious mental factors (*cetasika*) that condition conscious mental events (*citta*), a view that is replicated in the West by Hulse, Read, and Schroeder’s argument that intentional dispositions are not conscious processes (2004). In effect, Crook (1992, 2002b) re-categorises ‘aboutness’ as attention, and reserves intentionality for its prototypical reference to the volitional attitude that characterises proactive agency. Volitional intentionality is conducive to a conventional view of the world, which apprehends the discrete objectivity of an internal self in relation to a multiplicity of external things. Such intentionality is conducive to craving and attachment, and underpins the modern western discourse on individualism. The attentional attitude, on the other hand, is capable of discerning the relations between properties that gives rise to the perception of objects, and capable of informing an intentional response that is empathetic, compassionate and intuitively ethical. Because attentional states of mind provide essential guidance for the unconscious intentional attitudes that initiate activity, they facilitate the apprehension of sensorimotor (*de re*) information by all processes engaged in approximation to bodily psychological, and social homeostatic rebalancing. Because the intentions underlying expressive acts are unconscious, they are determined by a blind teleology of self-preservation. Without suitable attention to the constituents of conscious awareness, intentionality gives rise to the kinds of physical, psychological, social and environmental destabilisation that civilisation has always been heir to, and are self-evident in contemporary circumstances.

Dilemmas of mind

Although intentional and attentional brain/world relations are complex, they are expressed in an integrated form as consciousness, which is the process of *minding* (Damasio 1995). Like Ratnaprabha's verbal approach to *nirvāṇa*, Damasio's usage is a good approximation to the way things really are in the world, for the relational dynamism of mental activity lacks the stable objectivity normally denoted by a noun. It is apparent from the holistic perspective that the notion of a 'dilemma of mind' is not just a matter of explaining the ontology of a thing, but a 'dilemma of minding': the existential dilemma of how to go on in time.

That dilemma is attenuated by the realisation that the temporally-extended self is not the same as the immediate subject. The self is a hypothetical construct denoting the operation of a set of cognitive feedback processes working to combine past and present information for the purposes of prediction. The subject inhabits slight temporal extension, but has nothing whatsoever to do with the imaginative temporal extension involved in prediction. The subject is the 'horizon' of the arising and cessation of neuronal synchronicity; as such, the subject is imperturbable and non-dual with respect to immediate experience, for experience is only retrospectively differentiated into the duality of a subject attending to the awareness of an appearance as represented by a particular neuronal ensemble activity.

Buddhist mindfulness practice aims to pay attention (*manasikāra*) without intention (*cetanā*) to the arising of experience, before bifurcation into subject and content, and before the peripheral awareness of subjectivity becomes confused with the abstract-object form of a hypothetical self, which is metaphorically sequestered as if the mind was an internal correlate of the external world. In contrast to the western notion of a timeless *nunc stans* occurring between the 'nevermore' and the 'not yet' (Arendt 1978: 202-207), Buddhist mindfulness is the opposite of an escape from time, and offers no escape from responsibility for the intentional, predictive tasks carried out by cognitive self-processes over extended time. Mindfulness is just due attention to the world, enabling actions based on imaginative prediction to be balanced against full awareness of consequences: it is therefore a morally necessary way of reporting fully on being-in-the-world. Mindfulness illuminates a dilemma of mind, that intentional acts are necessary for the homeostatic maintenance of well-being, yet

intentionality is a wholly unconscious process. The general refusal of the interview participants to envisage enlightened individuals as being devoid of intentions supports the conclusion that mental re-balancing does not go so far as to eliminate intentionality. Rebalancing is the reinvigoration of conscious subjective attention, allowing suitable acquaintance with the way things are in the world to provide corrective guidance for the subliminal, habitual activity of intentionality.

Awareness of individuality constitutes another dilemma for the mind. Although individuals are immediately obvious to themselves and to others by virtue of embodiment, individuality is an abstract objective category, which is meaningless over time without reference to relational responses to contextual events. Under the doctrine of dependent arising (*pratītya-samutpāda*), individuals are not as they seem, but as they become in consequence of their *karma*: their reactions to the world. The temporality of this process reveals that the particular quality of individuality is not a timeless essence, but the continual manifestation of a changing nexus of relations. The relationally holistic perspective on individuality does not ignore the obvious arithmetic of separate human embodiment, but rebalances the significance of embodiment as one amongst other relational kinds embedded in the world. The collective lifestyle of the monastic *Saṅgha* is an attempt at ritual performance of an exemplary balance between individuality and otherness in the world (Bell 1997). That option is taken up by a very small minority of contemporary Buddhists, and no widespread agreement has emerged about the appropriate contemporary lay alternative. Such indecision indicates some lack of clarity about the status of the individual in contemporary Buddhism, and perhaps explains why the thrust of Mellor's critique of western Buddhist 'Protestant' individualism has yet to be fully addressed (1989, 1991).

Folk-psychological terms like 'self' 'mind' and 'individual' ought not to be reified into soul-like entities, for they have 'elastic' reference to dynamic states of affairs (Wittgenstein 1992: 24). For example, 'mind', is used with reference to the unconscious activity of determinate feedback self-processes, as if those processes rather than their results become objectively apparent to consciousness. Such object-language may be useful in social and juridical attributions of responsibility (Johnston 1993), but is problematic at all other levels of causal explanation. Firstly, it is

catachrestic: an abuse of the spatial metaphor to imply that the individual mind is a container for ‘folk’ psychological contents.⁷ On the contrary, self, intentionality and mind depend upon externally-embodied brain-world relations, and cannot be meaningfully described apart from their external causal matrix. Secondly, the notion of freedom of choice is inherently contradictory because it depends on consciousness of intentions, yet intentional dispositions are only conscious once they find expression as utterances.

The paradox of freedom in the midst of determinism illuminates some tension between the doctrine of dependent origination (*pratītya-samutpāda*) and the doctrine that intentional actions have consequences (*karma*). The tension cannot be resolved logically, but may be resolvable in practice by the ritual relinquishment of acts dependant upon a mistaken view that the self has the freedom of agency. How to modify unconscious, habitual intentionality is the nub of the psychological dilemma of how the mind is supposed to go on in the world. It is an ethical dilemma, which is illuminated by the experiential realisation that there is no connection between imaginary, temporally extended self-processes and the retrospective subjectivity in fairly immediate experience. This recognition is crucial to the location, differentiation and resolution of real and imaginary causes of existential suffering: who is to blame, what is wrong, and what to do about it. It remains to be seen whether the separation of self and subject, and some form of homeostatic, ‘Democritean’ relational holism of mind, are countenanced as acceptable contemporary Buddhist views. Whether or not these explanations are soteriologically useful as ‘good *upadeśa*’ must be left to another voice in this hermeneutic conversation.

Notes to Chapter 10

¹ See the review of Wallace (1999, 2001) in Chapter 1, pp 18-22 of this thesis.

² This hypothesis is reinforced by the ‘structural realist’ understanding that an ‘object’ is a conventional designation for bundles of perceivable property-relations (Ladyman 1998, Chakravarty 2003). In Arendt’s terms, an object is merely a ‘semblance’ (1978: 37-40). The relational task of sentience, throughout evolutionary history, has not been to manipulate objects, but to manipulate property relations in order to approximate to a state of homeostatic balance.

³ This is a possible application of the statement in the Heart *Sūtra* that ‘form is not other than emptiness, emptiness not other than form’ (Lopez 1996: vii), of the advocacy of non-dualism in the texts such as the Diamond *Sūtra* and the *Hsin Hsin Ming*, and of the third lemma of Indian four-fold logic, under which a thing can be both X and not-X (Hoffman 1992, 2001).

⁴ It exceeds the scope of this thesis to address the topic of duality and non-duality, beyond the observation that, broadly speaking, it is the task of the mind to first attend without discrimination, then to discriminate on the basis of that attention. Because direct perception is impossible, appearances to consciousness must include some duality. Discriminations such as like and dislike, which are based on the hypothesis of a self against the world, may at least be attenuated. Phylogenetically-encoded discriminations such as colour, texture, shape, and aspect recognition are inevitable. The subject is a different matter. Crook suggests that the ‘attender’ is not observable, being but a briefly retrospective discrimination (1980: 28), thereby opening the possibility that close attention to subjective experience may reveal it to be non-dual. Experience is then *just so*, containing the transient discrimination of subjectivity ‘peripherally’ within itself (Varela 1999).

⁵ Thompson (2007) is concerned to correct the perception that ‘autopoietic enaction’ is a philosophically internalist view of the mind by stressing that such systems depend on coupling to an external environment. See also Chapter 1 Page 26 and Chapter 8 Note 1.

⁶ Prasada and Dharmavidya were not influenced by Arendt, Wittgenstein, or Lakoff and Johnson’s linguistic analyses when they arrived at their doubts about the internal metaphor for mind (personal communication).

⁷ Black notes ‘an ever-present and serious risk that [archetypes] will be used metaphysically, so that its consequences will be insulated from empirical disproof. The more persuasive the archetype, the greater the danger of its becoming a self-certifying myth (1962: 242). His remarks is particularly applicable to the metaphor of space in mind.

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