Minding the World:

Integral Transformative Learning for

Geographical and Environmental Wisdom

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I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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Signed: ..................................................................................

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Abstract

This thesis explores how to promote, through education, environmental sustainability, intercultural understanding and personal signification in a mutually compatible manner. These aims are considered to be particularly well served through a transdisciplinary approach which combines perspectives drawn particularly, but not exclusively, from the fields of geography and environmental studies with 'place' and 'landscape' representing powerful integrative concepts. An 'enactivist' epistemology is presented which sees both a continuity, but also qualitative distinction, between human perception and that found in the non-human world. Such a perspective stresses the importance of both the milieu and the human subject in the perceptual process, and the neologism *emplaced imagination* is presented to stress this dyadic relationship.

In addition, a neo-Piagetian epistemology is defended in which the emplaced imagination is understood to undergo a series of qualitatively different developmental 'shifts', with a 'postformal' stage (heuristically referred to as 'wisdom' and characterised by a multiperspectival outlook and a motivation to work towards the Common Good) being seen as the desirable goal. This goal is seen to be promoted by transformative or 'fourth order education' which is most likely to be associated with adult learning. A special focus is therefore placed on Higher Education and, in particular, the development of 'transformative' or 'vanguard' educators.

An attempt is made to generate a 'mixed discourse' that permits a rapprochement between science, religion and art through the presentation of a non-materially reductive ontology within which to set this educational project. Implications of such a perspective for human-environment/place transactions are considered, drawing heavily on recent thinking in geography and environmental psychology and philosophy. Finally, important educational implications of the preceding chapters are considered.
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Dedication

I wish to dedicate this thesis to Heulwen and David, for the gift of an expansive emplaced imagination.

Dros Ryddid Daear
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Prelude

At the centre of your being you have the answer; you know who you are and you know what you want.

Lao-tzu

This thesis is intended to be a scholarly work and is consequently presented in somewhat impersonal terms. However, the process leading to its completion has at heart been a very personal endeavour and so this short prelude and the coda which frame it are intended to emphasise this fact. What follows is largely the result of my desire to respond to two injunctions: the Delphic Oracle’s command to ‘Know Thyself’; and the decree ushered by the mythologist Joseph Campbell to ‘follow your bliss’. The notion of a journey of self discovery is universal amongst the world’s spiritual traditions and is exemplified by the Insular/Celtic Christian Legend of ‘the Voyage of Brendan’ who left his familiar shores in a rudderless coracle to see where the ‘Spirit’ would take him. Such ‘spiritual journeying’ will involve ‘waystations’ along the way and sometimes these will be manifested as an actual places charged with ultimate meaning – sacredness for the spiritual traveller. For Campbell, these are ‘Bliss Stations’; for the Insular Christians the Ultimate such destination was the ‘place of resurrection’.

Two things awe me the most, the starry sky above me and the moral law within me

Immanuel Kant

The thesis which follows recounts some insights from such a journey-in-progress undertaken by myself. Along the way, it has allowed me to explore more deeply, and become ever more awestruck, by the same two amazing phenomena of human existence noted by Kant in this second quote. What is more, it has permitted me, however fleetingly, to discern a transcendent power which connects the two. But such comments must wait to unfold in the pages that follow. For now it suffices to say that the journey started with a dreamy ambition.
As I walked through the wilderness of this world, I lighted on a certain place where was a Den, and I laid me down in that place to sleep: and, as I slept, I dreamed a dream.

John Bunyan, Pilgrim’s Progress
Chapter 1: Transforming the subject - Critical ‘Geographical and Environmental Education’ for ‘Sustainable Development and Global Citizenship’

Rationale

This thesis has emerged from a personally and professionally motivated engagement with critical and postmodern theorising regarding human-nature relations, human-human relations and education and, more importantly, the intersections between them. This polycentric focus is derived in turn from a desire to contribute, through education, to the amelioration of significant and interdependent crises facing humanity in the twenty-first century, namely: environmental degradation; social injustices and intercultural conflict; and individual and collective ‘spiritual malaise’. The notion of ‘place’ is considered to be an important integrative ‘conceptual lens’ through which to approach this task (see Chapter 2). Consequently, this thesis represents in essence a multidimensional, multiscalar and holistic deliberative conceptual enquiry into the nature of ‘human-place’ relations with a view to suggesting crucial dimensions of a ‘place-based education’ capable of addressing the three interrelated sets of issues identified above.

The phrases ‘human-environment’ or ‘human-place’ relations will be used broadly synonymously to signify, simultaneously and inextricably, human-human and human-nature relations since to do otherwise (i.e. consider human issues exclusively in terms of either other humans or nature in a particular locale) would be to commit the error of disassociating (as opposed to merely differentiating) humanity from nature. This introduces a key theme in this thesis, namely that ‘place’ is an holistic and relational concept (as are the related terms ‘region’ and ‘landscape’). Whilst there are a great variety of sometimes divergent ‘place-based’ perspectives within academic discourse (see Chapter 2), this thesis attempts to present an holistic and multiperspectival outlook capable of accommodating all such perspectives. This is a grand claim and one which is highly contentious but which is both desirable and defendable within the emerging
‘Integral’ movement to which this thesis might ultimately be seen to subscribe. One of the chief architects of this movement describes the rationale of Integralism thus:

The word integral means comprehensive, inclusive, nonmarginalizing, embracing. Integral approaches to any field attempt to be exactly that—to include as many perspectives, styles, and methodologies as possible within a coherent view of the topic. In a certain sense, integral approaches are "meta-paradigms." or ways to draw together an already existing number of separate paradigms into an interrelated network of approaches that are mutually enriching.

(Wilber 2003a pxii)

The ‘topic’ at hand is human-place relations and the goal therefore becomes to arrive at an ‘integral’ understanding of place (with a view to establishing appropriate educational responses). Put simply, place, landscape and region, as holistic concepts, require, or rather demand, an holistic philosophy and Integralism, it is argued here, is seen to present a suitable coherent multiperspectival approach.

It must be acknowledged from the outset, however, that Integralism is contentious. Many postmodernists and post-structuralists are wary of the apparently ‘totalising’ agenda, seeing it as dangerously imperialistic. Others question the compatibility of the apparently divergent paradigms which Integralism seeks to bring together. These are significant and important challenges which have generated a great deal of debate and which are addressed in subsequent chapters. However, it is important to note in this section an important distinction between the rationale of Integralism and that of traditional academic discourse. According to Wilber, Integralism is “not looking at all of the available theories—whether premodern, modern, or postmodern—and then asking, “Which one of those is the most accurate or acceptable?,” but rather consists in asking, “How can all of those be right?”” (Wilber 2003b p1). These two divergent rationales represent very different premises from which conceptual enquiry and its associated argumentation proceeds. The former traditional ‘confrontational’ model involves a scrutiny of all standpoints set against one another. However, such an approach is largely beyond the scope of the present work and is more adequately addressed in other
works which take a critique of Integralism as a significant starting point (e.g. Zimmerman 1994).

Rather, this thesis is intended to provide an argument for, and from within, an Integralist informed place-based educational perspective. Such an approach is open to the charges of intellectual bias, arbitrariness (in the selection of perspectives to be integrated), and superficiality or naivety in terms of the substantial barriers to compatibility between various intellectual traditions and paradigms. These are indeed significant potential challenges which will always be levelled at a work with such generalist ambitions. However, a number of defences can be made on behalf of the approach adopted here. Firstly, synthesis is predicated on there first having been analysis and critique or what have been referred to as the search for 'sturdy conclusions' (Crittenden 1997). Admittedly, both the constraints upon (i.e. word count) and rationale of (exposition of a coherent integral account of place) this Thesis preclude more extended treatment of this process (greater attention to it would be at the expense of the exposition of the Integral formulation which is the primary goal). It is to be hoped that what is presented demonstrates a coherent and well informed formulation with adequate evidence of counterarguments and rebuttals to deserve the claim to intellectual rigour within the rationale set out.

Secondly, whilst still rather marginal within Academic circles, Integralism is gaining increasing legitimacy as an intellectual project, with counterarguments and rebuttals to the charges levelled against Integralism increasingly being rehearsed within the Academy (see e.g. Rothberg and Kelly 1998). Hopefully this thesis can benefit from, and contribute to, this enhanced status as a new approach to intellectual endeavour. Thirdly, as indicated in the Prelude and Coda there is a significant personal existential motivation underpinning this thesis and the process which has led to it. There is, consequently, a highly personal warrant for it in terms of the lived experience and 'development' of the author – what follows 'chimes' both intellectually and phenomenologically. It is intended to present a personal, albeit it well-referenced, vision in order to stimulate further intellectual interpersonal debate within the Academy. Finally, and a reiteration of a crucial point made above, 'place' is here understood as an holistic concept and therefore the search is for an appropriately holistic philosophy
through which to engage with it. This thesis humbly suggests one such formulation (without disavowing the possibility of alternative visions) in preference to a continuing confrontation between perspectives.

Having said all this, there still remains a significant issue which concerns the perennial tension between 'breadth versus depth'. Integralism implies inclusiveness, yet pragmatic choices have to be made in a work of this kind in terms of which specific lines of enquiry warrant greater development. Metaphorically, what is being attempted is a broad 'navigation' of the 'ocean' of place-relevant material to provide a synoptic 'chart' of the surface waters whilst pausing occasionally to take deeper 'soundings' to generate a more precise bathymetric map of certain 'seas'. The middle chapters negotiate particularly psychological and religio-philosophical or 'spiritual' waters, the justifications being that: firstly, these represent particularly contentious dimensions of Integralism as far as the Academy is concerned and therefore require closer scrutiny; secondly, any work concerned with learning must surely explore psychospiritual dynamics lying behind it; thirdly, much of the ecophilosophical literature is concerned with these dimensions; and, fourthly, these waters constitute important existential dimensions which this author has been strongly motivated to explore personally in order to gain 'new (self-)knowledge'.

This is not to deny the relevance of other 'seas' such as more overtly 'natural scientific' and/or socio-cultural/critical fields of discourse. These perspectives could, it is felt, be more fully expounded within the framework presented but only at the expense of a detailed exposition of the chosen lines of enquiry. Actually, whatever choices are made in terms of emphasis, Integralism teaches that, just as in the ocean, these various 'currents' are constantly intermingling. This is something which this thesis has attempted to demonstrate through the relational frameworks presented.

A final potential criticism which must be acknowledged concerns the tendency in this thesis to rely on what some might feel are secondary sources, that is the work of 'interpretative' rather than 'seminal' thinkers which can lead to a 'dirty snowball' effect in which miscontrual of the original concept/meaning (such as 'Derrida's 'deconstruction' and Hiedegger's 'being-in-the-world') by one author is compounded by subsequent readers. However, it is sometimes legitimate to refer principally to such secondary sources rather than tracing back to the seminal work itself for a number of
reasons. Firstly, for purely pragmatic reasons, since it would be impossible given the constraints outlined previously to trace all lines of thought back to their original sources and then examine them in any detail given the wide ranging nature of the enquiry at hand. Secondly, such seminal works are sometimes notoriously obfuscatory and it can be very beneficial to use more accessible material which, nevertheless, still conveys the sophistication of the original thought. Indeed, much seminal material (whether from the Continental School of 20th Century philosophy or premodern religious texts) was originally written in languages other than English (and therefore beyond the scope of the present author to read in the ‘original’ who must consequently rely on translations/interpretations of one stripe or another). Finally, those interpretations which have been utilised are, on the one hand, specific attempts to relate this seminal work to the ‘place-related’ matters more overtly than is often the case in the seminal works themselves (and therefore of greater relevance); and, on the other, are contemporary and thereby carry with them some of the accretions of meaning that the intervening years have inevitably given rise to (so that the ‘dirt’ of the snowball is both unavoidable and actually beneficial for a more contemporary understanding).

Consequently, this thesis attempts to provide an integrative account of ‘place’ which permits comprehensiveness yet which pays particular attention to two relational frameworks. On the one hand, it argues for a relational ontology or metaphysics which acknowledges the importance of the ‘spiritual’ dimension (in a panentheistic sense). On the other hand, it defends an enactivist (transactional constructivist) and post-Piagetian developmental epistemology. This acknowledges a ‘post-formal’ level of development which is characterised by a multiperspectival outlook and a motivation to work towards the Common Good. As such, it is and heuristically referred to as ‘Wisdom’. And here lies the educational warrant for this thesis since Wisdom represents the goal of lifelong learning which is promoted by transformative or ‘fourth order education’ leading to a multidimensional and non-anthropocentric ‘reflexive relationality’ through which the relational ontology is ‘realised’. This, it is felt, represents the form of ‘being-in-the-world’ most apposite for resolving the three crises outlined in the opening paragraph and thereby contributing to the achievement of a globally-minded outlook commensurate with the needs of sustainability. Since ‘place’ and ‘landscape’ represent powerful integrative
concepts, this goal is considered to be particularly well served through a transdisciplinary approach to learning which combines perspectives drawn particularly, but not exclusively, from the fields of geography and environmental studies.

Furthermore, a further emphasis of the thesis is the need to nurture, through these educational processes, vanguard or transformative educators and/or ‘sustainable communities professionals’ who are capable of supporting such learning in others and, in so doing, enabling them (both educators and the learners with whom they are working) to become agents of positive change for sustainability in their local context through contributing to processes of globally-minded ‘place-making’ – place-based participatory community planning and design for a sustainable future simultaneously at the local and global scales. Such educators could be working in any educational phase or sector (primary, secondary, further and higher education, informal and community learning) whether formally or informally, or ideally across several and consequently, the remit for this thesis is lifelong and community-wide (rather than merely school-based) learning.

**The normative dimension: Transformative Education for Sustainable Development and Global Citizenship**

It is necessary to place this rationale within wider educational discourse. This thesis aims to contribute to the emerging fields of Education for Sustainable Development (ESD) and Global Citizenship (GC). Contemporary interest in curricular developments for Sustainable Development is evident at all educational phases throughout the world which has its most obvious expression in the UNESCO ‘Decade for Education for Sustainable Development’ (DESD) from 2005-2014. However, there is no universally agreed conception of ESD which is an extremely contested concept. Indeed, many feel that the term itself is problematic either because it is oxymoronic or has become compromised through cooption by countervailing forces. Various alternatives have been presented such as Education for Sustainability, Sustainable Education, Global Education etc. in order to combat these perceived failings. However, the label ‘ESD’

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1 The term Global Education actually predates ESD and the two educational concepts need not be thought of as identical, however.
will be utilised here since this is most common in the literature and has received high level endorsement at both national (e.g. UK Government) and, perhaps more importantly, international level in terms of the UNESCO 'DESD'. Furthermore, providing that the educational rationale envisioned under the rubric of ESD is clearly explicated – which is part of the purpose of this thesis – then the choice of label should become less problematic. Indeed, one aim of this thesis is to ‘reclaim’ the term for more radical and transformative visions. Similarly, the term Global Citizenship (or Education for Global Citizenship) is equally contested but will be adopted here for much the same reasons as those noted above.

The author subscribes to a position in which both approaches are complementary and mutually reinforcing and prefers to use the (admittedly unwieldy) descriptor ‘Education for Sustainable Development and Global Citizenship’ (ESDGC) to stress this perspective and in order to counter the tendency to sometimes read either ESD or GC more reductively and as separate. This association is justified since these two approaches to education are here interpreted as demanding the dual development of environmental and social/intercultural concern which are, in turn, predicated on expansive conceptions of justice, moral relevance and compassionate identification. This ‘position statement’ situates the perspective being presented within what has been termed ‘Strong’ or ‘Transformational’ (as opposed to merely reformist) formulations of Education for Sustainability which attempts to syncretise both a ‘liberal/holistic’ and a ‘socially critical’ education for the environment (Huckle and Sterling 1996). In this sense this thesis may be seen as a continuation of a tradition within UK education which recognises a convergence between so called ‘adjectival educations’ (environmental education, development education, peace education, education for equality etc.) and may trace its antecedents to Global Education (Grieg, Pike, and Selby 1987, 1989; Pike and Selby 1988) and World Studies (Fisher and Hicks 1985; Hicks and Townley 1982), and should be located alongside, or within, other interpretations of transformational education and learning which are concerned with both social and environmental issues at a range of scales such as Global Education (GE) (Selby 2000) and ‘Education for Social and Ecological Peace’ (Wenden 2004). Furthermore, given its place-focus, the thesis draws

This is the approach taken by the educational community in Wales (ACCAC 2002).
on, and hopes to contribute to, ‘place-based education’ discourses such as bioregional education (Thomashow 2002; Traina 1995), ‘critical pedagogy of place’ (Gruenewald 2003a) and ‘place-conscious education’ (Gruenewald 2003b).

A confusion might arise in terms of the use of the adjective ‘Transformational’ education or learning. The term (along with others such as ‘critical’, ‘radical’, ‘reconstructionist’) has been applied in what might be thought of as ideological or ‘horizontal’ (right through to left) educational typologies to describe the ‘critical’ or ‘left-wing’ paradigm within educational thought which seeks, through education, to radically alter prevailing societal structures and which stands in opposition to either ‘conservative/neo-classical/vocational’ (‘right’) or ‘liberal/progressive’ (centre) paradigms which are seen to either support or merely reform the inherent structures of injustice which characterise the status quo. This thesis may be broadly positioned within the ‘Education for Transformation’ paradigm in this ideological sense. Whilst this ideological paradigm is concerned with all phases of education, there has been a tendency to focus, understandably, on the phases of mass, formal and compulsory education (generally 5-16+).

In contrast, a new perspective is emerging which is also calling itself ‘Transformational (or Transformative) Education’ or ‘Learning’ which utilises the term instead in what might be thought of as a ‘vertical’ sense to describe developmental changes, or indeed ‘shifts’, in consciousness or epistemological frames. This movement takes as its specific focus adult education, the implication being that the learning process in childhood is qualitatively different from that in adulthood which is characterised by a so called “fourth order of education … [concerned with] transformations of a work-a-day perspective to a broader awareness of humanity, often of spiritual and ecological dimensions, and one’s roles within one’s relationships, organizations, community, and world” (Markos and McWhinney 2003 p4). In certain educational circles an important yet controversial distinction is sometimes made between pedagogy and andragogy, the former referring to the education and learning process during childhood, the latter specifically to adult learning. Whilst it is not possible to outline the details of this contentious field, the distinction is introduced here to highlight an important assumption of this thesis, namely that adult (be it informal, undergraduate, postgraduate or teacher
education) learning for ESDGC will be qualitatively different to that in childhood. Given its particular focus on post-formal learning, 'epistemological shifts' or 'changes in consciousness' and the concept of 'wisdom' (see in particular Chapter 5), on the one hand, and a consideration of appropriate ESDGC 'educator', on the other, it would also be appropriate to place this thesis within this emerging 'vertical' 'education for transformation' paradigm. A key message of this thesis is that a consideration of developmental psychology across the lifespan is an all too often neglected dimension in ESDGC discourses and this thesis hopes to go some way towards addressing this omission.

Actually, the distinctions between 'pedagogy' and 'andragogy' are being increasingly blurred so that, rather than chronological age, they are being applied by some to refer to different educational processes with the former referring to more teacher-orientated learning and the latter to autonomous enquiry-based learning either individually or, more likely, collaboratively. Support for the latter type of education process is likely to be universal amongst transformational educators in the ideological sense and this points to a degree of commonality between the 'ideological/horizontal' and 'vertical' transformation paradigms. However, it remains the contention of this thesis that successful learning of this latter type is still predicated on the conceptual, emotional and interpersonal maturity of the learner(s). Furthermore, the intellectual and emotional demands made upon individuals and groups by the more 'wicked' (complex, contentious and iterative) issues (Rittel and Webber 1973) associated with (E)SDGC necessarily demand a higher order of relational 'being and knowing' to deal with than is typically available to children and, indeed, most adults. Consequently, a 'vertical' dimension remains an important feature of the type of transformational learning being advocated in this thesis.

Happily, some of the most recent material emerging from this 'vertical transformation' paradigm is specifically concerned with issues which fall within the rubric of ESDGC as understood here, offering the very real possibility of an integration of the horizontal and vertical meanings of 'transformational learning'. Particular exemplars include the recent work emerging from both the Transformative Learning Centre and the International Institute for Global Education of the Ontario Institute for
Studies in Education (OISE), the recently instigated *Journal of Transformative Education* and recent books (O'Sullivan 1999; O'Sullivan, Morrell, and O'Connor 2002; O'Sullivan and Taylor 2004). Recurring themes in this work are the need to consider the participatory, ecological and ‘spiritual’ dimensions of human existence and learning. These represent key themes of this thesis, and it is perhaps within this emerging Transformative (in the dual sense) learning field or movement that this thesis might, therefore, be most comfortably placed.

**The disciplinary contribution**

Whether discussing ESD, GC, GE or ESDGC it is commonly accepted that these represent emerging holistic *approaches* to education rather than academic disciplines in the traditional sense and therefore they should be more properly conceived as interdisciplinary and even transdisciplinary in nature. Furthermore, Transformational (vertical sense) Learning is being conceptualised as needing to be “inclusive of diverse disciplines and critical in approach” (Markos and McWhinney *op. cit* p6) through the application of ‘reflexive interdisciplinarity’ which will involve “a variety of viewpoints, origins, disciplines, and methods … [and involve] multiple paradigms, … seeing through others’ lenses, and viewing through multiple frames” (*ibid.*). This call for multidisciplinarity is entirely endorsed in this thesis given its commitment to Integralism which argues strongly for an interdisciplinary or transdisciplinary approach to learning. However, it is still the case that educational systems from primary through to HE globally are predominantly structured along disciplinary lines. Also, inter- or trans-disciplinarity is, by definition, predicated on, and grounded in, a sound grasp of the relatively autonomous disciplinary perspectives which one is supposed to be thinking between (inter) or beyond (trans). Expressed another way, in order to think ‘multiperspectivally’ (a key goal in terms of the learning theory being advocated in this thesis), one needs to first think ‘perspectively’.

Furthermore, the case may be made that the greatest contribution for the longest period in terms of ESDGC has been made within both the school and university curriculum by the ‘subjects’ or ‘disciplines’ of science, geography, environmental
science/studies, development studies and allied educational formulations (geographical education, science education, environmental education and development education). More recently, applied spatial disciplines such as architecture and planning and other ‘sustainable communities professions’ (SCPs)³ have also been in evidence within the Academy. For the present purposes, these are considered to be applied cognate disciplines of geography and environmental science and therefore subsumed within the arguments which follow. This permits a more specific focus (albeit very much not an exclusive one) within the broader ‘transformational learning paradigm’ for this thesis. This is not to deny that there are increasingly important contributions being made by other disciplines (for example, ecocriticism within literature studies: environmental psychology and ecopsychology within psychology) but rather to suggest that these can be considered as contributions to, or subsumed within, an expansive understanding of geography and/or environmental studies since the focus of this work remains human-environment/place relations, which is the sine qua non of geographical and environmental work.

Thus, the rationale of this thesis may be further refined as presenting and justifying a re-visioning or perhaps rather a reconstruction of the related fields of geographical and environmental education in the light of postmodernism, critical theory and developmental psychology such as will contribute to Transformative ESDGC (in both the horizontal and vertical senses). Echoing the preference for an inclusive ESDGC orientation noted above, for the purposes of this thesis it would be preferable to consider for the most part the focus to be both geographical and environmental education (GEE) as an expansive and integrative approach. The justification for this GEE association is fourfold. Firstly, as indicated above, this thesis takes as a significant focus human-environment/place relations which represents the essence of both disciplines with neither having a monopoly. Secondly, the close connection between these fields is already recognised within the field of education as witnessed in the titles of: the very many university ‘Geography and Environmental Science’ departments (or varieties thereof); the UK Higher Education Academy’s subject centre for ‘Geography, Environmental and

³ Term used by the UK’s Academy for Sustainable Communities (ASC) to describe those professions particularly involved in contributing to the achievement of ‘sustainable communities’ either as a core or associated dimension of their work.
Earth Sciences’ (GEES); the International Geographical Union Commission for Geography Education’s (IGU-CGE) journal *International Research in Geographical and Environmental Education* (IRGEE); and scholarly publications such as *Understanding Geographical and Environmental Education: the Role of Research* (Williams 1996) and *Environmental and Geographic Education for Sustainability: Cultural Context* (Chi-Kin Lee and Williams 2006). Thirdly, a key theme in this thesis is the need to engage with multiple perspectives and, despite the ‘holistic’ claims made by both geographers and environmentalists on behalf of their respective disciplines, it is all too often the case that internal specialisation and sub-disciplinary divides have arisen (such as between human and physical geography, or between the social/cultural and natural sciences) which works against this claim. This is further exacerbated by the fact that the respective ‘camps’ within the disciplines have often appeared to be at loggerheads leading to internecine tensions and struggles (Matthews and Herbert 2004). Thus, by stressing at the outset the twin perspectives, the intention is to stress the inclusivity and integral ambitions of the project at hand which draws on both socio-cultural/critical and ‘scientific’ theorising, and seeks to consider human-place relations in a range of environments from completely urban through countryside to ‘wilderness’. Finally, a combined GEE perspective provides greater scope for integrating important insights from other disciplines and should engender a more nuanced ‘reflexive interdisciplinarity’ that will guard against too narrow an understanding of human-place relations.

**The existential dimension – education for (more-than-)humanity**

In addition to the broad normative (Strong ESDGC) and more specific, yet still expansive, (trans)disciplinary (GEE) foci, this thesis may also be considered as having a third, even broader, aim. This relates particularly to the third contemporary crisis identified in the first paragraph, namely the ‘spiritual malaise’ which appears to be so much a feature of contemporary life at both the individual and collective levels. Attention to this theme can be seen as a consequent, yet perhaps more fundamental, theme of this thesis since it extends the purview beyond being merely a superficial enquiry into educational responses to environmental and social issues to consider deeper
existential questions which are considered to lie at the root of them. This introduces a more overtly personal motivation behind this thesis, namely the author’s threefold lifelong ambition to: follow the Delphic injunction to ‘Know Thyself’ and undertake a personal journey of discovery into what it might mean to be ‘fully human’; to come to make the greatest or most adequate (but importantly never complete) ‘sense of the world’; and to come to understand what it might mean (individually and collectively) to achieve the ‘Good Life’.

As noted by Bonnett (2004b), and as borne out by the author’s personal biography, critical enquiry into the nature and purpose of environmental education (or in this case GEE) quickly expands to wider philosophical considerations such as the nature and purpose of education generally (processes of knowledge construction, societal values etc.) and, in turn, a more fundamental consideration of the nature of humanity since any theory of education is, at heart, a ‘theory of human nature’. This provides a further justification for taking a GEE combined focus in the first instance since it is the contention of this thesis that a profound contemplation of human-place transactions can (and ideally should inevitably or inexorably) lead to a relational or dialogical understanding of human nature (which appears to be the point being made by Bonnett). Furthermore, this will quickly demand a move out of any form of disciplinary parochialism into interdisciplinary cosmopolitanism and holds the real potential for a consideration of existential questions of ultimate meaning, however this be perceived.

Consequently, this thesis draws heavily on, and points strongly towards, fields outside mainstream geographical, environmental and educational discourses with the ambition of arriving at a comprehensive integral perspective within which to set the geographical and environmental educational ‘project’. It draws inspiration and insight from across a wide range of psychological, religio-philosophical and historico-cultural formulations of the human condition and draws on emerging fields such as ‘cross-cultural psychology’ (Segall et al. 1999), ‘World Philosophy’ (Solomon and Higgins 2003) and, more specifically, alongside those working towards what might be term an ‘Integral Philosophy of Development’ (Combs 2002; Wilber 1997, 2000). Heuristically it attempts to integrate (in the sense of draw on) the wisdom of all historical epochs –
Premodern/Traditional/Indigenous, Modern and Postmodern⁴; and all geographical regions – East and West, North and South – for a truly ‘global’ vision in the dual sense of holistic and worldwide. Indeed, one of the most promising aspects of the contemporary age is that, for the first time in human history, we have the potential to derive a truly global vision in the senses indicated above (Smith 2003; Wilber 2000).

From such a perspective follows the possibility of deriving a common vision of/for humanity and education, although such a notion must be treated with extreme caution given the attendant dangers of neo-Imperialist universalising and essentialising. Rather, it is a perspective which acknowledges the situatedness, contingency, particularity and diversity of life, and will be suspicious and critical of any essentialising and universalising ‘truth claims’ (which are the concerns of most self-identified postmodernists) whilst at the same time accepting “[t]he natural fact of human similarity [thereby permitting] … the identification of common human needs” (Smith 2004 p203). From such a perspective opens the possibility of a Moral Geography (Smith 2000, 2004) within which to make ethical judgements at a local through to global scale, a situation precluded in the relativising climate of much postmodern discourse which emphasises particularity and diversity at the expense of commonality and solidarity. At the same time as considering human-human or social relations in order to arrive at a position of social justice, one should also be moved to consider human-environment or the human relationship with ‘more-than-human’ entities (Abrams 1997) or ‘other-than-human-persons’ (Harvey 2005) in terms of ‘ecological justice’.

However, the achievement of the Good Life as understood here is concerned with more than just these normative societal and ecological goals and a further, yet as will hopefully become apparent, complementary motivation of this thesis to consider certain existential requirements necessary for the achievement of human happiness and flourishing in terms of the inner life of individuals. Actually, achievement of the Good Life must always be seen as an individual and collective matter since, according to Noddings (2003 p2), “[h]appy people are rarely mean, violent or cruel”. Writing on the connections between happiness and education, Noddings goes on to identify several areas

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⁴ These terms are problematic and used here merely as heuristic devices to indicate the integrative ambitions of this thesis in terms of the variety of religio-philosophical responses to human existence across time and space.
of life which are important in the achievement of happiness, two of which are highly pertinent to this study, namely ‘place’ and ‘character and spirituality’. Consequently, this thesis may also be seen as drawing on, and contributing to, the emerging field of positive psychology (Carr 2004a), works investigating the ‘psychology of ultimate concerns’ (Emmons 2003) and the interface between cognitive science and religion (Bulkeley 2005). A common theme in this literature is the importance of the human capacity to experience ‘awe and wonder’ from which important existential and normative attributes flow such as humility and transcendence of egocentricity leading to a desire to serve others. Geography and environmental education’s potential to elicit experiences of awe and wonder particularly, but not exclusively, in natural landscapes represents a recurring justification for their inclusion within the curriculum. However, this claim is generally presented as a truism and this thesis attempts to present a more reasoned argument in its favour. Furthermore, drawing on the emerging field of ‘environmental and architectural phenomenology’ (Seamon 2000) and the psychogeography tradition (Coverley 2006), this thesis takes a more expansive view which includes the relevance of the built and urban environment as well as natural environments in terms of eliciting ‘significant life experiences’ in, or meaningful encounters with, place.

Wider Critical Debates

Having broadly positioned this thesis within the Strong or Critical strand of ESDGC or GEE it is appropriate to trace the wider discourses informing these debates. ‘Critical Theory’ has emerged as a broad intellectual movement within which may be discerned “varieties of Marxism, socialism, anarchism, feminism, gay/lesbian liberation, ecological perspectives, discourses by antiracist, anti-imperialist, and national liberation movements, and utopian/critical strains of religious communities” (Gottleib 1994 pix). Rather than a univocal body of work, ‘Critical Theory’ should be seen as more of a loose coalition of intellectuals critiquing prevailing conservative and liberal thought that take as their particular target the hegemonic or ‘Dominant Social Paradigm’ (DSP) (Cotgrove 1982) or the ‘Western’ or ‘Modern’ worldview. From Horkheimer and Adorno on, the common thread running through Critical Theory has been the desire to uncover
underlying forces of ‘domination’ which have given rise to conditions of injustice in the world, with the express purpose of reversing them to give rise to a situation of ‘liberation’ (Merchant 1994). Of course, there is a great deal of tension within the ‘movement’ as to what is to be the precise focus of the critique and prescription for change. Thus, for a great many Critical Theorists, the focus is almost exclusively on human-human relations and the principal task is working towards the collective liberation of oppressed groups to achieve a situation of social justice.

For others, however, a damaging relation of domination and exploitation exists not only between humans and other humans but also between humans and nature, and a key task is working towards ‘ecological justice’. Within this latter category might be placed so called ‘Radical Ecologies’ such as ‘Deep Ecology’, ‘Social Ecology’, ‘Socialist Ecology’, ‘Ecofeminism’, ‘Ecotheology’ and/or ‘Ecospirituality’, and ‘Postmodern’ and/or New Paradigm Science’ (ibid.; Zimmerman 1994). This thesis draws its inspiration from across these critical perspectives and their engagements with educational theorising, in particular those ‘radical ecologies’ or ‘communicative and participative ecologies’ (Harvey op. cit) that acknowledge the need for liberation from domination in both human-human and human-nature relations in the search for an ‘Alternative Environmental Paradigm’ (Cotgrove op. cit), ‘New Environmental Paradigm’ (Dunlap and Van Liere 1978), or ‘New Ecological Paradigm’ (Dunlap et al. 2000).

Not wholly unrelated to Critical Theory, yet with a distinctive intellectual trajectory and purpose, has been so-called ‘Continental Philosophy’ which is strongly associated with postmodernism and post-structuralism and the subsequent ‘cultural’ and ‘relational’ turns. This has proved extremely influential within intellectual discourses within the Academy in recent decades, not least within the particularly human and social sub-disciplines within geography (Murdoch 2006) and within environmental philosophy (Foltz and Frodeman 2004). These intellectual movements, particularly in those areas where human-environment relations have been foregounded, have also provided invaluable insights in this thesis. However, as will be discussed further below, this thesis is critical of the radical social constructivist strand of ‘postmodern’ or ‘post-structuralist’ thought given its tendency towards textual-reductionism and relativism which can lead to nihilism, extreme and irrational relativism, and political quietism.
Clearly the aforementioned desire to arrive at a comprehensive integral perspective within which to set the GEE ‘project’ represents a shift away from the postmodern or poststructuralist eschewing of ‘meta-' or ‘grand-narratives’. The position presented here is one that argues with the postmodernist against dogmatic/monolithic/monologic ‘meta-narratives’ with their attendant dangers of the tyrannical and/or restrictive hegemonising of human minds and societies. That these must be critiqued is the invaluable insight of a ‘postmodernism of deconstruction’ (Griffin 1990c) which could actually be seen to be a modern reformulation of an insight recognized throughout history by so called ‘world teachers’ or epistemological innovators who have sought to subvert the prevailing habitual and sedimented worldviews of their time and so allow one to ‘see with eyes made anew’ thereby expanding the horizons of what it means to be human.

However, a critique that ends in deconstruction will fall victim to the equally unsatisfactory position of extreme relativism and is ultimately self-defeating (the impossibility of meta-narratives being a dogma in itself). Thus a ‘postmodernism of reconstruction’ (ibid.) is called for in which a new ‘worldview’ arises from the old now transformed into one which is necessarily epistemologically plural, polysemous, relational, and open (and hence always tentative, expansive and revisable) whilst at the same time permits value judgements to be made as to the relative (more or less) adequacy of different perspectives within the broader encompassing framework. Such a position is shared by a number of scholars in the contemporary age (O'Sullivan 1999; Sayer 2000; Smith 2003; Wilber 1996) and marks one of the principal motivations of this thesis. Such a position has been referred rather clumsily as ‘post-postmodern’ to indicate this acceptance yet transcendence of the postmodern critique. Here the preferable term ‘integral’ will be used which carries with it the important connotation of inclusivity.

These comments situate the postmodern approach I wish to advocate for GEE within a broad and emerging movement within contemporary Anglo-American (and increasingly Global) culture which could be labelled ‘(re)constructive postmodernism’ and ‘Integralism’. These terms are helpful because they immediately locate the

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5 Depending on the source, the term used may be ‘constructive postmodernism’, ‘reconstructive postmodernism’, or, indeed, ‘revisionary postmodernism’.
inspiration⁶ for these efforts in the works of, respectively, the theologian David Ray Griffin and colleagues on the one hand, and the transpersonal psychologist and metaphysician Ken Wilber and colleagues on the other. Secondly, they position this thesis (along with these movements) in opposition to other forms of postmodernism, namely those ‘deconstructive’ or ‘eliminative’ types that are seen to deny the desirability and even possibility of arriving at a comprehensive worldview and which appear to occupy a privileged position as the postmodern discourse (rather than one amongst many). Furthermore, this reconstructive postmodernism is a movement that, rather than constantly sniping at the failings of Modernity, calls for an acknowledgement of its successes but also its necessary transcendence, hence it is postmodern as opposed to antimodern.

Actually, on closer inspection what many critics have against Modernity is its associations with ‘instrumental rationality’, reductionism and materialism, and the consequent ‘disenchantment’ of the world. These themes represent significant targets for critique in this thesis. Yet this represents only one unfortunate reductive strand within the trajectory of Modernity and there have always been Modern polymaths who have subscribed to a more expansive or ‘larger modernism’⁷ who acknowledged and sought to reconcile human rationality with human spirituality. This ‘pro-Modern’ (but not uncritically so) stance places this thesis in opposition to another tendency that takes an antagonistic stance towards the ‘project of modernity’, namely those that call for its wholesale rejection in favour of a ‘return’ (rather regression) to exclusivist, superstitious, antiscientific and literalist worldviews which might fall under the rubric of ‘religious fundamentalism’ or ‘premodernism’ in a pejorative sense.

Whilst acknowledging that the ‘postmodern deconstructionist’ suspicion of ‘grand narratives’ is inspired by the laudable goal of forestalling the possibility of fundamentalist, totalitarian and monolithic systems of thought, ‘postmodern reconstructionists’ see it as ultimately self-defeating since, at the very least, people require ‘orienting stories’ (Beardslee 1990), Root Metaphors (Pepper 1972) or ‘myths’ to enable them to negotiate the vicissitudes of humanly existence, or ‘human being’.

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⁶ ‘Inspired by’ does not imply wholesale acceptance of the perspectives noted.
⁷ The phrase apparently used by Patrick Geddes (Welter 2002).
Furthermore, Fox (1990a) argues that such orienting stories must have a clear cosmological dimension if they are to be equal to the task. Without these cosmologically informed orienting stories, nihilism, existential angst and extreme relativism are likely to prevail. Worldviews do more than merely provide existential comfort for individuals, however. Griffin recognises "the presence of a transcultural proclivity to evil [that lies] deep within the human heart ... [and] a strong element of competition is inherent within finite existence, which no social-political-economic-ecological order can overcome ... [which] can be greatly exacerbated or greatly mitigated by a world order and its worldviews" (Griffin 1990a pxii). Therefore, Griffin and colleagues, whilst warning against naïve utopianism, still insist that it is possible and desirable (if not essential) to envision "a far better world order, with a far less dangerous trajectory, than the one we now have" (ibid.). Such a 'postmodern constructivist' perspective:

seeks to overcome the modern worldview not by eliminating the possibility of worldviews as such, but by constructing a postmodern worldview through a revision of modern premises and traditional concepts. This constructive or revisionary postmodernism involves a new unity of scientific, ethical, aesthetic, and religious intuitions. It rejects not science as such but only that scientism in which the data of the modern natural sciences are alone allowed to contribute to the construction of our world view ... [thereby]... transcending its individualism, anthropocentrism, patriarchy, mechanization, economism, consumerism, nationalism, and militarism

(ibid. ppx-xi)

A critique of current trends in geographical and environmental discourse

It goes without saying that since this thesis has been located within critical and postmodern educational discourses it is critical of unreconstructed and narrow (as opposed to 'larger') Modern formulations of GEE characterised by materialism, scientism, reductionism and instrumental rationality. However, a crucial question is what form should a postmodern GEE take? This thesis is not alone in calling for geography and environmental educators to engage with 'postmodern' debates and Critical Theory.
However, echoing the internal divisions within the broader disciplines of geography and environmental studies noted above, and the tensions between deconstructive and reconstructive readings of postmodernism generally, there has been a worrying tendency to privilege ‘social constructionism’ and its attendant attitude of ‘deconstructionism’ and the ‘hermeneutics of suspicion’ within critical geographical education (e.g. Morgan and Lambert 2005) to the exclusion of other perspectives, including Modern rebuttals. Despite the rhetoric, deconstructivism can be seen to represent a self-identified counter-hegemonic move which is becoming, or indeed has become, hegemonic in its own right and which, consequently, demands a critical response to it on two grounds. Firstly, postmodernism, if it means anything, means challenging all shibboleths, which should include postmodern ones as well, chief amongst which is ‘social constructionism’ (challenge, not reject). Secondly, and more crucially, ‘extreme’ versions of ‘social constructionism’ are intellectually disempowering if not downright misguided and risk precluding the possibility of intercultural solidarity and moral judgement based on universally agreed values (Smith 2004) and are, at the same time, inherently anthropocentric in the extreme. This, taken together with a general postmodern suspicion of ‘science’ and Western representational epistemology, could be taken as a threat to the inclusion of ‘physical geography’ and more mainstream ‘scientific’ dimensions of environmental studies in an integrative GEE. Whilst acknowledging the crucial contribution of this perspective, this thesis seeks to critique, temper and complement it with other ‘critical’ perspectives as well as revisioned ‘modern’ and even ‘premodern’ ones within an overarching perspective which sees unity within GEE as preferable to fragmentation, but this is a unity in diversity rather than a monolithic and monological epistemology (whether this be scientism or deconstructivism) in which deconstruction has a role to play as a necessary precursor to reconstruction.

**Alternative and complementary postmodern/critical perspectives**

One reason that social constructionism appears to have gained the upper hand in critical discourse within geography, at least, has been the serious lack of engagement of physical geography in these debates. However, recently this situation has started to
reverse as reflected in Trudgill and Roy (2003) and Inkpen (2005). Inkpen has shown that far from remaining firmly entrenched within the logical-positivist and/or 'critical rationalist' or Popperian scientific paradigms, a number of physical geographers are placing themselves within the philosophical movements of 'critical realism' and 'pragmatic realism'. Both of these perspectives are critical of the notion of a dispassionate and disengaged observer of objective reality and are more likely to subscribe to a “view of reality as constructed by a dialogue” (p35) between the viewer and their world, which are both seen to be implicated in the reality which is co-created between them. This is precisely the stance adopted in the enactivist or co-constructivist epistemology advocated in this thesis which is explored in greater detail in Chapter 4.

The metaphor of being able to enter into a dialogue with non-human or 'more-than-human' reality is also used extensively within more 'green postmodern' discourses or 'radical ecologies' which are often notably absent from GEE and reformist versions of ESD discourses (Selby 2006). Thus, the ecofeminist Spretnak, working from the perspective of Buddhist-inspired 'ecological postmodernism' (Spretnak 1991, 1997), calls for a 'resurgence of the Real' in which the 'body' (embodiment), Nature ('more-than-human' dimension) and 'place' are recognised as crucial and more fundamental components of the 'meaning-making' process than the socio-cultural 'veneer' which many postmodernists apparently can't see through (only a human face reflecting back). Similarly, Orr (Orr 1991, 2004) has stressed the need to engender 'environmental literacy' through education in 'nature'. A number of authors are in agreement with Spretnak (1997 p4) when she states: “All human thought, social or individual, is also situated in the processes of body, nature and place” which should be taken as a more fundamental 'ground' for human 'worldmaking'. From this perspective Modern Western society needs to rediscover 'bodymind' (the knowing body); the 'creative cosmos' (the unfolding physical context or nature); and the 'complex sense of place' or 'bioregion' seen as the context that provides the very possibility of being human (ibid.). This is a view which emphasises the foundational emplacement or situatedness of the human condition not only in a socially and historically situated sense but also in the very real sense of emplacement in the biophysical milieu or environment.
These calls for an acknowledgement of the environment and/or nature as a real dimension of human existence, coupled with the postmodern insight into the situatedness of all knowledges, are also generating the recognition of the importance and legitimacy of traditional, indigenous or what might be termed (non-pejoratively!) pre-modern worldviews and ‘frames of reference’ which is also permitting a renewed and more sophisticated engagement with spiritual dimensions of human-emplaced existence. For example, Short (2000) argues that contemporary geography (whether modern or postmodern) has much to learn from premodern ‘geographies’ precisely because they are more ‘cosmological’ in scope. Similarly, some are calling for an engagement with so-called ‘new animism’ (Harvey op. cit) in environmental thinking in terms of indigenous knowledges (Berkes 1999; Grim 2001; Ingold 2000) and/or neo-pagan and countercultural movements (Ivakhiv 2001; Wallis 2003). Calls for a dialgogical engagement with, and relational understanding of, human-environment/place relations not unlike these ‘indigenous’ epistemologies are also coming from the aforementioned radical ecologies and the emerging fields of ecopsychology (Fischer, Yan, and Stewart 2003; Roszak 2001; Roszak, Gomes, and Kanner 1995) and ecotheology or spiritual ecology (Barnhill and Gottlieb 2001; Clayton and Peacocke 2004; Eaton 2005; McDonald 2003).

These varied perspectives carry important implications for human-place transactions in terms of place-consciousness or the phenomenology of Mind-World relations which is a very significant theme in this thesis (as conveyed by its title). Notwithstanding the invaluable contributions of Tuan (1974; 1976; 1977; 1996), Buttner (1980; 1993), Relph (1974; 2000) and other humanistic scholars, geography has had only limited engagement with these place-consciousness debates. However, a marginal strand within the discipline is concerned with ‘religious geography’ (as opposed to the geography of religion) which explores “the reciprocity of meaning between place, landscape, and religious experience” (Park 1994 p26). Furthermore, new inter- and trans-disciplinary approaches such as ecophenomenology (Brown and Toadvine 2003; Seamon and Mugerauer 2000) and the aforementioned ecopsychology are emerging at the interface between environment/place and consciousness studies. A significant contribution is also being made from the field of Transpersonal Psychology (Ferrer 2000;
Hart, Nelson, and Puhakka 2000). One strand of thinking has it that human consciousness is multidimensional or ‘polyphasic’ and is capable of ‘altered’ or ‘alternative states of consciousness’ (Tart 1990) giving rise to qualitatively different modes of ‘being and knowing’-in-the-world. A major implication of such thinking is that one needs to operate across a range of these modes of relating to the world, or at least occasionally transcend the banality of more prosaic modes, to be more completely human and to live in pursuance of the Good Life for oneself and for others (including humans and non-humans). This opens up the possibility of another educational role over and above pedagogue and/or andragogue (see above), namely that of ‘mystagogue’ - one able to initiate others into an experience of the sacred mysteries of creation (Regan 1994).

Critical Regionalism and Bioregionalism

An emerging strand within critical and countercultural discourses deserving special mention is a focus on places at the ‘regional’ scale as the most suitable base for countering global corporate capitalism; the ‘myth’ of the nation-state; and individual and collective anomie. Common themes in this broad movement are the need to combine a communitarian ethic (engendering convivial and human-scale place-based communities and regional identifications) with an ecological one (reconnecting people intimately with the regional ‘land community’) and emphasising a non-accumulative, aesthetic and even spiritual approach to life. Bioregionalism is a movement which has emerged from, and remains largely restricted within (but not exclusively so), the countercultural movement within the Americas (it is particularly strong in USA, Canada and Mexico) (Carr 2004b; McGinnis 1999). It represents a “philosophy with values and practices that attempt to meld issues of social and economic justice and sustainability with cultural, ecological, and spiritual concerns” (Carr 2004b p16). The bioregion may be defined as:

an area without hard boundaries but which can be distinguished by its many natural features including flora, fauna, soil, climate, geology and drainage area. A

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8 This neologism is presented to describe a perspective which sees human consciousness as multilayered and is to be contrasted with the view of Western psychology which is ‘monophasic’ i.e. is “locked into one particular state of consciousness” (Devereux op. cit p43).
critical component of each bioregion is the human culture which has developed within and is integral to that area

(Traina 1995 p1)

Critics of bioregionalism target its apparently romantic anti-urbanism and utopian thinking as naïve (Hay 2002); its call to bioregional self-sufficiency as potentially leading to parochialism and a loss of interregional solidarity (ibid.); and, most disturbingly, a privileging of ‘nature’ that may give rise to misanthropic or even ‘ecofascist’ political systems (Zimmerman 1994). However, certain formulations of bioregionalism are consciously outward looking and concerned with social as much as ecological justice such as Thomashow’s ‘cosmopolitan bioregionalism’ (Thomashow 1999) or Carr’s ‘(global) civil society theory’ informed version (Carr 2004b) and it is these bioregional perspectives which are most in keeping with that advocated in this thesis.

Critical Regionalism represents a similar perspective but which has its roots in the field of European architecture (Lefaivre and Tzonis 2003). Architecture has a long engagement with what would today be termed ‘local distinctiveness’, namely the expression of the particularities of a local culture through its modifications to the landscape (ibid.) and the need to preserve and celebrate this regional distinctiveness in the face of abstract and universalising tendencies in landscape planning. However, the danger has been that this has either descended into a reactionary parochialism or commercialised pastiche. Consequently, “… the critical regionalist approach to design and architecture of identity, recognizes the value of the singular, circumscribes projects within the physical, social, and cultural constraints of the particular, aiming at sustaining diversity while benefiting from universality” (Tzonis 2003 p20).

Despite their divergent origins (both geographically and philosophically), both movements trace their roots to the work of Lewis Mumford (Carr 2004b; Lefaivre and Tzonis 2003) and, through him, to Patrick Geddes. Drawing on biographical accounts of Geddes (Welter 2002) and Mumford (Luccarelli 1995), it is apparent that both lives were intertwined both personally and in terms of their cultural and political milieux. Both subscribed to a ‘larger modernism’ (see above) and took an holistic perspective which integrated society, place, ecology and economy. Both were inspired by radical political
movements, particularly anarchism, and sought to combat, in Mumford’s words, the emerging ‘megamachine’ of global capitalism through a focus on regional decentralisation, albeit set within a global awareness and international solidarity. Both recognised the need for a mythic engagement with place through the activity of what would today be called the ‘active imagination’ and drew on artistic inspiration. Crucially, both stressed rural-urban interdependence and were concerned with engendering convivial and inspirational urban environments which provides an important corrective to too exclusive a focus on non-urban and non-human place-relations to be found in some environmental discourses. As such, the Geddesian or Mumfordian conception of the region provides a context for the integration between geographical and environmental thinking on the one hand, and the various strands of postmodern and transformational thinking on the other called for in this thesis. Consequently, this thesis may also, in large part, be considered an attempt to carry their legacy forward, and to contribute to the bioregional and critical regional movements.

Towards a rapprochement between the diverse GEE traditions

Whilst this thesis argues strongly for an engagement with these ‘countercultural’, religiophilosophical and esoteric strands in environmental thinking, it should not be seen as a call for a wholesale rejection of more historico-material and socio-cultural approaches to critical GEE, far from it. However, since it is felt that the case has already been cogently made for more socially critical, postmodern and culturally informed forms of GEE and ESDGC by others (e.g. Huckle 1997; Morgan 2000a) and only limited space is devoted to a recapitulation of these arguments which are largely to be taken as read. Rather, the perhaps disproportionate space given over to ‘place-consciousness’ and spirituality issues is intended to make the case for their acknowledgement and integration alongside more socially critical and more mainstream perspectives within a broader integrative GEE schema. A preliminary consideration of how this might be achieved is presented below but before considering this another critique of contemporary thinking within ESDGC and GEE needs to be made.
Developmental considerations

In addition to the critical questions concerning the 'type' of postmodernism with which to engage, the case can be made that too many critical educators adopt a somewhat unproblematic account of the educational implications of engaging with the exceedingly complex nature of postmodern debates. It is often the case that critical educators call for teachers to move away from a status as mere technicians to become 'transformative intellectuals' (Giroux 1989) and, in so doing, become 'cultural workers' capable of nurturing this capacity also within the learning communities with whom they are working. This is a position which is in keeping with the rationale outlined above. However, the distinction between the learning needed (postmodern GEE) as 'subject' and/or 'attitude' (postmodern 'frame of mind') on the one hand, and the learners who will be 'doing it' on the other, is somewhat blurred in many accounts. There is, consequently, sometimes only a cursory acknowledgement that the education of children and adults must represent very different educational scenarios given the differences in life experiences and intellectual development. Consequently, adults, including teachers, will generally9 be better able to cope with the complex and counterintuitive nature of the ideas being posited within postmodern discourses. I agree that it is indeed important that both GEE teachers and pupils are encouraged to engage with the complexity of coming to understand the socially constructed nature of reality but in both cases only in a manner which is appropriate developmentally and not to the exclusion of other learning opportunities.

Here the Vygotskian notion of the ‘Zone of Proximal Development’ (Vygotsky 1978) and the recent engagement in HE with the idea of ‘Threshold Concepts’ and ‘Troublesome Knowledge’ (Meyer and Land 2005) should be salutary. Younger learners are presented with their own school-level ‘threshold concepts’ and ‘troublesome knowledges’ and an emphasis on developing a ‘postmodern attitude’ of suspicion and deconstruction might, on occasion, be disempowering. Trudgill (2003), writing from the perspective of geographical HE, acknowledges the ‘tyranny’ of models given their

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9 I hesitate to make this point as it can only set me up for a fall. I do acknowledge that there are some situations in which the benefit of youth with its lack of sedimented and habitual ways of seeing the world may make understanding some postmodern themes and ideas easier. I do, however, believe that it is possibly naïve to believe that all ideas are teachable to all ages providing the teaching is appropriate when it comes to complexities of modernity.
selectivity, yet argues that they can also be very useful. He presents a typology of scenarios (see Box 1) in which ‘given meanings’ may be conveyed to learners, only one of which (number four) is indefensibly disempowering and should be a legitimate target of resistance and deconstruction. The others are, to a greater or lesser extent, empowering since they give the learner access either to new experience or new intellectual understanding or, at the very least, access to a particular scholarly worldview with the attendant benefits that will accrue from this (intellectual development and societal status). GEE should be about equipping learners with skills such as deconstruction and a critical attitude when engaging with the subject since these represent important ‘tools of intellectual self-defence’ (Edwards 1995) in order to escape from the clutches of what the geographer Wright termed ‘categorillas’ (cited in Lowenthal 1976) – inflexible and constraining categories of thought. However, we also have to acknowledge that to constantly adopt an attitude of deconstruction at a stage when conceptual development can be quite fragile can be counterproductive. Consequently, this thesis will draw on insights from developmental and environmental psychology in order to provide a more adequate account of the epistemological challenge presented by postmodernity (see in particular Chapter 5).

1. Enablement of personal meaning through given experience
2. Enrichment through given meaning
3. Conscious acceptance of given meaning
4. Disempowerment of self through enforced given meaning

Box 1.1. Trudgill’s typology of given meaning-learner interaction (Trudgill 2003)

From Post- to Adequate Structuralism and Moralising

Whilst an important corrective to ‘naïve realism’, the danger of too many versions of social constructionist or deconstructive postmodernism is that they appear to argue that socio-cultural schemas are all there is to reality. Not all postmodernists (and hence postmodernisms) subscribe to such an extreme position and these correctives need to be
heard to counter the inherent dangers of nominalism with its attendant anthropocentrism and extreme relativism. Bonnett (2004b), discussing varieties of ‘frames of mind’, reveals the difference between adopting a moderate form of social constructionism as opposed to an extreme ‘Derridean’ frame that privileges seeing the world only as ‘text’ to be hermeneutically deconstructed:

There is literally a world of difference between saying that there is some underlying reality (nature) of which we only ever see limited aspects or different profiles according to how we look at it (under what aspect or description) and saying that it is only the ways we look – that is, the descriptions and the norms that inform them – that give meaning and reality to things

(p54)

He then goes on to point out a significant implication of such a perspective, namely that it precludes the possibility of a universal global ethic (p50). This point is also made by Smith (2004) who argues that the tendency of the “postmodern intellectual elite” (p203) to only privilege and celebrate difference and particularity undermines the basis for universal moral reasoning which he believes is crucial for moral judgement. He instead suggests that one can adopt a position of “ethical naturalism or essentialism ... [based on the] natural fact of human similarity” (p203). He therefore advocates that a ‘context sensitive universalism’ (p201) be applied to issues of moral geography. This is a significant challenge to the post-structuralist refusal to entertain the possibility of any identifiable ‘structural’ dimensions of reality, whether mental or societal.

It is without doubt that post-structuralism has proved an important intellectual movement in terms of questioning the validity of categories and the notion of underlying structures as fixed and unchanging realities ‘out there’ but we must now transcend it. We need to acknowledge that humanity thinks categorically, i.e. in categories. To critique a monological and monolithic system of categorisation is good. To deny the value of categorising – identifying patterns and proposing underlying structures – per se is to deny human forms of mentation and to foreclose the possibility of enquiry into anything but the surface features of contingent existence. Humans have come up with a variety of ways of categorising reality based on lived experience which are therefore legitimate in at
least a pragmatic sense. The important message of post-structuralism is that no one category, system or ‘structure’ can account for the richness and complexity of reality. But to make the move from this conclusion to a complete rejection of existing categories, or the very act of categorising, as no longer useful is to deny the fact that categorising does uncover usefully an aspect of reality, albeit not the whole story. Thus ‘categorical’, textual and metanarrative deconstruction is useful but so too is their provisional reconstruction.

It is beyond the scope of this thesis to consider the whole Integral Theory proposed by the controversial American scholar Ken Wilber. However, two recent ‘Wilberian’ formulations have a salience to this present discussion. Wilber (2003c) proposes that we should adopt what he calls ‘adequate structuralism’ which takes on board the post-structuralist suspicion of ‘structuralism’ but admits the value of using conceptual structures and categories as heuristic devices to be used and discarded as the situation demands. He has also presented a cogent argument for what he calls Integral Methodological Pluralism (IMP) which is based on the principle of ‘nonexclusion’, the acknowledgement that “‘Everybody is right’—or more technically, that the experiences brought forth by one paradigm cannot legitimately be used to criticize, negate, or exclude the experiences brought forth by other paradigms” (p2).

A consequence of this principle is that the best perspective is an integral one, namely one which attempts to collate and resynthesise the insights of the major epistemological paradigms. Hopefully it will be immediately apparent how such a perspective is potentially more affirmative in terms of allowing a ‘voice’ to very many perspectives which are, at present, at loggerheads. Thus, Modern and postmodern and indeed Traditional and/or Indigenous perspectives of various stripes, it is argued, can be accommodated in this schema. Furthermore, the implication is that it is only when these various perspectives are acting dialectically and dialogically (which could mean antagonistically as well as concordantly) will a more adequate perspective on reality – a ‘multiperspectival’ one – be achieved.

Applying the principle of IMP and non-exclusion to GEE would mean that all existing traditions within geographical and environmental thinking have an important contribution to make. But how might one identify which approaches to human-place
thinking should be integrated? Mulligan and Hill (2001) present a threefold typology of ecological traditions namely: scientific; Arcadian/romantic; and indigenous. Although writing from the perspective of environmental thinking in the Australian context, this typology has wider applicability and is helpful since it suggests that an integrative place-based education should attempt to incorporate all three strands of ecological knowing in a complementary manner whilst retaining their distinctiveness. This allows for an engagement in non-Western, Traditional and/or Indigenous ways of relating to the world (Mulligan and Hill’s third category) as well as ‘Western-inspired’ ones. This latter category would, furthermore, include both scientific and aesthetic/Romantic approaches (Mulligan and Hill’s first and second categories respectively). Similarly, various traditions have been identified in terms of Geographical thought, namely positivist/scientific, humanistic, critical and, more recently, postmodern (Holt-Jensen 1999). Once again, rather than providing a justification for division within the discipline, such a typology could better be used to provide a formula or prescription for an inclusive geographical engagement with place with each tradition providing a partial disclosure of human-place relations.

Liber(ation)al Education and the crucial task of Educating the Educators

Having presented a preliminary argument in favour of an integral GEE, this introductory chapter concludes with some preliminary statements concerning the wider understanding of education being presented and defended in this thesis within which this GEE project may be placed. Thus, education is seen as a process:

- which is lifelong;
- which proceeds through iterative transactions between a person and their situated context which includes both human (socio-cultural) and non-human dimensions
- in which personal, cultural and environmental dimensions intertwine;
- in which moral, spiritual and cognitive development are inextricably interrelated yet relatively autonomous dimensions of development;
which proceeds through a number of epistemological schemas of increasing sophistication and integrity in the dual sense of fullness and virtue;

- which has the potential to develop the highest human state of 'being and knowing' which will be heuristically referred to in this thesis as 'Wisdom'.

This understanding of education leads to the three cardinal claims of this thesis which should be seen as implicit throughout the ensuing argument, the first of which represents a major focus and the final two are significant yet derivative from it. First is the claim that, working within a neo-Piagetian framework, 'higher orders of being and knowing' – 'post-formal' levels of development – are possible and represent goals to which the educational process should be directed both in terms of enriching the life of each individual and equipping them (and therefore society) with the requisite wisdom to address the constellation of challenges presented to humanity in the contemporary world including environmental degradation, globalisation and living in culturally pluralistic societies. This is one important sense to be conveyed by the title 'Minding the World' namely the development of an attitude of care and compassion towards the world in all its dimensions, both human and non-/more-than-human, both personal and collective, that is commensurate with the needs of sustainable development and global citizenship. Consequently the author has a particular interest in adolescent/adult phases of lifelong development since this is considered to be the most crucial, yet unfortunately the most often disregarded, period of epistemological development in terms of GEE, and ESDGC and education more broadly. This gives rise to the second claim, that certain types of 'educational' experiences and 'educational' systems (curricular, formal/informal etc.) will be more efficacious in terms of facilitating this goal whilst others might be deleterious. What follows represents an implicit critique of the prevailing educational institutions within the West and a call to explore alternative formulations with the goal of nurturing a 'wise' population.

The final claim presents a still more specific focus in terms of the adult Higher Education (both initial and continuing) of two professional communities: educators (especially those involved in ESDGC or GEE across all sectors and phases) and the 'sustainable community professions' (SCPs) (such as planners, architects, social workers
etc.) who might play a key role in empowering local communities to undertake globally-minded collaborative ‘place-making’ and/or exercise a ‘leadership for sustainability’ role. Educational professionals whatever their phase of focus (primary to Higher) represent essential facilitators of societal transmission and ideally its transformation so should ideally represent society’s ‘higher achievers’ in terms of the development of ‘wisdom’. Equally, ‘SCPs’ should ideally demonstrate (geographical and environmental) wisdom in their daily practice. Consequently, society should ideally recruit or more properly nurture over an extensive period ‘integral’ or ‘wise’ ESDGC/GEE educators and SCPs (the former should perhaps be seen as a special subset of the latter). This is, of course, too contentious and grand a demand either for the whole teaching profession or all ‘sustainable community professions’, given the conflicting demands made upon them, and the fact that many will no doubt be ideologically opposed to such a suggestion. Rather, this thesis is, therefore, more specifically concerned with the development of ‘transformative intellectual’ educators or what Lister (1987) terms ‘vanguard educators’ who would be instrumental in nurturing ‘wise GEE/ESD/SCP practitioners’ and/or communities. The crucial question remains, of course – what is the ‘right kind of human being’ needed to promote transformative ESDGC and GEE, or what kind of learning experiences will nurture such ‘vanguard educators’? Drawing on a range of perspectives, this thesis attempts, humbly, to go someway towards suggesting answers to this.

The type of education advocated in this thesis may be characterized as ‘liberal’ or General Enlightenment (Hamm 1989) in certain respects. Such a perspective has been challenged by critical educators who see such a project as merely developing individuals who ‘fit in’ with the prevailing state of affairs or status quo or at best are in a position to merely reform it. This is not the implication of a liberal education as conceived in this thesis, however which instead carries with it important implications of freeing – liberating – individuals from the social limitations (cultural habits) of the society they find themselves in. In terms of the argument presented in this thesis, this demands the development of an ‘autonomous rationality’ with its associated ‘morality of self-accepted principles’(Billington 2002) coupled with spiritual awareness or deeply relational consciousness that gives rise to a ‘being-for-others’ approach to life which has the
capacity to be filled with a sense of awe and wonder. These two developmental goals will be heuristically referred to as Western Enlightenment (autonomous rationality) and 'Eastern Enlightenment' ('being-for-others') respectively, and a truly liberal education should therefore be seen as an 'education for liberation' or 'education for enlightenment' combining both individual development (liberal/holistic) and societal change (socially critical) goals.

Edwards (1995) argues cogently that one can only be fully human when one has reached this level of awareness and is able to "abandon rationalized certainty for uncertainty, doubt and wonder" (p216). He suggests that this is the real meaning behind the universal myth of the 'hero's quest' in which one develops the 'tools for intellectual self-defence' against the hegemonic powers of the prevailing 'Power Religion' (in contrast to humanistic religion) which is focused solely on sustaining existing iniquitous societal power relations whether truly religious or secular (for example the Global Capitalist Western hegemony may be seen as a Power Religion in the latter sense). These 'defences' are able to penetrate through the monolithic 'false certainties' and dogmas that pander to the egocentric fears and desires of the majority of the 'in-group' whilst demonizing the (falsely identified) 'out-group' or 'other'. The true hero who embarks on this quest "acquires a capacity for being genuinely bewildered; he [sic] marvels at the discovery of a part of himself whose existence he had never suspected" (Fromm cited in ibid. p217). Such a person has been known in all world societies as a 'sagacious fool' who is truly 'free to be human'. These are attributes we should look for, and/or seek to nurture, in our 'vanguard educators'.

From another perspective, Walsh argues that "(e)ducation has apostolic duties to the World's grandeur" (Walsh 1993 p127) and should be about developing 'Love of the World' (p115) which seems more than a little apt in a discussion of GEE in particular. He identifies four purposes of education – possessive, experiential, ethical and ecstatic – chief amongst which he considers the ecstatic category or the goal of developing the capacity to experience 'awe and wonder' in the face of the everyday realities of life. Another observation made (p113) that is highly pertinent to this thesis may be paraphrased as 'education can be conceived as the loving initiation into the mysteries of existence'. Finally, following Peters, he suggests that "education implies the equipping
and supporting of people in an ongoing quest for what is of ultimate value – by those who do not know all the answers but who are more experienced and advanced in this quest” (p93 [emphasis added]). Taken together, this presents an almost religious view of education in which educators play the metaphoric role of ‘wise elders’, ‘world priests’ or even mystagogues humbly initiating the next generation into the awe, wonder and mystery of earthly existence. This provides a powerful vision for the development of GEE educators who are comfortable with the socially critical, ‘radical ecological’ and ecospiritual perspectives being championed in this thesis, and the remaining chapters attempts to justify just such a perspective and finally map out significant dimensions of what this might entail.

**Structure of the remainder of this Thesis**

Having set out the rationale for this thesis and located this within wider discourses, this Chapter concludes with an overview of the chapters which follow. Chapter 2 reviews recent thinking about the significance of ‘place’ in the Academy including philosophy, the social sciences, psychology, New Paradigm science, and bioregionalism. It also presents an argument for supporting the development of an holistic understanding of place informed by the above and which nurtures ‘geopiety’, ‘topophilia’ and a ‘global sense of place’ – heuristically refered to as ‘geographical and environmental wisdom’. Chapter 3 argues that it is both possible and desirable to gather different perspectives into an integral worldview. It reveals the complementarity of different perspectives in terms of ‘science’, ‘religion’ and ‘art’ as broad orientations for relating to the world. It therefore argues that Modern and premodern/traditional and indigenous perspectives from around the world can and should be drawn upon in the development of a postmodern spirituality.

Chapter 4 presents a description of ‘enactivism’ – the epistemology associated with the Santiago school of cognition – and its significance in biological, including human, cognition. This reinforces the significance of human-place relations covered in Chapter 2 in the light of modern thinking in cognitive psychology. The chapter argues that the human or emplaced imagination enacts (brings forth) the particularly human
umwelt or ‘mundane reality’ (non-pejorative sense). Chapter 5 develops the notion of enactivism within a developmental framework using Robert Kegan’s ‘orders of epistemology’ model. It therefore argues that human mentation or ‘emplaced imagination’ develops through a number of qualitatively discrete mental schemas or mundane realities, with the highest being post-formal and associated with ‘reflexive relationality’ and the development of the mythopoietic imagination giving rise to a relational and enchanted perception of reality.

Drawing on postmodern, poststructuralist and New Paradigm thinking, Chapter 6 presents an argument for a relational ontology and metaphysics which acknowledges a ‘spiritual’ dimension to reality in either a weak or strong sense. The latter is best understood through a panentheistic framework. Chapter 7 relates the foregoing discussion to the concrete realities of place-based human existence. It discusses Extrovertive Mystical Experiences and the liminality of imagination-place relations. The chapter argues that Significant Life Experiences can, and should, be nurtured in a variety of geographical/environmental settings including wilderness and urban. Finally, Chapter 8 attempts to bring the foregoing discussion to a conclusion by discussing desirable characteristics of an ‘integral and tranformative GEE’ with exemplifications.
Chapter 2: Putting Humanity in its Place: the ‘ground’ of being, becoming and learning

The ‘rediscovery’ of Place in the Academy

Place is the first of all beings, since everything that exists is in a place and cannot exist without a place

Archytian Axiom

Whatever is true for space and time, this much is true for place: we are immersed in it and could not do without it. To be at all – to exist in any way – is to be somewhere, and to be somewhere is to be in some kind of place. Place is as requisite as the air we breathe, the ground on which we stand, the bodies we have. We are surrounded by places. We walk over and through them. We live in places, relate to others in them, die in them. Nothing we do is unplaced. How could it be otherwise? How could we fail to recognize this primal fact?

(Casey 1997 pix)

The Archytian axiom expresses the emplaced fact of human existence. Yet Casey’s elaboration, which I would wish to extend with ‘we learn’ and ‘are educated’ in them’, ends with a question which reveals our general oblivion to this truth. The answer probably lies in the very ubiquity and ‘a priori’ fact of place (ibid. px) resulting in it being a prereflective, and therefore ‘invisible’ or unconscious, existential given. Thinking about place requires an act of will under normal circumstances or is precipitated by internal or external forces that bring the issue sharply into focus. For much of human history, and particularly since the (Western) Enlightenment, humanity has tended to overlook place. Now, however, it appears to be experiencing a period of ‘awakening’ to place that is partly in response to contemporary issues relating to the environment, human identity and meaning (both individual and collective) and Globalisation, precisely those
themes identified in the previous Chapter as providing the normative rationale for the particular form of Transformative Education advocated in this Thesis.

This emerging recognition of the significance of place is particularly in evidence within academic discourses within the humanities and social sciences. The discipline of geography (with the notable exception of the sub-disciplines constellated within purely physical geography) is, as might be expected, a key driver of these academic developments. However, non-geographers such as sociologists, historians, political theorists, philosophers and psychologists as well as those who may be better described as transdisciplinists have played as significant a role as geographers. This academic diversity means that the 'spatial theory' field is being enriched by a multitude of intellectual perspectives from "established and important intellectual traditions such as positivism, phenomenology, Marxism and feminism as well as those developing new(er) [sic.] discourses of space and place as they engage with (and develop) poststructural, queer, postcolonial, postmodern and subaltern theories" (Hubbard, Kitchin, and Valentine 2004 p1). More exciting still are the syncretisms occurring in the lacunae and interstices between these different intellectual traditions and disciplinary boundaries. This Chapter explores some of these developments in order to provide a broader conceptual landscape within which to locate the Integral Transformative 'place-based' Educational project identified in Chapter 1.

This is not an argument simply for the reprioritizing of GEE at the apex of a new educational hierarchy although a greater acknowledgement of this metadiscipline is an important corollary of the argument being presented. Rather this is a perspective which sees 'place' and our existential emplacement as providing fundamental and holistic orientating constructs from which education should proceed. Furthermore, this is a perspective which favours an integral or holistic view of knowledge, skills, attitudes and values acquisition (which necessarily militates against rigid disciplinary divisions) through the lifespan but especially at the adult phases of education which is driven by place-based transactions. The 'subject' of such an education is the 'emplaced imagination' understood as a synonym for 'human being' (individual and/or collective). This neologism is presented in order to emphasise the existential import of place and our psychological transactions with it. The 'imagination' is understood as a quintessentially
human psychological capacity which depends upon ‘emplacement’, that is a particular contingent existential context (embodied, ecological, enculturated), for its very existence (this notion is elaborated particularly in Chapters 4 and 7). The ‘curriculum context’ for this ‘education of the emplaced imagination’ becomes the ‘World’ understood polysemously, that is simultaneously implying one, some or all of the following:

- the Globe, Planet Earth
- heterogenous (multifarious/manifold/pluralistic) phenomena
- unity in diversity/inclusivity/integrity
- any ordered system (synonym of cosmos) comprising heterogenous elements that exist in relation to generate a functional whole. As such (relatively autonomous) ‘worlds’ are identifiable at the microscopic/microcosmic (e.g. cellular through subcellular, atomic and subatomic systems) and macroscopic/macrocosmic (solar systems, galaxies, Universe(s)) scales, with the realm of humanly existence – the mesocosm (and the diversity of ‘subsystems’ – social, economic etc. - which this is comprised of) lying between these extremes
- a/the human lifespan (etymologically the original Old English meaning – we(o)rul). Semantically this can be related to the term ‘curriculum’ understood as ‘the lifecourse’
- (by extension of above) any temporal existential frame such as that of an ‘idea’ or even worldview (gestation through to expression and ultimately ‘change of mind’), a civilisation (‘origins’ to ‘decline and fall’ of the Roman World, the Western World etc.), a species (evolutionary emergence to extinction) or even the Universe (Big Bang to Big Crunch?)
- ‘sphere’ or ‘horizon’ of concern.

The ‘goal’ of such an education is a continuing process of ‘Minding the World’ or the intellectual (minding as ‘cognizing’) and affective (minding as ‘caring for’) development of an ever expanding and encompassing ‘sphere’ or ‘horizon’ of concern for a person throughout the lifespan. Place and/or ‘world’, that is the contingent circumstances of existence, represents the context for this development.
Philosophical Conceptions of Place: Classical and Contemporary

Place is the locale of the truth of Being

Heidegger

Attempts to privilege place are generally emerging from self-avowed postmodernists who wish to emphasize contingency over universalising and abstract categories such as ‘space and time’. Some critics have identified these efforts as being ‘anti-Modern’ (Brockelman 2003) since the universalizing categories of space and time which are now being critiqued are so closely associated with the Enlightenment project and Modernity. Less pejoratively, one could alternatively see these efforts as an acknowledgement of Premodern or Traditional Wisdom since many are finding inspiration in the philosophers of the Ancient World and non-Western traditions. Thus philosophers of ancient Greece, notably Plato and Aristotle, considered place for, and of, itself but thereafter until very recently it has not featured strongly in the Western philosophical tradition as these other ‘absolutes’ (space and time) have taken precedence (Casey 1993; Casey 1997). Now it would appear that ‘place’ is a notion or construct whose ‘space-time’ has come again.

Strong parallels, or more likely reciprocal relationships, exist between different fields making a brief treatment of the ‘philosophy of place’ worthwhile. In terms of the Western tradition, Classical Greek conceptions of place seem to present the ‘archetypes’ from which later conceptions have emerged. Plato’s conception, in particular, resonates at least in part with emerging contemporary notions of place. He discusses the (proto)place — chora — in Timaeus as one of the great modes of being and as the Receptacle, mother or nurse of all becoming (Casey 1997) which “suggests that place is an interactive environment which influences and responds to whatever is within it.” (Relph 1996 p906). Aristotle, in contrast, takes a narrower and much reduced view of place — topoi — as ‘container’ i.e. the precise dimensions of the space that contains something. This pays no real attention either to what is contained or to interactions between container and contained (ibid.). It would seem that this narrower understanding
largely informed subsequent thinkers up to and beyond Newton who subordinated place to Space and Time and then largely ignored it (Casey 1997)).

Increasingly, place has reasserted itself through the work of phenomenologists, existentials, structuralists and post-modernists (*ibid.*). It is beyond the scope of this chapter, or indeed this thesis, to explore in detail the place-related work of key figures in this resurgence such as Heidegger, Merleau-Ponty, Derrida and Foucault but a new philosophy of place is emerging. The contemporary notion is one which resonates with (and has probably been informed by) quantum rather than Newtonian physics. Thus:

Aristotle is turned on his head and Plato put back on his feet: place as enclosure is affirmed, but only insofar as the elements that make up place inhabit and suffuse the universe as a whole, now considered as a gigantic sievelike vessel – which, though entirely enveloped, leaks throughout ... [so that] a single place is capable of reflecting the whole universe of space. A place is the *event* of this reflection.

(*ibid.* p336 [original emphasis]).

Whilst somewhat abstruse, this metaphysical conception of place also resonates with conceptions emerging in the social sciences to which we will now turn.

**Place in the Social Sciences**

Place is becoming an increasingly important feature in discourses from human geography, sociology, cultural studies, anthropology, psychology and applied disciplines such as architecture and planning. Indeed, it is not unusual to speak of the social sciences as having undergone a 'spatial turn' in recent decades. This is a consequence of two factors: firstly, the greater influence of humanistic approaches within these disciplines; secondly, the greater structural awareness and the attention being paid to the constellation of ‘binary oppositions’ (McGrew 1992) associated with Globalization, namely:

- universalization versus particularization
- homogenization versus differentiation
integration versus fragmentation

centralisation versus decentralisation

juxtaposition versus syncretisation.

These dualities condense around a primary 'Global-local dialectic' which is discernable between interpretations of Global change by authors in the field – some focusing on Global processes and others stressing localization/fragmentation. Cochrane (1995) rejects either interpretation, denying the polarization implicit in both. He suggests instead that "it is precisely the interconnectedness of these processes that helps to define the contemporary condition" (ibid. p251).

The impact of these tumultuous forces upon the notion of 'identity' and its relationship to location is a major focus of study and concern (Carter, Donald, and Squires 1993). For environmental psychologists 'place-identity' represents "a cognitive sub-structure of self-identity" (Proshansky, Fabian, and Kaminoff 1995 p92) which emerges from 'active environmental self-regulation' through which individuals seek to maintain "... the psychic balance of pain and pleasure, and the coherence of one's self and self-esteem" (Korpela 1995 p115). The processes outlined above are upsetting this balance and coherence. Consequently, sociologists are witnessing the simultaneous creation of new 'global' and new 'local' identifications (Hall 1992). This is occurring because "... interconnections between global forces and local particularity alter the relationships between identity, meaning and place" (McDowell 1994 p166) resulting in "... new ways of articulating the particularistic and universalistic aspects of identity, or new ways of negotiating the tension between the two" (Hall op. cit p304). Thus, "... the resurgence of ethnic and sociopolitical localisms and regionalisms ..." (Gregory, Martin, and Smith 1994 p2) has been coincident with a resurgence in internationalist movements and the emergence of a so called New Global Solidarity (Waterman no date) as witnessed, for example in the anti-capitalist protests in Seattle (ibid.) and the rise of the "... 'global civil society,' a transnational formation of primarily non-governmental organizations that is functionally place-based but normatively global" (Lipschutz 1999 p110). The rather clumsy term 'glocalization' has been coined to convey the process by which "... globalization creates the conditions for localization, that is various kinds of attempts at
creating bounded entities - countries (nationalism or separatism), faith systems (religious revitalization), cultures (linguistic or cultural movements) or interest groups (ethnicity)" (Eriksen 1999).

Globalization must be seen as a process involving new ‘time-space’ phenomena such as time-space ‘distanciation’ and ‘compression’ (McGrew op. cit.) which are altering the nature of ‘activity space’, “… the spatial network of links and activities, of spatial connections and locations, within which a particular agent operates” (Massey 1995 p54). The spatial reach of activity space is being increased as is its complexity resulting in increases in both the permeability of, and linkages between, places (ibid. pp57-58). This is giving rise to a new conception of place “… as a meeting-place, the location of the intersections of particular bundles of activity spaces, of connections and interrelations, of influences and movements” (ibid. p59). This conception has striking parallels with the philosophical notion outlined above. It permits the integration of the major dualities in people-environment studies, namely between choice and constraint; process and pattern; the micro-scale and the macro-scale; behaviour and structure (Walmsley and Lewis 1993) and, as shall be made more apparent in the following section, between humanity and nature.

Place in Systemic Critical Theory – Socio-Structural and ‘New Paradigm’ thinking

Some of the insights noted above have drawn on thinking from quantum mechanics, the science of complexity and Chaos Theory which is giving rise to a so-called interdisciplinary ‘New Paradigm’ (Zimmerman 1994) which rejects the Newtonian-Cartesian view of reality as being made up of discrete elements linked in a simple linear fashion in favour of a systemic view of 'nodes in networks' operating in a complex/non-linear way. A significant implication of this thinking is the unpredictable nature of 'nature' (including humanity) – a change in one part (node) of the system can have consequences across the whole system which cannot be predicted because of the complex 'web of relationships' existing across the system's structure in a distributive manner. Furthermore, systems exist in a 'nested hierarchy' or rather holarchy – what is seen as a system at one level is actually a node within a wider system. This observation
highlights the fact that the nature or characteristics of any node has as much, if not more, to do with its relative position and role within the system as its individual attributes, which is in accord with the themes of 'positionality' or 'situatedness' within postmodern and poststructuralist discourses. Another key idea is that of 'emergence' as new and more complex and sophisticated levels of organisation are created with new or 'emergent' properties not seen in the system at the lower levels – the whole is greater than the sum of its parts.

The relevance of this thinking to geographical and environmental thought can be seen in the various tendencies to dissolve the categorical distinctions between humanity, nature and technology on the one hand and discrete spatial scales on the other. Thus, one may substitute the terms place (and/or region and/or space) for node (and/or context and/or system) and so recognise that places are nodes within wider networks or contexts (e.g. the global system). Furthermore, people, artefacts and non-human agents represent agentic nodes or 'actants' (Murdoch 1997) within these places. Consequently places should be seen as fundamental 'co-ordinating interfaces' (Laszlo 1972), on the one hand, between the physical and social sub-systems (from which they are inextricably composed) and, on the other, the Global system (of which they represent a sub-system). Geographers working from a more historico-materialist/economic-structuralist perspective are concerned with uncovering the consequent 'geometries of power' (Massey 1993a) of the particularly human systems which are believed to be structured in such a way as to lead to inequality and the marginalisation and exploitation of some. However, this simultaneous blurring of ontological and spatial categories is giving rise to new heterogeneous and hybrid understandings in terms of human-nature transactions and of places as heterotopias which is demanding a more sophisticated analysis than is associated with traditional Marxian discourses in which considerations of the biophysical and phenomenological domains were largely absent. Thus more recent critical discourses include considerations of gender, race, sexual orientation, ability and culture alongside class and are often concerned with tracing the contours of their 'social construction' of these and other categories, and exploring new more fluid and potentially liberatory ones.

The notion of geographical scale as being hierarchical (arranged from the local through the regional, national, continental up to the Global) is similarly being challenged
since it is difficult to separate geographical phenomena into one discrete scale level (just local, just regional or just global) as the holarchy works as a web of relationships with local forces both shaping and being shaped by Global forces (with all levels in between also being involved) in a complex, iterative and mutually dependent fashion. Thus, places are seen to be nested within places within places (as contexts within contexts within contexts), or ‘places’ should more properly be seen as complex multiscalar phenomena which emerge and dissipate as systemic associations come and go, but they are always ultimately implicated in, or emergent features of, the ur-place or planet. This idea is expressed as the local-Global nexus.

Given the supercomplexity of the local-Global nexus, it is usual for people to consider it from the perspective of a single scale or set of associations. Attempts to consider ‘Global Complexity’ and various local-Global nexuses more holistically can be found, however, in the Gaia hypothesis (Lovelock 1982), Actant Network theory (Murdoch op. cit.) and so called ‘new social physics’ (Urry 2004). The Gaia hypothesis basically extends the ecosystem concept to the scale of the whole planet and suggests that the planet functions, and always has, Globally. Globalisation, on the other hand, is the term applied to the emergence relatively recently in Earth history of a range of structural systems and their associated emergent properties that are human in origin, being associated particularly with the emergence of Modernity (Hall, Held, and McGrew 1992). Whilst global ecological or biospheric processes will clearly represent a key interest of GEE, it is largely these anthropogenic global structures which socially critical transformative intellectuals seek firstly to uncover and then to transform.

Urry (2003) discusses two types of largely human structures or systems that operate across all scales. The first type – Globally Integrated Networks (GINs) – are purposefully created to serve a particular function on the Global stage and have an identifiable network structure with a controlling influence. Good examples include transnational companies (e.g. McDonald’s and Coca-Cola) and the United Nations. The second type – Global Fluids (GFs) – are much more spontaneous, much less predictable, much less ‘ordered’, and ‘messy’ in that they do not operate within strict networks but rather ‘overflow’ boundaries. Good examples of this second type are population migrations, the internet, environmental problems, Global protest movements. Different
types of both GINs and GFs might either contribute to, or work against, the achievement of social and ecological justice, and it becomes incumbent on those seeking to bring this situation about that they have the requisite knowledge and skills to identify, challenge and subvert or exploit these global networks as appropriate. Consequently, this structural and political awareness must represent an important feature of transformative GEE and ESDGC which, in educational terms, can be thought of as conscientization (Freire 1970).

Another perspective, albeit not a universally held one, within New Paradigm thinking which is Global in outlook could be termed the Noosphere hypothesis. Neo-Hegelian in terms of its progressive and optimistic view of history and potential of the human spirit (Samson and Pitt 1999), it posits the continuing emergence of a level or 'sphere' of consciousness hitherto unknown within the biosphere, or possibly even cosmos, which is associated with the evolution of humanity's cognitive capacities. A variety of perspectives may be discerned within this general notion ranging from largely individualistic (the development of an individual’s consciousness is preeminent), to more collectivist/distributive and technocentric (which sees the emergence of a type of Global Brain e.g. the Internet). Whilst the noospheric perspective is highly contentious within certain 'radical ecology' circles (e.g. Deep Ecology), given its apparently inherent anthropocentricism, it would warrant serious consideration as a relevant perspective within an integrative GEE considering its relevance to environmental debates (Samson and Pitt op. cit.). Furthermore, a qualified version of the noospheric hypothesis could be seen to be a significant strand in this thesis (see Chapter 6) given its emphasis on psychology.

Psycho-social, existential and transpersonal significance of 'sense of place' - The view from humanistic geography, environmental and transpersonal psychology

Place has emerged in Environmental Psychology as an "holistic model of the context of behaviour" (Cassidy 1997 p49). Place as both the locale of experience and context of behaviour or the 'lifeworld' is a holistic notion "incorporating the ways in which the environment serves a function, motivates the person and is evaluated by the
person all at the same time" (ibid. p51). These processes might be captured by the phrase ‘sense of place’ which is used here to describe the constellation of attitudes a resident or community has with regard to its place of residence. The phrase ‘place identity’ refers to the way in which a sense of place is implicated in individual, social and cultural identity (Altman and Low 1992) and the precise nature of this ‘place identity’ will, therefore have a bearing on residents’ individual and group self-concepts and self esteem. A ‘sense of place’ can be negative or positive, or more likely a complex combination of the two. This is highly significant in terms of this thesis because one is more likely to behave in a way which is environmentally and socially responsible within a place one evaluates positively.

A less instrumental justification for a focus on ‘sense of place’ is "that through personal attachment to geographically locatable places, a person acquires a sense of belonging and purpose which gives meaning to his or her life" (Proshansky, Fabian, and Kaminoff 1995 p90) which is a significant assumption made by Humanistic geographers such as Tuan, Relph, Malpas and Buttimer as well as environmental psychologists. Where individuals have a “strong, local sense of home and are emotionally attached to their local area” (Hummon 1992 p263), the sense of place is described as ‘rootedness’ (ibid.) or ‘Place Attachment’ (Altman and Low op. cit.).

It would seem that place attachment develops through positive experiences (and the memory thereof) associated with a place. Three distinctive foci for the development of these experiences are discernible in the environmental psychology literature which mirrors in part the liberal/holistic and socially critical division in transformative versions of critical theory and GEE noted in Chapter 1. Thus, for ‘environmental sociologists’ the overriding factor is social interaction (see e.g. the contributions in ibid.). Other workers, in contrast, concentrate on individual-nature exchanges in natural settings, with wilderness settings considered most efficacious and social interactions a distraction in terms of developing personal growth and Place Attachment (e.g. Kaplan and Talbot 1983; Ulrich 1983) The third alternative concerns transactions with the built environment in terms of ‘architectural phenomenology’ (Seamon 2000), urban-focused ‘eco-phenomenology’ (e.g. Bognar 2000; Jager 2000) and psychogeography (Coverley 2006; Sadler 1999).
What appears to have been lacking to an extent are efforts to engender ‘place attachment’ based on all three types of human-place transactions. It is important to recognise that each perspective has preferred contexts (relatively natural vis-à-vis social and/or architectural/built) and divergent processes (the social interaction required by ‘environmental sociologists’ might interfere with the attitude of reverie or contemplation required by the other perspectives, and vice versa) which partly accounts for this lack of integration. However, in this thesis they are not considered to be mutually exclusive. Rather, the transformative potential of each is considered to be vastly enhanced through their blending. Fortunately, places, considered over a wide enough (bioregional) scale, provide a mosaic of natural and social environments within which the requisite blending of the different types of experiential interactions or learning opportunities, at different times and within different contexts, can be facilitated.

Having discussed the importance of face-to-face social interaction in terms of developing a ‘sense of place’, it is worth considering briefly the significance of the socio-cultural context which is, according to social constructivism and social psychology, implicated in individual-place relations in a still deeper way than just face-to-face social interactions. Whilst we all (both individually and collectively) interpret reality through our own particular 'lenses' which gives rise to our own particular 'take' on reality or 'World' we inhabit, it is our socio-cultural context (family, friends, national culture etc.) which has largely and subconsciously taught or socialised us into what phenomena and behaviours are relevant and appropriate. These are consequently 'foregrounded' or 'brought forth' into our attention and make up the principal features and practices of our 'World' (see Chapter 4). Things not valued in this socio-cultural context are still there but lurking in the background and not really considered and therefore do not significantly feature in our Worldview – they therefore fall outside the ‘scope of concern’. From the perspective of many critical environmentalists, the Western worldview has, until very recently at least, disassociated itself from, and therefore shifted to the ‘background’ of its attention, nature which has consequently lain outside the horizon of concern only to be rudely reintroduced in recent decades as a consequence of environmental degradation.

These are important matters, and the Freirian concept of conscientization must be seen as a process of uncovering not only the exploitative socio-economic structures
prevailing within the local-Global nexus but also uncovering the socially constructed nature of our epistemological frames to enable us to question our own ‘worldview’, undertake a process of mental ‘decolonisation’ in terms of hegemonic perspectives, and move to greater authenticity (Edwards 1995). However, for many, the present author included, social constructionism is not the end of the story and our existential status as embodied and emplaced beings is prior to our socio-cultural status since "place is integral to the very structure and possibility of experience" (Malpas 1999 p32 [emphasis in original]) and, consequently, "[u]nderstanding human being and understanding place are one and the same" (ibid. p36) since:

the way in which the problem of understanding human being, and more particularly, of understanding concepts such as knowledge, self, experience and so forth, is inseparable from the problem of understanding the possibility and nature of place.

( ibid. p35).

Thus, humans are always and already geographical beings or Homo geographicus (Sack 1997) and a fundamental existential, albeit generally unconscious, yearning of the human condition is topophilia (Tuan 1974), i.e. love of place. Consequently, one route taken in terms of the Delphic injunction to Know Thyself must be to ‘know one’s place’, that is, come to an intimate understanding of how the actualities of one’s contingent emplaced existence have shaped who one is. This necessarily requires a consideration of the local socio-cultural forces which have shaped one’s worldview but also of biophysical phenomena as well. This represents the important insight of the so called ‘Santiago’ school of cognitive psychology (Thompson 1987) which presents a non-anthropocentric postmodern epistemology (Preston 2003) based around the notion of enactivism (Varela, Thompson, and Rosch 2000) and stresses the essential importance of human transactions with ‘nature’ and place in terms of developing our ‘worldview’. This new epistemological approach is a crucial theme in this thesis and is explored at greater length in Chapter 4.

However, from another not wholly unrelated perspective an intimate relationship with place opens up the possibility of transcending the limits of contingent existence to
find one’s true Self, one’s ‘Buddha Nature’ (Badiner 1990) or one’s ‘Sacred Face’ (Tisdell and Tolliver 2003) since "to immerse oneself in what one most deeply feels is a proven route to the universal" (Smith, Light, and Roberts 1999 p4). Such a perspective sees the Delphic injunction to be a call to Self-realisation or actualisation which represents another important strand in certain ‘radical ecologies’. Mulligan and Hill (2001) identify Romanticism (which would be taken here to be exemplified by the English Romantic Poets and the New England Transcendentalists) as a legitimate tradition within ecological thinking (alongside scientific and indigenous forms). The Romantic-Transcendentalist movement therefore deserves a place within an integral GEE. Furthermore, it represents a Western tradition which would reasonably be identified alongside environmentally sensitive religio-philosophical traditions or ‘creation-centred spiritualities’ (Fox 1983). A recurring theme (which suggests a proclivity of the human species) in much of this literature is the possibility of experiencing ‘Eternity Now’ or the ‘Ever Present Origin’ (Gebser 1986) in the concrete realities of the real world through a transpersonal engagement with place or things therein (which might, from a holarchical perspective, be considered ‘places’ in their own right). This is the sentiment encapsulated in the first verse of Blake’s ‘Auguries of Innocence’:

To see a world in a grain of sand
And heaven in a wild flower,
Hold infinity in the palm of your hand
And eternity in an hour

This hope of a ‘realised eschatology’ may be discerned in the Celtic or Insular Christian notion of finding one’s ‘place of resurrection’ (Bradley 1993; Sheldrake 1995) and Wordsworth’s ‘spots of time’ (Prelude cited in Chawla 2002). Another recurring, likely related and highly relevant theme in terms of this thesis is the impulse and/or injunction to undertake a spiritual journey either literally in the form of a pilgrimage or metaphorically in terms of an ‘inner journey’, although the distinction between them will be most likely blurred within ‘creation spirituality’ traditions. Once again, this tendency is exemplified by the Celtic/Insular Christian tradition of peregrinatio (Biallas 2002; Bradley 1993; Sheldrake 1995) and this represents a religious tradition which is being

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rediscovered or reinterpreted (some might argue inauthentically) largely because of its strong emphasis on 'place', nature and 'journey' or pilgrimage. Other non-Western and 'premodern' religious traditions are also being reconsidered for their 'ecological' credentials. The relevance to the discussion immediately at hand is encapsulated by Eliot’s ‘Little Gidding’ which provides a twentieth century expression of the same eternal human striving for meaning which is realised through our coming to understand our contingent, that is emplaced, existence (see Coda).

In this sense the 'lifeworld' becomes the window not only onto the local-Global nexus (from the perspective of Systemic Critical Theory) but also onto the local-Cosmic nexus (from the perspective of religion and transpersonal psychology). The 'lifeworld' presents a safe and secure anchor from which exploration of the universal is possible and, indeed, necessary for maturation to occur. This is the sentiment conveyed by Buttimer's notion of Home and Reach (Buttimer 1980) and Tuan's notion of Hearth and Cosmos (Tuan 1996). Consequently, place should be seen to both provide the context for, and represents an important dimension, of:

- Identity formation
- 'Rootedness'/Place Attachment
- Self-esteem
- Cognitive development
- Socialization and enculturation
- Perceptions about, & behaviour towards, 'Others'
- Relationship to non-human reality (transpersonal dimension)
- Personal transformation
- Structural transformation
- Development of 'Worldview' i.e. understanding about place, space and nature
The Holistic Nature of Place and the need for an integrative GEE

Echoing the call for an integrative approach to understanding the world made in Chapter 1, these perspectives emerging from the Academy are presenting a view of place which demands convergence between positivist, humanist and critical/structural philosophical approaches (Walmsley and Lewis 1993) and thereby invites plurality and eclecticism since to "seek to understand place in a manner that captures its sense of totality and contextuality is to occupy a position that is between the objective pole of scientific theorising and the subjective pole of empathetic understanding" (Entrikin 1991 p133). Such a convergence, which is in line with a postmodern sensibility, is discernable within the field (Walmsley & Lewis op. cit) and debunks the notion that any one monological metanarrative is capable of explaining the real world or prescribing solutions to its supposed ills. For example, Harvey (1993) recognizes commonalities, and therefore opportunities for building bridges, between Marxist and Heiddeggerian approaches to "... reconstruct a better understanding of place" (p15) using a 'Lefebvrian matrix' or schema which, as others (e.g. Soja 1996) have noted, is capable of integrating physical, mental and social conceptions of space. This move away from ideological bigotry which is discernable within the Academy provides an exemplar to be welcomed and promoted in education generally, and GEE especially. Scott and Oulton (1999) look forward to a time when environmental education can be truly "... cross-disciplinary and multifaceted in that it will be informed by a combination of traditions and ideological persuasions which together will offer more than any one of them alone" (p89). An educational focus on place which promotes convergence, plurality and eclecticism could provide a context for this to occur since the very concept itself demands it.

The foregoing discussion has demonstrated that places are multifaceted and can be partially understood from a number of perspectives (religio-philosophical, scientific, sociological, psychological) but their 'totality and contextuality' can only be appreciated holistically through the synthesis of these perspectives. Some have tried to tease out the constituent facets of place from which this plurality emerges. For example Lukerman presents six constituent values of place: "location; 'ensemble'
(integration of ‘nature’ and ‘culture’); uniqueness, though within an interconnected framework; localized focusing power; emergence (within an historico-cultural sequence of change); and meaning (to human agents)” (cited in Johnston, Gregory, and Smith 1986 p346). Each of these characteristics has provided a specific focus for place-related studies but it is only when one addresses all of them, and drawing on a range of perspectives for each, that an holistic Sense of Place can be developed. This has obvious implications for ‘place-based’ or ‘place-orientated’ education.

Developing the ‘emplaced imagination’

Places are always and already both implicated in our lives and exceedingly complex whether we are conscious of the fact or not. Furthermore, we are complex beings who have developed phylogenetically (in terms of our species) and ontologically (in terms of our own personal biographies) to function within this complexity in a manner far above mere survival. We all, of necessity, develop a ‘sense of place’ because it is existentially impossible for us not to. Yet, as the Casey quote which opened this chapter reveals, most of Western (and most probably global) society is largely oblivious to these unexamined givens of human existence. Thus, a gap exists between the ‘reality’ and the ‘realisation’ of human-place relations but thankfully one that is largely bridgeable although never completely so (since no human can ever come completely to understand the ultimate mysteries of our place-based existence). Indeed, it is the contention of this thesis that one of the most rewarding and important journeys of discovery, if not the most important, one can undertake is that which leads one to a sophisticated and meaningful understanding of place since with this will emerge a manner of ‘being-in-the-world’ characterised by awe and wonder and ultimate meaning. This is an inherently educational process in the etymological sense of educere, that is a process by which these awesome relations between a person and ‘place’ can be drawn out or uncovered in the Heideggerian sense of aletheia. But this represents a long and arduous process in which the ‘world’ itself – our existential horizon – represents the curriculum in the sense suggested by Pinar’s notion of currere. Fortunately, others are able to support and nurture this journey and it makes sense to talk of teachers or educators as ‘World Priests’.
(see Chapter 1) who are further along this journey of discovery and have the skills to initiate those with whom they work into these wonders of emplaced existence and the true nature of humanity.

Who or what is the 'learner' undergoing this developmental journey? Here the notion of the 'geographical imagination' might provide a starting point. This is considered to be an inbuilt psychosocial capacity through which we develop our 'sense of place'. It has close correspondence with the philosophical notion of 'Worldview' and the psychological notions of the 'cognized environment' which "constitutes the total knowledge of the environment, together with our imaginings of it and thoughts about it" (Holt-Jensen 1999 p121); and the 'phenomic world' i.e. "the world as it exists in the mind as opposed to the external physical and social environment" (Cassidy 1997 p17). Terms such as 'maps of meaning' (Jackson 1992) and 'terrain of belief' (Cobern and Gibson no date) have also been applied to convey similar understandings of human-place transactions.

However, in this thesis, the neologism 'emplaced imagination' is proffered as an alternative which is broadly synonymous with, or inclusive of, the above terms but which is preferred precisely because of this inclusivity and since it is not compromised by association with a particular discipline (as might be the case with 'geographical imagination') and is thus freer to encapsulate the particular arguments being developed in this thesis. Chief amongst these is the need for an integral outlook, and the term 'emplaced imagination' is intended to provide a comprehensive concept which may subsume all other 'adjectival' imaginations (religious, sociological, historical, scientific, ecological, geographical etc.). This theme will be developed further in subsequent chapters and for the time being it is appropriate to continue the discussion using both extant terms such as the "geographical imagination" and the neologism, the former when discussing the existing literature and 'emplaced imagination' when rehearsing themes to be explored subsequently in this thesis.

According to Allen and Massey (1995) the 'geographical imagination' allows us to construct meaning in the world by providing us with an understanding of:
1) Geographical places at a variety of scales from the local to the Global, and how they are interconnected and interdependent

2) our personal and collective 'place' in the World – both in terms of sociological status and identity, and our relationship to nature – through which we construct our sense of 'self' (identity) and 'other' (alterity).

An important theme of this thesis is that the Geographical or, more expansively, 'emplaced imagination' is not static but rather is open to transformation throughout the lifecycle in response to changes in the nature of these transactions. Thus, the 'geographical imagination' is sometimes defined in ideal terms (i.e. in those with a highly developed one) as a "sensitivity towards the significance of 'place' and 'space', 'landscape' and 'nature' in the constitution and conduct of life on earth" (Johnston et al. 2000 p298). Education may be seen to represent a special case of intentional external intervention in this process, and a consideration of its role in the formation and transformation of 'emplaced imagination' represents the rationale for this thesis.

The 'geographical imagination' is constructed through two types of experience (Goodey cited in Wiegand 1992 pp5-6):

1) Direct (first-hand encounters). This refers to the subject's 'lifeworld' and is obviously closely related to their geographical 'place'. Indeed, 'lifeworld' and 'place' might be seen to be mutually circumscribing or defining notions. The lifeworld corresponds with the micro-system and meso-system levels within the multi-system nested hierarchy of settings

2) Vicarious ('second-hand' experience) - in this case the source and/or focus of the imaginative object may exist outside the subject's direct experience (e.g. an activity in their locality to which they are not party, a locality at the other side of the world, a global phenomenon). However, these vicarious environments are also essentially

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10 This social dimension has been described as the Sociological Imagination but the relationship between this and the 'geographical imagination' is so strong that really they need to be considered as inextricable. This is the understanding adopted in this thesis which is why the neologism 'emplaced imagination' is preferred.

11 This might logically be described as the Ecological Imagination but will also be subsumed within the 'emplaced imagination' as understood in this research.
experienced and mediated through the subject's 'lifeworld' (e.g. media reporting, information from an acquaintance, produce in their local shop).

'Imaginative Geographies' refers to 'geographical imagination's concerning 'other' places but could equally refer to geographical imagination concerning the home-locality not based on personal experience. In either case, 'imaginative geographies’ are often social (i.e. shared) imaginations (Driver 1999).

A significant feature of the notion is that are as many 'geographical’ or ‘emplaced imaginations' as there are individuals, and it is appropriate to use the term in the plural to emphasis this diversity. However, it is also true to say that there is likely to be a high degree of commonality between them since they are derived from the same perceived environment, are partially social constructions (Imaginative Geographies) and partly emerge from human attributes that can be similar between individuals (e.g. psychology, ideology, gender, age, status, lifestyle). The above observations point to the significance of direct experience, social construction, phylogenetic propensities and mediation (whether unintentional or, as in the case of education, more overtly intentional) dimensions which are inextricably implicated in the development of a sense of place. This, in turn, can be considered a fundamentally learning process which involves both formal and informal educational dimensions. Consequently, each dimension should become the focus of attention in a ‘place-based’ educational approach.

(Bioregional) Wisdom: the ideal form of Emplaced Imagination

In order to consider which types of experiential and vicarious experiences and social and biophysical encounters will be efficacious in terms of transformative GEE it becomes necessary to have some concept of what kind of ‘sense of place’ is most ideal. This thesis has a self-conscious normative dimension in that it takes the position that a certain category of ‘geographical imaginations’ or ‘emplaced imaginations’ are perceived to be preferable to others, namely those that exhibit what shall be referred to in this thesis as ‘geographical and environmental wisdom’ which is intended to subsume notions such as a ‘global sense of place’, geosophy and geopiety (see below). This preference emerges from the contention that such a sense of place will be:
a) closest to providing an understanding of the complexity of the World and how it works. In terms of educational philosophy this represents a Transcendental Realist justification

b) best able to address our psychological needs i.e. most efficacious for cognitive and affective development and maturation and the achievement of happiness (psychological/humanistic/liberal education justification)

c) most likely to promote knowledge, attitudes, values and behaviours appropriate to both socially critical and liberal/holistic interpretations of Sustainable Development and Global Citizenship to which this research subscribes (utilitarian/transformative education justification).

A number of academics working both within HE and teacher education (Grieg, Pike, and Selby 1987; Healey and Roberts 1996; Jackson 1996; Johnston 1996; Massey 1991; Orr 1992; Selby 2000; Thomashow 1999, 2002) have cogently argued for a new conceptualisation of place which emphasises an awareness of the relationships between places. Such a view has both descriptive and, more significantly, normative implications. It supposedly "avoids the implications of boundedness, homogeneity and exclusion" (Johnston et al. 2000 p583) so much a feature of prevailing understandings of place. Instead it favours a view of a place "which is extroverted, which includes a consciousness of its links with the wider world, which integrates in a positive way the global and the local" (Massey 1991 p244). Massey describes such a perspective as a 'progressive sense of place' (1993a) or a global sense of place (1991). Such a 'Sense of Place' allows one to "retain appreciation, and an understanding of the importance, of the uniqueness, of place while insisting always on that other side of the coin, the necessary interdependence of any place with others" (Massey 1993b p146).

In systemic terms, this interdependence and interconnectedness emerges from the relationships that link places both horizontally and vertically within the 'local-Global nexus', and emerges through the plethora of both socio-economic and natural processes that are so much a feature of the contemporary world. The former are the particular focus of Massey and other critical geographers who are concerned with societal 'structures' but it important to realise that the latter (i.e. biophysical processes) are also significant in
binding places together. Therefore, it is the contention of this thesis that it is only through a combination of these relatively anthropocentric and ecocentric perspectives that a more holistic understanding of places and the 'local-Global' nexus is derived. Fortuitously, the prefix Global can also mean 'holistic', and the term Global Sense of Place as used in this thesis is extended beyond Massey’s somewhat anthropocentric perspective to encompass this sensibility. Thus, the 'emplaced imagination' which is implied by the phrase Global Sense of Place is understood in this thesis to accommodate an appreciation of place, space, nature and landscape in a multidimensional way.

Here Wright’s notion of geosophy (earth wisdom), by which he meant “the study of geographical knowledge from any or all points of view” (Wright 1947)\(^\text{12}\), is helpful. Wright sees human progress, whether societal or personal, in terms of the human imagination being driven by curiosity and wonder to discover an ever more adequate understanding of the world through the transformation of metaphorical terrae incognitae into terrae cognitae. An important insight of Wright is the benefit of complementing a rational perspective with a mythic one. Thus for him geosophy is developed at the intersection of formal geographical knowledge (mapping, surveying, academic studies) with informal, subjective and intersubjective knowledge of place (mythology, personal experience, place in the imagination). Writing from the perspective of an academic geographer he naturally considers the traditional academic ‘core’ of the subject to be a crucial aspect of uncovering ‘terrae incognitae’. However, he is also aware of the value of ‘peripheral’ or ‘informal’ sources of geographical knowing such as are “contained in non-scientific works – in books of travel, in magazines and newspapers, in many a page of fiction and poetry, and on many a canvas” (ibid.). This is an insight that predates the ‘cultural turn’ in geography by decades.

Wright also coined the term geopiety although it has been most significantly developed by Tuan (1976) who uses it to refer to the “special complex of relations between man [sic.] and nature” (p11) in which a reverential and compassionate attachment is developed between a person and their “terrestrial home” (p12). Thus geopiety represents an almost religious form of holistic place attachment characterised by

\(^{12}\text{Available online at http://www.colorado.edu/geography/giw/wright-jk/1947_t1/1947_t1.html (last accessed 17.07.07)\)
an ethic of reciprocity in which ecology, territory and one’s ‘compatriots’ are all important dimensions which are to be loved, nurtured, protected and served selflessly. Whilst onerous in one sense, the rewards are perceived to be a richer and more rewarding mode of ‘being-in-the-world’ characterised by a sense of ‘awe and wonder’ and great meaning and contentment. The notion of who or what constitutes a compatriot is potentially problematic, however. In purely human terms, exclusivist identifications of the legitimate ‘in group’ in terms of ethnicity, religion, ideology etc. would give rise to ‘geographies of exclusion’ (Massey 1995) with the Third Reich providing the greatest caution against a ‘land and blood’ basis for moral reasoning. However, the notion of geopiety as understood here carries with it the implication of an expansive identification characterised by a ‘progressive’ and even ‘global’ (i.e. multiscalar – from local through to global) or cosmopolitan ‘sense of place’ in which a ‘geography of acceptance’ (ibid.) is normative.

Furthermore, Tuan’s attention to the importance of ecology and landscape in the development of geopiety necessarily implies that it transcends merely anthropocentric identifications. Indeed, in certain animist cultures the notion of fellowship is extended to other-than-human-persons (Harvey 2005). This introduces another contentious debate concerning the charge of misanthropy and ‘ecofascism’ levelled against certain Deep Ecologists who are apparently (depending on one’s point of view) ecocentric in the extreme in privileging non-human over human considerations (see e.g. Hay 2002 p45). However, the notion of geopiety as understood here is inherently concerned with human society as much as ecology and territory and is therefore considered to be an important characteristic amongst those committed to working for ecological and social justice.
**Bioregional Wisdom is Learnt!**

It is a major contention of this thesis that ‘geographical and environmental’ or bioregional ‘wisdom’ is intellectually and emotionally demanding and is not an innate characteristic but is rather achieved or developed across the lifespan. Therefore transformative GEE/ESDGC must be informed by insights from developmental psychology and learning theory. The subsequent chapters of this thesis will attempt to further justify and explicate the contours of this task. However, an important theme is that a truly holistic understanding of place requires convergence not only of liberal/holistic and socially critical pedagogies but other more mainstream ones also. The convergent notion of place emerging from philosophy, the social sciences and (more narrowly) ecophilosophy outlined above demands an eclectic and pluralistic approach to the generation of an ‘integral pedagogy of place’ which could accommodate a whole range of perspectives. Such an understanding will, no doubt, generate tension within and between these diverse perspectives but this should be welcomed as a creative process. Most significantly, it should work towards the creation of:

a community of practitioners (teachers, students, managers, researchers and people across the community) in which not every group approaches [geographical and] environmental education in the same way, but where what is done is done well, and where approaches are selected to meet clearly identified goals suited to the social, cultural, political and philosophical contexts in which the education takes place.

(Scott and Oulton 1999 p94)

Such a conception of education holds the greatest promise for engendering ‘bioregional/geographical and environmental wisdom’.

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The desirability, and challenge, of (re)integration

The previous chapters have presented an argument that it is both possible and desirable to accommodate a range of insights and perspectives on place from diverse fields. This chapter is concerned with further justifying these claims. As the title suggests, this chapter will attempt to develop a 'mixed discourse' which is informed by and seeks to permit at least partial rapprochement between, a variety of human approaches to making sense of 'emplaced existence'. The use of the super-ordinate categories of 'science', 'religion', and 'art' to refer to this diversity of human approaches to 'sense making' should alert the reader to the ambitious scope of this exercise which seeks to integrate those apparently antagonistic domains of human knowledge which were allegedly differentiated, in the West at least, during the Renaissance-Enlightenment epoch (Wilber 1997).

According to Wilber (ibid.) the differentiation of human understanding into relatively autonomous 'domains of knowledge' was a beneficial development of Modernity but one which became maladaptive by their complete dissociation with one, namely science, coming to exert dominance over art and religion. This chapter will hopefully point towards the potential for a new phase of collegiality between them. This may be seen as a 'postmodern' project but one that must extend beyond the merely 'deconstructive' variety towards 'reconstructive' kind. Furthermore, this allows a re-evaluation of the pre-modern or 'Traditional' epoch, a period when, according to many scholars, the domains of science, religion and art were not even differentiated. This was a preferable state of affairs in many respects, since people were presented with a coherent worldview, albeit rigid, partial and inadequate in the light of our current understanding. Similarly, it is an approach which invites consideration of Indigenous perspectives, both historical and contemporary. Interestingly for the purposes of the present chapter, Turner (1990) exemplifies the story of the Modern loss of coherence and meaning in terms of
changes in the meaning of the word ‘art’ since the English Renaissance, whilst pointing to a contemporary ‘postmodern’ Renaissance:

The destruction of the old coherence can be traced and epitomised in the etymological collapse and fragmentation of the word “art.” In *The Tempest* it is Prospero’s “art” that makes temporary sense of the airy nothing the world is made of, rendering it into cloud-capped towers and gorgeous palaces, solemn temples, even the great Globe Theatre itself. For Shakespeare “art” means science, philosophical knowledge, technical power, craft, theatrical sleight of hand, liberal education, magic and “art” in our modern meaning, all at once. The moment of *The Tempest* was the last moment of full cultural health and integrity until our own time now. “Art”, the word, was gradually torn to shreds, until in our century art and science, science and technology, philosophy and science, art and philosophy, magic and science, craft and art, education and art, have all been set against each other, like demons bred out of the corpse of the great mother.... [But fortunately] now that great coherence is swiftly returning. Film and science fiction testify to the convergence of science and art ...

(p150)

Thus this chapter humbly attempts to present an argument, and partial framework, for the horizontal (‘science’, ‘religion’ and ‘art’ in the narrow senses utilised today) and ‘vertical’ (Tradition/Premodern; Modern; and Postmodern) integration of ways of thinking about ‘the World’ in the light of the ongoing discussion to arrive at a conception of the ‘art’ (in the broader sense described by Turner) of ‘being human’ in the postmodern world, a capacity that requires the interaction of all domains of human ‘being and knowing’.

**Mixed Discourse**

Drawing on a wide range of disciplines and domains of knowledge from across the ages and civilisations with disparate discourses, languages, Root Metaphors and even worldviews necessarily creates something of a semantic minefield. Indeed, there are
those who would argue that it is neither possible to empathetically enter into another’s discourse nor to attain a ‘God’s Eye View from Nowhere’ and that such a project is doomed to failure. However, the integral perspective is predicated on the possibility of epistemological pluralism certainly at the societal and ideally at the individual levels, and so actively seeks to communicate in interdisciplinary and cross-cultural ways. The difficulty of negotiating these different received vocabularies and semantic territories remains, however. In addition, many so called postmodern philosophers and geographers, particularly those of a post-structuralist disposition, have felt compelled to engage in often ‘tricksterish’ wordplay in order to shake up old ways of seeing the world and to convey new meanings and sensibilities. Critiques find such efforts profligate and obfuscatory but this author deems it to be worthwhile for a number of reasons. Primarily, as Bulkeley (2005) has argued (following Ricoeur) in terms highly appropriate for this thesis, in order to speak a language that permits dialogue and mutual-transformation across disciplines and perspectives one must create a “mixed discourse”:

... a synthetic conceptual language that aims to integrate at a higher order of complexity the specialized terminologies of philosophy, theology, and natural science, with a practical interest in using the new knowledge gained by this discourse to care for suffering individuals and promote a more peaceful social world.

(p50)

Such a ‘mixed discourse’ represents a kind of ‘philosophical kreole’ which borrows words, phrases and grammars from a variety of once discrete discourses, and invents new ones, in order to communicate eloquently in the epistemological territories between thereby opening up space for inter- or trans-disciplinarity (but will necessarily seem strange and possibly incoherent and even pernicious from the perspective of an avowed disciplinist). This goes especially for such an expansive epistemological territory as the field of geographical and environmental studies as advocated here which must find such a ‘mixed discourse’ if there is to be any chance of communication within the discipline, let alone beyond.
The creative and poetic use of language in academic discourse thus becomes legitimate in order to try to convey innovative ideas and insights that transcend the existing language of everyday speech; of any one discourse; and, possibly, on occasions, of formal logic itself. Sometimes it proves desirable to utilise existing terms which can be interpreted in polysemous or polyvalent ways in order to sustain the richness of the ideas to be conveyed. Sometimes existing terms might prove inadequate or too loaded by association with a particular perspective or person (e.g. Heidegger's *Dasein* will not be employed as a key term). It then becomes desirable to create neologisms, as others have done before, which are purposefully designed to convey more precisely the intended meaning with the added benefits of highlighting the originality of the ideas presented and inject something of the joy of the act of creation into the exercise.

For these reasons it has been felt necessary to join in these 'wordgames'. However, and in partial contradiction to points made above, too much 'fuzziness' can lead to misconstrual which is the principal hazard of utilising polyvalent and metaphoric discourse. It then becomes important to delimit the elastic, albeit not boundless, hermeneutic 'frame' within which the 'mixed discourse' can legitimately be interpreted without completely losing the 'plot'. On the other hand it might also be necessary to 'stretch' too narrow a frame of reference/interpretation by at least pointing to some of the 'valences' that are intentionally, but not obviously, implied by a polyvalent term (see for example the polysemous nature of the term 'world' outlined in Chapter 2).

**Critical correspondence**

The phrase 'critical correspondence' used in the title also requires elaboration. Here the term 'correspondence' is used to refer to (and advocate): on the one hand a dialogic engagement or encounter between two or more already well developed perspectives in a spirit of mutual respect and openness; and, on the other, the ambition of moving, through such an encounter, towards a degree of coherence or congruity (although not identity) between perspectives. This should be contrasted with alternative forms of encounter, namely: 'conflict' between dogmatic exclusivist perspectives which show no regard for, if are not openly hostile towards, the other(s) and merely seek to
proselytise their existing standpoint from an imperialistic position of perceived superiority; and 'conversion' in which the previously held perspective is completely rejected in favour of a wholesale adoption of the other perspective in its original and necessarily partial form.

Through the process of 'correspondence' the 'blindspots' of a person's (or culture's) original partial or partisan position become highlighted and problematised and ideally partially addressed by insights from the other perspective(s) thereby permitting each party to develop a 'more adequate' standpoint of their own. All participants of genuine correspondence are transformed and able to shift towards a greater appreciation of each other and occupy a conceptual ground that is shared, mutually informed although never identical. Through 'correspondence' mutual learning takes place, in a situation of 'conflict' or 'conversion' it cannot. Such a position not merely tolerates pluralism, it actually depends on it since cultural diversity is a prerequisite of intercultural correspondence. Thus, as an aside, whilst religiophilosophical allegiance might be an accident of geography, religiophilosophical pluralism could also be seen as a purpose (or at least felix culpa) of geography in terms of the regional and global diversity of cultural worldviews.

The prefix 'critical' is used in two senses. Firstly, to refer to the need to apply 'critical thinking' (Lipman 2003) which refers to the application of sound reasoning to a problem, issue or theme and critically considering all the possible factors and outcomes to allow one to apply sound judgement (in the case of problem solving and issue resolution) and/or establish a convincing argument, counterargument or rebuttal regarding it. It is important to note that the application of critical thinking should not be one way but rather iterative and reflexive. Thus, a 'correspondent' must take a critical stance towards that of their 'interlocutor' but also (and perhaps more importantly) must, in the light of new insight gained through dialogue, reconsider, that is 'critically reflect' upon, their own perspective. Secondly, the term 'critical' is intended to convey both the necessity of this kind of 'encounter' in the contemporary world given the constellation of issues facing us; and the passionate belief that only a position informed by multiple perspectives will be adequate to the tasks ahead.
Cartography or topographic survey provide a suitable metaphor (and, given the discussion of the relationship between cognition and the spatio-temporal nature of human existence in Chapter 4, perhaps even figurative ‘explanation’) for this process. Thus, a scholar needs to undertake a ‘survey’/exploration of the ‘field’ in order both to develop a familiarity with the landscape that enables them to negotiate it expertly (their ‘synoptic capacity’) and to create ‘maps’ (a communicable outcome) to enable others to negotiate the territory as they see it. These might take the form of ‘routeplans’ (‘lines’ of argument) or ‘synoptic maps’ which connect through ‘nodes’ or ‘orienting generalizations’ or ‘sturdy conclusions’ (Crittenden 1997), a number of these ‘chains’ together forming networks of interlocking conclusions giving rise to a coherent conceptual system. Taking the metaphor further, epistemological cartographers in the pre-modern/Traditional period attempted to create holistic ‘maps of everything’ but based on conceptual schemas that were severely limited in some respects regarding the material world, and parochial in terms of intercultural dialogue giving rise to speculative and substantially erroneous schemas analogous to (and the basis of) Medieval Mappae Mundi. Whilst geographically naïve, these can, in hindsight, be seen to convey significant messages about the human condition given their cosmological, spiritual and didactic functions (Edson 1997; Edson and Savage-Smith 2004; Kline 2001).

During the Age of Discovery, Renaissance, and Enlightenment periods ‘map makers’ were able to correct many of the errors of the previous epoch with the findings of scientific method applied to existing knowledge and new discoveries (geographical and material). However, the focus shifted towards maps exploring a single theme/perspective or at a single scale (specialization) and the subjective dimension was largely superseded by considerations of the objective and material realm. Postmodernism’s value has been in expanding the territory and potential scope of explorations and has given rise to an explosion of the potential directions for undertaking ‘transects’ into objective, subjective and/or interpersonal/cultural themes. Of course, a postmodernism of deconstruction would wish to deny the possibility of creating any kind of overall synoptic map (or ‘metanarrative’) that draws all of these ‘surveys’ together, preferring to rest with, and
celebrate, the diversity of ‘mappings’ possible. A postmodernism of reconstruction, in contrast, offers the possibility of connecting these routes together into a more coherent whole whilst acknowledging that this will represent a continual process as ever more material is ‘uncovered’ (archaeological/geological metaphor) or ‘discovered’ (exploration metaphor) permitting an ever more adequate map, or better, a Multidimensional Geographical Information System database, to be incrementally built up. Midgley, also using the cartographic metaphor, adequately describes the ambition of such a perspective which is commensurate with that of this thesis:

What is needed is that all should have in their minds a general background map of the whole range of knowledge as a context for their own speciality, and should integrate this wider vision with their practical and emotional attitude to life. They should be able to place their own small area on the map of the world, and to move outside it freely when they need to … Details make much better sense when they have a context, and what makes sense is far easier to remember. For the point is not just that different specialities need to be related to each other. It is that they all need to be related to everyday thinking, and made responsible to it. They must even acknowledge their own emotional aspect.

(Midgley 1991 pp8-9)

Critical Agnosticism

Much of what follows involves speculating upon the ultimate nature of reality, in other words metaphysics, since this represents the chthonic foundation of any attempt at a postmodernism of reconstruction. A crucial qualification must be made at the outset. What follows should be seen as being tempered by a position that must always remain essentially ‘critically agnostic’ on matters metaphysical and theological because a perspective claiming ‘certainty’ regarding Ultimate Reality is both impossible and undesirable. It is impossible because the universe is essentially ambiguous (Hick 1989) and the nature of ‘Ultimate Reality’ must (and should) always remain a mystery. It is undesirable because certainty closes the mind and leads to dogmatism and hubris whereas mystery keeps it open, nimble and humble. ‘Critical agnosticism’ therefore should be
seen as the application of critical thinking (but not this alone) to matters of ‘ultimate concern’ or the ‘mystery of existence’ with the expectation that arriving at a position of concrete certainty is an impossibility but that one may approach an ever-more adequate and personally satisfying conception of ‘the meaning of life’. This is understood to be a particular insight held throughout history by the wisest people whose wisdom is centred in their humility and lack of certainty and their capacity to tolerate ambiguity rather than dogmatic certainty.

Critical agnosticism should be seen in contrast with, and as a challenge to, ‘naïve agnosticism’ and ‘fundamentalism’. With the former, one simply does not even start the process of engaging with issues of ‘ultimacy’ or mystery, preferring to remain on the comforting surface of things. The great danger with this position is that the universal human impulse to search for meaning is diverted into consumptive materialism and/or egocentric hedonism both of which are, ultimately, both personally unsatisfying and environmentally and socially destructive. Fundamentalism, on the other hand, represents a situation where the desire for certainty with regard to ultimate concerns arrests the enquiry at a position of exclusivist dogmatism whether this be of a religious or atheistic-scientific nature. A fundamentalist position almost by definition precludes critical reflection and critical correspondence and leaves one arrested in a monolithic and unidimensional worldview that all too often is supported by pre-rational and irrational intellectual supports or, at best, rigid, monolithic and habituated thinking schemas that at least do have an internal rationality but are deeply ingrained and therefore difficult to transform to make ‘more adequate’.

Although the argument being developed is one that advocates pluralism, it is important to stress that this is not one advocating extreme relativism. It is the contention of this thesis that certain perspectives offer a more adequate description of the mysterious and awesome nature of things and, as importantly, offer some advice and support as to how to navigate through the ‘world’ in the dual sense intended throughout this thesis: both matters ‘down-to-earth’ and one’s lifespan or creaturely existence as part of the multidimensional, multiscalar, beautiful and ordered system (kosmos or mundus). In

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13 the term ‘fundamentalist’ is often associated with the former but seldom with the latter but the charge can be equally levelled at both.
terms of the developmental framework to be developed particularly in Chapter 5. na\(\text{i}ve\) agnosticism and fundamentalism should be seen as occupying positions at the lower epistemological levels either pre-rational or irrational or ‘formally rational’ (i.e. application of reasoning of an ‘either/or’ nature). Whilst developmentally appropriate in their turn, they are ultimately inadequate for mature ‘being-in-the-world’. Instead, one needs to operate at ‘post-formal’ levels of cognition allowing the application of dialectical reasoning. Further, it may even be possible to develop the capacity for surrational (by which is meant ‘intuitive’) and/or transrational knowing. Thus, this thesis aims to champion an expansive view of education that is lifelong and necessarily involves an engagement with ‘ultimate concerns’ (which are both personal and collective) and the mystery of existence but in a manner that does not close down the scope of, nor prematurely (or indeed ever) conclude, the enquiry. Such a perspective could be described as a ‘religiously liberal existential’ one. Ideally the content for this enquiry is ‘everything’ – the ‘world’ (in the sense of multiplicity); and the timescale if the whole lifespan – ‘we(o)rld’ (Old English). This enquiry will engender epistemological development through iterations between ‘reasoning about’ and ‘caring for’ – both accommodated by the term ‘minding’ (hence the title of this thesis) – this content, with the higher reaches of this development process being encapsulated by the terms wisdom generally and ‘geographical and environmental wisdom’ specifically. It will be an enquiry that delves ever deeper into mystery and learns to rest in the wonder and awe that typically arises before moving ever onward and pushing further the ‘horizons of concern’.

Whilst this implies an individualistic and subjective process of development and transformation, the important corollary of this is understood to be an ever-increasing attention to appropriate action in the world in terms of ever more responsible social and environmental behaviour. Furthermore, the process of epistemological and moral development cannot be seen as an intellectual and individualistic enquiry alone. Rather it is understood to be collective and distributive in nature with ideas and exemplar behaviour of others whether encountered directly through dialogue and personal experience or vicariously through artefacts (such as literature, art, documentary media) providing the essential stimuli for personal transformative experiences. Such a perspective, which, it is argued, is to be found in \textit{any and all} religio-philosophical
traditions (but by no means in equal measure within their respective subtraditions) is characterised by a postformal and dialectical rationality and even trans-rational epistemology.

**Currere, Bildung and the fuzzy nature of the inner and outer ‘worlds’**

Such a project has radical implications in terms of developing an appropriate ‘curriculum’ (broadly defined). Pinar’s (1976) notion of ‘currere’ is particularly helpful here. He uses the etymological (Latin) root of the term ‘curriculum’ – *currere* (Latin *to run*) – to shift the perspective in terms of curriculum planning away from objectives to the subjective ‘life course’, that is the ‘learning during and through the path one follows in life’. This has some overlap with the Northern European notion of *Bildung*. Nordenbo (2003) explains that *Bildung* is derived from the German term for ‘image’ (*Bild*) and refers to “an image – or model – of which somebody or something is to become an image or model” (p25 [emphasis in original]). This is interpreted here to indicate a transactional process by which a person’s ‘inner form’ or ‘inner-world’ comes into harmonious accord with the context or ‘outer-world’ within which they are situated or ‘emplaced’ (the epistemological reasoning behind such a perspective is developed in Chapter 4).

The syntax of Nordenbo’s description can be taken to imply an iterative and transactional relationship between ‘inner’ and ‘outer’ worlds/forms in which both exhibit *both* an active or assertive and *passive* role in the process. In the case of an individual’s ‘inner world’ it is passive in the sense that it is ‘summoned’ – *Aufforderung* (Uljens 2003) – by the context to undergo development or transformation; whereas it is assertive in that it actively explores – *Bildamskeit* (*ibid.*) – the context and thereby ‘brings forth’ or constructs a model, image or vision of this ‘outer world’ adequate for their existential requirements. Equally the context might be passive in that it is shaped by the activities of the agent(s) within it (that is, the form it takes is both materially and semantically shaped by them); whereas it is active in the sense of setting constraints and presenting affordances which set the parameters of what can and cannot be ‘permitted’ either materially or semantically therein. An important point is that the adjectives ‘inner’ and
‘outer’ are not meant to only be interpreted literally in spatial terms in relation to a person’s embodiment (metaphorically ‘inside the brain’ and physically ‘outside’ the body) but will be used in two different senses. First is the everyday sense of the ‘inner world’ in contradistinction to the ‘outer world’ of (apparently) objective external reality. The former is most obviously experienced as subjective phenomenological experience of the individual ‘from within’, but should also be considered as existing at a collective or distributive level of culture or the socially constructed nature of reality. Second is the distinction between the inner ‘subject’ or ‘figure’ in the sense of the focus of attention – in contradistinction to the ‘outer’ or context or ‘ground’ from which it is ultimately derived or ‘brought forth’. The difference between these two categories are those aspects of the context (or indeed reality) that are not ‘re-cognised’.

**Commonalities between Science, Religion and Art 1. Common and Divergent Goals**

An implication of the adoption of a ‘critical agnosticism’ is that a dogmatic adherence to a ‘reductionist-physicalist’ ontology must come under scrutiny. This is a thorny issue since the alternative apparently involves the positing of transmaterial levels of existence and there are those who would reject this thesis out of hand for its apparently ‘supernatural’ musings. However, in the spirit of ‘critical agnosticism’, one should at least entertain the possibility of a phenomenon in order to critically engage with it. The latter part of this chapter will explore such a contentious metaphysic and some of its corollaries, namely one that posits a multidimensional reality which exhibits a stratified ontology. It is hoped that this will provide an adequate framework for a rapprochement between science, religion and art.

Prior to this, however, it is possible to formulate a relatively uncontentious position that sees a significant degree of commonality between art, science and religion whilst also explicating their particular foci and contributions to knowledge acquisition. Stent (2001) suggests that science and art have in common the need to discover ‘truth’ in the world, and then to communicate this (or these) truths about the world semantically. The difference, however, lies in the particular domain of reality which they explore; the particular kind of truth they are attempting to establish; and the particular type of medium
used as a vehicle for this communication. Thus, echoing the previous discussion, science is directed towards exploring the outer, material domain whilst art (and it may be argued also religion in some of its important dimensions) is concerned with exploring the inner, subjective domain.

Despite this fundamental difference in their principal foci of interest, traditional art and science form a thematic continuum ... the transmission of information and the perception of its meaning constitute their very essence ... Nevertheless, concerning the communication of truth, there is an important difference between art and science: works of science communicate their truths explicitly in spoken language, whereas the truths of works of art are communicated in linguistic, tonal, and visual structures.

(ibid. pp32-3 [emphasis in original])

Stent, following Meyer, then goes on to make a further distinction between the kind of novel ‘truth’ each attempts to discover and communicate about the world. Thus science is concerned principally with propositional truth (stating facts and proposing reliable models) whereas art (and, it can be argued, religion) is concerned with presentational truths which conveys meanings and emotions. He then goes on to discuss a ‘structural-realist’ account of truth (in contrast to either a naïve realist or idealist one) which is largely in agreement with the notion of Bildung developed above. Here the crucial truth criterion is that it commands (personal) assent:

A propositional truth is true (for me) insofar as it is in harmony with my internalized picture of the world (i.e. my reality) and commands my assent. This literal meaning of truth is obviously not an objective one, but a subjective one ... When viewed from the standpoint of structuralism, the concept of truth, as applied to scientific propositions, amounts to harmony with my internalized picture of the world, that is my reality, and hence commands my assent. Since great works of art similarly harmonize with reality and command assent, this concept of truth would apply to their contents as well.

(ibid. p42)
Of course, concepts such as ‘distributive cognition’, ‘social construction’, ‘weltanschauung’ (collective worldview), ‘zeitgeist’ (Spirit of the Age), and ‘paradigm’ suggest that this ‘personal’ assent is often significantly shaped by wider societal and cultural forces. Finally, Stent presents a schema which reveals a continuum rather than distinction between science and art (Table 3.1):

<table>
<thead>
<tr>
<th>Domain</th>
<th>Modality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner World</td>
<td>Music</td>
</tr>
<tr>
<td>Poetry</td>
<td>Dance</td>
</tr>
<tr>
<td>Dance</td>
<td>Painting</td>
</tr>
<tr>
<td>Painting</td>
<td>Sculpture</td>
</tr>
<tr>
<td>Sculpture</td>
<td>Drama</td>
</tr>
<tr>
<td>Drama</td>
<td>Literature</td>
</tr>
<tr>
<td>Outer world</td>
<td>Science</td>
</tr>
<tr>
<td></td>
<td>Linguistic</td>
</tr>
</tbody>
</table>

Table 3.1: The continuum of art and science (reproduced from ibid. p39)

With regard to the distinction made between the communicative preferences of science and art (linguistic and non-linguistic respectively), Smith (1992) appears to take issue with Stent (although specifically discussing the contrasts between science and religion, his point regarding the latter is equally applicable to art and the humanities). Thus, for Smith science communicates in number and signs (non-linguistic) which permit unambiguousness and precision whereas religion (and presumably the arts and humanities also) communicate in words and symbols which are inherently ambiguous and polyvalent and therefore much better able to “mesh with the multidimensionality of the human spirit, depicting its highest reaches as numbers never can” (p13). Perhaps these apparently divergent perspectives as to which adopts the specifically linguistic characteristics – science or art/religion – can be resolved if one accepts that both communicate through words (as well as through other ‘languages’) but within different genres. Thus, science typically employs descriptive, technical and unambiguous prose, whereas art and religion are relatively more likely to engage in the use of evocative poetry, myth (in a non-pejorative sense) and metaphor. Perhaps an additional column could be added to Stent’s typology with degree of precision increasing as one descends form the inner/artistic to the outer/scientific ends of the spectrum. Of course, even this
distinction breaks down in the works of the great ‘artist-scientists’ who can communicate something of the wonder of the world they investigate only through recourse to ‘artistic’ expression either through expressive writing and ‘poetry’ or, where words become inadequate, through the elegant language of high mathematics and/or geometric symbology.

Another line of argument is presented by Cech (2001). For him both science and art exhibit non-linear progress (that is, they proceed in an interrupted or punctuated fashion with periods of preparation followed by burst of creativity) and that they share the same goal of ‘shifting perspective’. However, their differences lie in their respective intentions: for scientists “… their intent is to arrive at the same place, to achieve the same endpoint” (p15) (i.e. commonality); whereas “…artists are not striving for commonality, but rather, that the content as well as the form of their work is unique” (p15) (i.e. uniqueness/distinctiveness). However, he goes further to demonstrate that this distinction is not always clear cut since scientists quite often come up with different interpretations of the same material/data. The existence of ‘schools of art’ and the very fact that art can ‘speak’ to its audience suggests that commonality is also apparent within the artistic endeavour.

With regards the parallels between science and religion greater difficulties arise giving the thorny issue alluded to above, namely the potentially unbridgeable disagreement on matters metaphysical (materialist versus ‘non-/extra-material’ realities respectively). As a consequence of this divergence, some authors stress the differences between science (and its supposed corollary: ‘Modernity’) and religion/Tradition. Thus Smith (1992) provides distinctions that permit the construction of Table 3.2.
Table 3.2: Differences between science and religion (adapted and extended from Smith 1992)

However, this extension of Smith’s typology provides only a dichotomous caricature of the respective scientific and religious perspectives and there are many scientists who are seeking to bridge his Modern-Tradition divide either because they themselves straddle the science-religion divide (in the case of scientists who also profess, or acknowledge the validity of possessing, a faith) or adopt a ‘critically agnostic’ position on matters metaphysical (sometimes because their scientific investigations have lead them ever deeper into the mystery of existence). We will return to the possible parallels between religion and science based on metaphysical grounds below but it is still possible to recognise some parallels even with this issue left to one side. Thus, some authors have identified parallels in terms of methodological similarities. Wilber (1998) suggests that both domains rely on empirical investigation and theoretical conceptualisation on the part of the practitioner (scientist on the one hand; religionist/adept on the other) which requires intersubjective agreement with colleagues working within the same intellectual milieu (scientific paradigm or Tradition respectively).
Less problematic apparently are parallels between religion and art. Coleman (1998) has provided an extensive study of this issue and, at the risk of brevity, has identified some key correspondences (some of which may also be seen as accommodating science at least in some formulations as well). Thus, he suggests that art and religion (or more expansively the aesthetic and the spiritual) share the following common denominators (paraphrased):

- Find positive value to be omnipresent i.e. in all creaturely things
- Engage in a quest for union, unity or oneness. This can be expressed in three senses:
  - Unification of the self i.e. self-integration
  - Union found within the object of attention
  - Union of relationship – "intimacy in which subject-object distinctions diminish or disappear ... [resulting in] communion, fusion, [or] identification" (pxviii)
- Applied practices directed after the achievement of harmony
- Yearning to return to 'the condition of the child' (childlike not childish).

In the light of the foregoing discussion, it should be possible to recognise some reasonably uncontentious and supportable common ground between all three approaches. Firstly, art, religion and science are all 'meaning-making systems' (poietics might be a suitable descriptor of them all) regarding 'being-in-the-world', with each presenting an 'imago mundi' (hence the relevance of all three to this thesis). Science's apparent focus on 'objective facts' belies the fact that this is driven by the very human existential desire to comprehend reality. Consequently all three are equally engaged in a common (but not identical) quest to know truth. Distinctions exist in terms of the type of truth sought, with science concerned with finding the (propositional) 'external' truth in order to achieve 'comprehension' which is consensual. Religion & Art, on the other hand, aim to know the 'inner' or 'performative' truth that lies behind this 'external' manifestation i.e. meaning in order to 'know' in the experiential (or Biblical) sense: Religion in order to enter into deep communion with it; art to be able to 'express' or 'communicate' it through an 'artistic' medium of expression (music, poetry, architecture etc.) Secondly, the
starting point for this investigation after truth is the same existential context for all three. namely the *world* here using the term in its semantically ambiguous sense to mean both external reality (the material, ecological and cultural context within which I am situated) and *we(o)rld* – existential reality (*my subjective life* between birth and death or, in the case of science – between Big Bang and, depending on one’s perspective, Big Crunch/Freeze). Thirdly, all three are ‘communicative systems’ that is, they attempt to express their ‘findings’ (which could equally be ‘feelings’). The drive for this expression might be satisfied through purely private expression but most often it is intended to be interpersonal, art through its works of art; religion through its doctrines, liturgy, rituals, and religious art, etc.; and science through scientific theories, presentations and papers etc. And fourthly all three, it can be argued, are relation-seeking systems, i.e. attempts to find answers to the great existential questions regarding the place of oneself and humankind in the broader scheme of things and, in the light of this, the appropriate ways to relate to the broader whole for the ‘Greater Good’. Religion is most clearly engaged in this endeavour as is reflected etymologically in its name: the Latin *re-ligare* meaning to (re-)connect, (re-)articulate (in both senses), and *relate* to Ultimate Reality. However, science and art, I would argue, also, at a fundamental level, are equally driven by this desire for existential relatedness. Finally, in their highest expressions, all three are capable of driving one towards the epistemological level of ‘wisdom’ and a capacity to perceive what is truly significant.

All three employ the ‘creative imagination’ and ‘wit’ to their chosen field. This permits them to ‘see’ things anew, from new ‘perspectives’ from which new phenomena and new relationships are ‘brought forth’. This permits the breaking down of sedimented habits of mind allowing the creative construction of new solutions and new ‘visions’ to problems, particularly the intransigent existential ones. This shift in perspective is also often associated with experiences of ‘awe and wonder’ – a realisation that the new reality is actually a portent of ever greater mysteries that is ever more wonderful and miraculous (in the etymological and non-supernatural sense of ‘something to wonder at’). This paradoxically elicits feelings of both great humility and gratitude *and* of great importance as a ‘seer’ of, and participant in, and even possibly a co-creator of (in a limited ‘enactivist’ sense), these wonders. This gives one the ability to not just tolerate but to
also celebrate the ambiguous nature of reality and feel at home with it and enjoy (or ‘enjoy’ — surround with joy) it. Taken together these ‘epistemological shifts’ represent ‘wise being-in-the-world’ which is associated with the desire to contribute to the ‘Greater Good’ (rather than the merely egocentric good).

The specific choice of terms highlighted in the above account is deliberate since many are etymologically related. Thus the term Vedic is used to refer to pre-Brahmaic religious period in India after the ‘Vedas’, the holy scripts of this period. The word Veda actually “referred in ancient India to a special mode of seeing beyond the surface, a vision that not only allowed the seer to comprehend things as they truly are or should be, but also to contemplate or reflect on their deeper meaning and thereby truly to know them” (Mahony 1998 p4). The word veda, according to philologists, is derived from the Proto-IndoEuropean word root weid which means ‘to see’ and from which we derive the English words: wise, wisdom, wit, view, vision, idea (ibid.) which are all recurring notions in this thesis.

**Commonalities between Science, Religion and Art 2. Synchronistic perspective**

Another way in which art, science and religion can be seen to be related is the fact that there is often a close correspondence to be made between the art, science (in the broad sense) and religion of a particular civilisation, and that this relationship is even further reinforced if one takes a historical perspective. This is perhaps unsurprising given the parallels identified in the previous section. Thus, Coleman (1998) suggests that the quality and depth of art and religion undergoes periodic iterative cycles, sometimes mutually enhancing, sometimes degenerating in unison. Far from being mutually antagonistic, art, science and religion are all shaped by, and more importantly shapers of, the worldview or zeitgeist of a particular period. Thus, for example, Gamwell (2002) provides a useful historical analysis of the effect of scientific innovation upon art and considerations of matters of spirituality from the Romantic period to the present in Europe and the West (sometimes the relationship has been antagonistic and sometimes mutually supportive, but the encounter has always been there).
Commonalities between Science, Religion and Art 3: A deeper potential 'ground' for commonality? The Spiritual Dimension and Esotericism

Despite the qualification that what follows must ultimately be set within a 'critical agnostic' perspective on matters of ultimate concern, this thesis at least entertains the possibility of a non-reductionist physicalist metaphysics. This is an important strategy since it permits a deeper rapprochement between the various modes of human understanding which represents one of the goals of this chapter. Actually, it is more honest to admit that this is the position towards which this thesis leans or leads. Consequently, this thesis may be seen as taking an 'anti-modern' position where modernity is understood to be ‘… an outlook in which this world, this ontological plane [physical-material], is the only one that is genuinely countenanced and affirmed … [giving rise to] a one-story [sic.] universe” (Smith 1992 p6). This should not be seen as a rejection of ‘scientific materialism’ but rather the positing of an order or dimension of reality beyond or transcending the material-physical and which provides its very ground and summon bonum. Smith (ibid.), amongst others, presents a cogent argument for a multidimensional view of reality in which the physical and material is merely one dimension, a recurring theme in the ‘transpersonal’ literature. A brief overview of his Traditionalist perspective (Smith is an advocate of pre-Modern metaphysics) serves to demonstrate an alternative to scientific-materialism.

Smith (after Guénon) uses the image of a six-armed, three-dimensional cross to explicate this view. This comprises a horizontal cross interconnected with a vertical one to form a shape akin to the objects used in the children’s throwing game ‘Jacks’ (see Figure 3.1). A detailed description of the complex ontological symbolism implied by this geometric shape is beyond the scope of the present work but its salient features are as follows. The horizontal cross is used to represent the materio-physical realm with each arm representing and graduating or ‘measuring out’ of time and space (past, present future; and micro-, meso-, macro-scale respectively). This is a dimension which is characterised by ‘quantity’ (units of time, size, distance and space-time etc.) and is the realm explored by science as understood in the West. The vertical ‘axis mundi’, however, represents an ‘extra-spatiotemporal’ ontological dimension graduated into ‘levels of
reality' based on the ineffable criterion of 'Being'. Thus, the greater the degree of saturation with 'being', the more 'reality' an entity is said to possess. This dimension is not quantifiable in the scientific sense but relates to the existential categories of value, purpose, life meanings, and quality (precisely those categories upon which, according to Smith, science must remain silent). For want of a better term, this dimension is what is understood by the term 'spiritual'.

Figure 3.1: The Six Dimensional Cross (adapted from Smith 1992)

The most basic division on this scale is a dichotomy, with a higher order of reality – Ultimate Reality – being seen to lie beyond and/or provide the ground of, the sensible world which is seen as contingent, limited and pen-ultimate. Hua-yen Buddhism (see below) makes the distinction between lokadhattu – the world of manifestation and humanly existence – and dharmadhattu – its ground. This may be related to Bohm’s (1981) distinction between explicate order and the 'implicate order'. The Kantian distinction between the phenomenal realm and the noumenal or 'Ein-Sich' may also (with some qualification) be seen as another example of this dichotomy. As a final and important example, Eliade (1959) makes the distinction between the 'profane' and 'sacred' (das Heilige). Understanding this dichotomy should provide an important corrective to the belief that many religious traditions are necessarily 'world denying'.
Thus, if it is understood that the ‘world’ that is being disparaged as being illusory, spiritually unpure or a ‘trap’ is the contingent material world devoid of any sense of this higher reality, then a highly ‘world affirming’ change in perspective is called for in which this penultimate reality gains trans-signification (McGrath 2003) as symbolic of or indeed always and already implicated in and permeated by, a higher reality. What is being warned against is the ‘penultimate world’ or ‘relative reality’ which is considered illusory or untrue in the sense of not being ultimate, and perilous in the sense of being a distraction from the real work of identifying its ‘higher ground’ or the ‘Ultimately Real’. What the adept is being directed to is the ‘Real World’ – the manifest world or relative reality perceived as a manifestation or realisation of this higher ‘sacred’ or ‘divine’ reality. Such a tradition would be ‘penultimate/relatively-real world denying’ whilst being ‘Real World affirming’. Such a sentiment is encapsulated in the Zen/Ch’an Buddhist verse regarding three levels of enlightenment:

Before I studied the Way [Dao], mountains were mountains, and rivers were rivers.
After I'd practiced the Way for a few years, suddenly mountains were no longer mountains, and rivers no longer rivers.
But now that I've practised the Way for many, many years, mountains are again mountains, and rivers are rivers

(attributed to Zen Master Seigen [trans. Anon.])

Here the first line refers to the perception of the contingent world solely; the second line to the realisation that there is a higher (or deeper) reality that underpins this contingent world (and its corollary that the contingent world is therefore somehow false or rather only ‘relatively real’); the final line refers to the realisation that the contingent world has a real existence but that this is a consequence of the higher reality; expressed another way, that the ‘contingent’ and ‘Real’ worlds are interpenetrated and identical (or, at the very least, relate) in an important and ontological sense.

Such a perspective has two significant implications. First, there is a realm beyond the sensible that is more real than that which we perceive. The foregoing discussion has
intimated several possible terms for this (Ultimate Reality, Dao, Brahman, God, the Real etc.) but for want of a better term, the term ‘spiritual’ is employed here. Secondly, (although not necessarily a given that follows from the first premise) many religious traditions teach that humans (possibly uniquely in creation) are able to transcend the gap between these dimensions of reality and (re)connect – religare – them. This would amount to a spiritual role and/or practice. According to Hay and Nye (1998) humans do have a natural (i.e. phylogenetic) sensitivity, and propensity to relate, to this spiritual dimension. They refer to this capacity as ‘relational consciousness’ and characterise it as in Table 3.3.

| Awareness sensing | here-and-now | focusing on the present situation (point-mode; ‘sacrament of the present moment’)
|---|---|---|
| tuning | participating in an immediate simultaneous [shared] stream of consciousness
| flow | action & awareness merged self-transcendence
| focusing | using the senses/embodiment to focus on something in order to know it
| Mystery sensing | wonder and awe | not needing an explanation for the wonders / the state of the world; an aweful acceptance of the mystery of existence
| [active] imagination | using imagination to explore possible situations within existence (metaphors; symbols; narratives)
| Value sensing | delight and despair | Emotional feeling as a way of knowing [Emotional Intelligence?]
| Ultimate Goodness | “Trust in Being”
| meaning | the search for meaning in a particular situation

Table 3.3 Relational Consciousness (adapted from ibid.)

These authors suggest that children are naturally attuned to this realm but that the capacity has to be nurtured in older age groups. In a similar vein, Emmons (2003) discusses ‘Spiritual Intelligence’ (SI), presenting five key components in his formulation:
1. The capacity to transcend the physical and material
2. The ability to experience heightened states of consciousness
3. The ability to sanctify everyday experience
4. The ability to utilize spiritual resources to solve problems
5. The capacity to be virtuous.

Once again, this is seen to be a potentially universal human capacity but, as the use of the term intelligence suggests, this needs to be nurtured and developed (i.e. is a feature of higher order, that is postformal and transpersonal, modes of ‘being-and-knowing’). Specifically, Emmons (pp166-167) mentions the capacities of showing forgiveness, expressing gratitude, being humble, displaying compassion, wisdom and self-control. These two understandings of the spiritual dimension of human being – relational consciousness and SI – are largely commensurate with the understanding being advocated in this thesis.

More sophisticated gradations of reality have been posited in many of the world’s religious systems than just two (sacred and profane; immanent and transcendent). Smith (1992) presents a simplified typology which he considers reasonably indicative of the ‘human unanimity’ – the almost universal worldview held across the Globe for the vast majority of human civilisation (the implication being that the ‘modern’ outlook is a relatively recent aberration). This schema comprises four levels which are symbolically arranged in concentric circles, with lower levels being encompassed by higher ones. Smith is, however, at pains to point out that this relationship is not spatial in a literal sense:

1. Terrestrial/gross/material/sensible/corporeal/phenomenal/[everyday] ‘human’ Plane
2. Intermediate/subtle/animic/psychic Plane
3. Celestial Plane
4. The Infinite.

This scale is in fact a hierarchy – the Traditional ‘Great Chain of Being’ – with the apex representing Ultimate Reality or what Hick (1989) terms ‘the Real’ however this be conceived (i.e. in theistic or atheistic/non-theistic terms). Sensitive to the postmodern
distaste for all things hierarchical, Smith (op. cit.) points out that social hierarchies are not equivalent to ontological ones. He also points out that some asymmetrical power relations are benign and nurturing as in the case of the parent-child or teacher-pupil relationships (providing they are open to modification towards ever greater degrees of power-symmetry). Furthermore, etymologically, the term literally means a system of order that is sacred or divinely ordained (Greek hieros – sacred, and archein – to rule), which need not necessarily imply rigid, top-down structure associated with everyday meaning. Thus, it could legitimately apply to other, more fluid, dynamic and egalitarian nested structures such as are favoured in this thesis. Still, Wilber (1997) prefers to use Koestler’s notion of holarchy to discuss the metaphysical insight that all of existence is ultimately interconnected and mutually implicated. Thus, the Great Holarchy of Being is considered to be a preferable way of conceiving this scheme since it reduces the dangers of anthropocentrification and is more in keeping with some preferred metaphysical systems of this thesis. Similarly, Gunderson, Holling and colleagues (2002) have coined the term Panarchy as an alternative term for the nested hierarchy of systems under their consideration since this also avoids the negative connotations associated with the everyday meaning of the term. Holarchy, Panarchy and other metaphysical schemes that are not hierarchical in the narrow everyday sense are explored further in Chapter 6.

The Traditional doctrine of the ‘isomorphism of human being and the cosmos’ (As Above, So Below) teaches that each ontological plane is seen to have a correspondence within the human personality which is provided as an explanation for the ability of humans to ‘cross the transcendent divide’. Indeed, Smoley (2002 pp68-69) discusses separately the ‘six-armed’ cross model in purely human terms, with the vertical axis representing the ‘inner dimension’ of subjectivity, consciousness and interiority. Thus it is possible to conceive of the central axis of the model to provide a scheme which allows a correspondence between extrahuman or transpersonal reality (the Great

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14 Although it must be recognized that, all too often, the circular argument that the prevailing order must be divinely sanctioned otherwise it couldn’t be in power provided the justification for requiring ‘subjects’ to accept without question their status within existing rigid oligarchic hegemonies, a situation which privileged a few and exploited the many such as prevailed in Medieval Europe and even prevails through to today in some quarters. This represents one of the great ‘fallacies’ of many ‘Premodern’ worldviews and, in the West at least, society had to await the humanistic turn associated with the Renaissance for the falsehood to be questioned, one of the great achievements of Modernity.
Holarchy of Being depicted by Smith’s ‘cross’) and the interior dimension of human consciousness (Smoley’s cross).

1. Body [ Terrestrial]
2. Mind [ Intermediate]
3. Soul [ Celestial]
4. Spirit [ Infinite]

Thus, by ‘going into oneself’ one may gain knowledge of higher realities and levels of being. This is the central tenet of all esoteric Traditions within the world’s faiths – etymologically the Greek term esoterico means ‘further in’.

Esotericism teaches that this world within us is as rich and diverse as the outer world and consists of many different levels of being. Furthermore, that these levels exist in a more or less objective way: those familiar with them can discuss them intelligibly with each other and will find that their experiences are essentially similar, much as everyone will say a ball is round.

(ibid. p2)

Smoley goes further to make the connection, but also distinction, between esotericism and mysticism (again, using a landscape metaphor):

Esotericism is characterised by an interest in these different levels of consciousness and being. Mysticism is not quite so concerned in these different levels of intermediate states; it focuses on reaching God in the most direct and immediate way. The mystic wants to reach his [sic.] destination as quickly as possible; the esotericist want to learn something about the landscape on the way. Moreover, mysticism tends more toward passivity: a quiet “waiting upon God” rather than active investigation.

(p3)

The implication of this Traditional psychology or, to use the term preferred by Smith, pneumatology (op. cit. p60) is that there are levels or capacities of knowing available to a person in which the ‘Real’ or ‘divine ground’ of existence may be, to a greater or lesser
extent, discerned. The Greek Orthodox Tradition (which traces its roots in part to Hellenistic culture) terms such a capacity for ‘divine knowing’ nous or ‘spiritual intellect’ (Nesteruk 2003) which gives rise to gnosis or ‘divine intuition’. This is to be contrasted with dianoia which represents the “discursive, conceptualizing, logical faculty in man [sic.] … [that] employs such particular cognitive operations as dissection, analysis, measurement, and mathematics” (p52). Self-avowed neo-Traditionalists such as Nasr (1976; 2003) and Smith (op. cit.) demonstrate that rationality is etymologically derived from the Latin ratio- ‘to measure out’ or ‘to cut up’ as reflected in terms such as ration, ratio, ratiocination, rational etc. Thus ‘rational’ thinking could be seen to describe a useful, indeed necessary form of mentation that involves dividing reality up into ‘named things’ or objects or ‘corporeal categories’ and which can be subsequently studied and ordered. Smith relates the point at which this level of mentation is achieved to the Biblical story of Adam who is given dominion through the power of naming.

In terms of the epistemological development scheme to be presented in Chapter 5, this could be seen to correspond to ‘formal’, ‘rational’ or ‘Modern’ thinking. The term ‘transrational’ should therefore seems much less threatening since it attempts to describe a type of mentation beyond discursive and categorical thinking – trans-rational. Possible candidates for such non-categorical knowing are: Intuition, although this might be better termed surrational or acategorical in that it is characterised by a kind of impulsive knowing that is subconscious and therefore prior to conscious ratiocination; and ‘Revelation’ or ‘enlightenment’ thought of here as the kind of knowledge that is ‘supplied’ (rather than ‘rationally’ derived) at higher orders of mentation when, according to mystical traditions, the human mind becomes attuned to, or in communication with, transpersonal and cosmic realities.
Esotericism in the light of contemporary science: some speculations

Clearly Traditional esotericism was formulated before the advent of Modern science. The world revealed by the latter was very different from, often diametrically opposed to, that prevailing in the pre-Modern period which was increasingly seen to be full of erroneous conceptions and superstitions. This is the source of the principal antagonism between science and religion over the past several hundred years with science winning the day. According to Smith and other Traditionalists, however, these differences can be accounted for by the fact that Premodern and Modern cultures were focused on different orders of reality which operate with very different 'rules'. Modernity had reduced the multidimensional Cosmos or Kosmos to a single material-physical plane, a disenchanted one-storey universe which acknowledges no other orders of 'being and knowing' and no other legitimate modes of enquiry other than science – a situation described by its critics as 'scientism' to imply that science in itself is a legitimate way of garnering knowledge but not to the exclusion of all others. During the twentieth century scientific advances have given rise to a new understanding of both the material cosmos (relativity theory, quantum mechanics) and the human mind (psychology) which at least begs a re-evaluation of the Traditional cosmology. Smith (op. cit. pp97-117) draws six parallels between contemporary science and Traditional religion which are suggestive of the need for such a re-evaluation:

1. things are not as they seem
2. the other-than-the-seeming is a ‘more’; indeed, a stupendous more
3. in their further reaches the world’s ‘mores’ cannot be known in ordinary ways
4. the ‘mores’ that cannot be known in ordinary ways do, however, admit of being known in ways that are exceptional
5. the distinctive ways of knowing which the exceptional regions of reality require must be cultivated
6. profound knowing requires instruments.

From Smith’s perspective, science isn’t inherently good or bad but if it becomes the only arbiter of ‘being-in-the-world’ (as in ‘scientism’) it can be extremely destructive. To paraphrase: ‘in its place science is a grace; out of place, science turns demonic’ (p117). Similarly, Nasr (1976) suggests that science is legitimate only if set within a form of
'higher knowledge'. Indeed, according to many, prior to the advent of Modernity and the attendant 'scientific revolution', what might be recognised as proto-scientific endeavours such as Alchemy (in its purest forms) were ultimately spiritual or metaphysical in nature. Perhaps they should rather be understood as 'arts' in the broader, Shakespearian sense presented towards the start of the chapter, the aim being to gain a better understanding of the divine workings of Nature and the Cosmos. Thus, western, and increasingly global, civilisation has undergone an accelerating shift away from Metaphysical Arts to profane science. This represents a radical shift in perspective which Capra (1983) summarises thus:

Before 1500 the dominant worldview in Europe, as well as in most other civilisations, was organic. ... People lived in small, cohesive communities and experienced nature in terms of organic relationships, characterised by the interdependence of spiritual and material phenomena and the subordination of individual needs to those of the community ... This medieval outlook changed radically in the sixteenth and seventeenth centuries. The notion of an organic, living, and spiritual universe was replaced by that of the world as machine ...

(pp53-54)

Towards a postmodern spirituality

Whilst postmodern deconstructivists are radically skeptical as to the value of either Traditional or Modern-Scientific approaches (and, indeed, any metanarratives), and Traditionalists prefer to invest their faith and efforts wholly in traditional teachings (a route which all too often leads to a blinkered form of religious 'fundamentalism'), postmodern reconstructivists wish to relearn the Wisdom of Tradition in the light of modern scientific advances and postmodern skepticism. How might this rapprochement be possible? This final section will attempt to briefly present some pertinent thinking emerging from the physical sciences, psychology, life sciences, and theology that will be used to support a contemporary metaphysical schema that could, in part, bridge the gap between Traditional esotericism and contemporary science. This will necessitate a consideration of two 'realms': 'outer' in terms of the ontological nature of reality as
posited by recent physical sciences; and 'inner' in terms of recent developments in psychology, particularly cognitive psychology. More importantly still is the consideration of the possibility of the articulation between them which is, according to the argument of the thesis, prior and not subsequent.

A) A spiritual-material relational or nondual Ontology

Evidence and concepts emerging from the physical and biological sciences during the late nineteenth and twentieth centuries appear to be pointing towards a Holarchical structure of reality. This argument has been made cogently on a number of occasions (see e.g. Fox 1990b; Mathews 1994; Smith 2003; Wilber 1997), so only the briefest attention will be paid to the crucial developments. In the realm of physics new thinking relating to the extremes of the physical-material emerged, namely Relativity Theory and Quantum Mechanics (respectively dealing with the very macro-/cosmic and nano-/quantum scale), which have caused a paradigm shift away from the rigid Newtonian worldview towards a view of reality which is much more holistic, relational and transcategorical (e.g. wave-particle dialectic). Capra (1992; 1996) and Zukav (1984) were early proponents of the view that there are close parallels between the insights of contemporary science and models presented in Traditional Oriental cosmologies (Vedic, Daoist and Buddhist). Similarly, the rise of ecology and the environmental sciences have revealed the complex interconnectedness of the natural environment. This has been partly responsible for a re-evaluation of Traditional ecocentric worldviews associated with Primal Cultures (both extinct and extant) and religious traditions drawn from East and West.
B) A Developmental/Relational Psychology

Two key themes emerging from some branches of contemporary psychology (admittedly somewhat fringe and marginalised ones) represent key themes in this thesis. namely an enactivist epistemology (see Chapter 4) and a neo-Piagetian developmental framework that extends towards (and possibly beyond) postformal thinking (Chapter 5).

Taking the latter first, it is important to note that postformal thinking is conceptualised as being transcategorical in a weak sense. By this is meant that such categories as are employed tend to be seen not as rigid and exclusive (as is the case with formal thinking) but rather fluid and dialectical. Here “... distinctions remain but are softened. Or they remain precise while changing from barriers to bridges” (Smith 1992 p90). Some themes from cognitive psychology and psychiatric therapy are particularly pertinent, namely the condition of ‘schizotypy’ and ‘thymotypy’ (Brod 1997; Jackson 1997; Nettle 2001) which represent positive re-evaluations of non-normative psychologies (discussed briefly in Chapter 5).

The term thixotropic seems an ideal metaphorical neologism for this kind of ‘shapeshifting’ thinking or property of mind which provides the basis for creativity and ‘awe and wonder’, two important themes in this thesis. This neologism is particularly amusing in the context of this thesis with its particular emphasis on the relations between the mind and thinking on the one hand and material, and particularly geographical reality, on the other. The term is meant to allude to the ‘thixotropic’ properties of some land surfaces – at a crucial threshold value of agitation, such surfaces undergo the process of liquefaction and effectively turn from solid to liquid before settling back into a new solid configuration once the energetic episode has subsided – which are revealed only under extreme conditions such as during a seismic event. Thus, for much of the time processes of sedimentation (analogous to the construction of mental schemas) proceed and lay down a solid surface upon which normal human functioning can take place (analogous to the processes of schema construction and habitual thinking respectively). However, under extreme events such as earthquakes (analogous to phenomena or experiences which cannot be assimilated by the existing schema) the land surface disintegrates and becomes fluid – the mental schema ‘breaks down’ and becomes chaotic, ‘far-from-equilibrium’
(Prigogine and Stengers 1984) or ‘protean’. Subsequently, the energy of the system subsides permitting the land surface to settle into a new solid configuration upon which new human activity can take place (analogous to the development of new thinking schemas). Ideally, such an experience (whether human-geographical or mental) leads to a re-evaluation of traditional or habitual practices and structures which were found wanting and leads to the creative development of new, adaptive and therefore more adequate ones. Thus, just as societal structures (literal i.e. buildings and metaphorical i.e. institutions and organisations) need to become more flexible and less rigid and acknowledge the inherent instability of the environment (leading to a more humble people-environment relations which works against overly hubristic exploitation of land resources), so too must developing mental schemas develop from ‘formal’ (‘monolithic’) to ‘postformal’ (thixotropic).

Another important feature of postformal thinking is the integration of cognition and emotion with the possibility of entertaining a ‘spiritual’ dimension in the sense suggested above. Of course, the traditional psychologies in their esoteric and mystical formulations would appear to extend even further than most postformalists would feel comfortable with but perhaps the step towards a still further level of mentation as advocated by transpersonal psychologists is not so great as might first appear. Once again, contemporary thinkers (Traditionalists and transpersonalists) are re-evaluating Traditional esoteric psychology/pneumatology in the light of these scientific developments. Thus the *vedic* notion of ‘sheaths’ and the Gnostic Christian attention to different levels of consciousness such as *diaomoia* and *nous* in the Eastern Tradition and the Eye of Flesh, Soul and Spirit in Medieval scholasticism are being reconsidered in a more positive light. Finally, the discussion early in the chapter concerning the etymological relationship between wit, wisdom, vision and idea and the ancient Sanskrit word *Veda* bears returning to since Mahony (1998) reveals that this term referred to no ordinary level of ‘seeing’ but rather:

... *veda* implied more than a person’s ability to see things in a way that others do not. It allowed the visionary to see through a process of direct perception. ecstatic
experience or inner vision what were regarded as fully sacred modes and structures of being, even ultimate reality itself.

(PP4-5)

Perhaps here lies the explanation for the close correspondence between Traditional cosmologies espoused by mystics and contemporary science; the former were intuiting realities that modern science is now empirically investigating. A potential religio-metaphysical implication of attaining such a level of consciousness given the discussion of ‘enactivist epistemology’ (see Chapter 4) is that not only might the ‘sacred’ be perceived but it is also, in a sense, ‘brought forth’ or ‘realised’ by this very epistemological act or event. Such a moment of sacred ‘being-and-knowing’ or ‘sanctification’ may be termed a ‘hierophany’ (Eliade 1959). Such an event need not be thought to possess ontological status as in the Roman Catholic doctrine of ‘transubstantiation’. Rather, it could represent a phenomenological event such as described by McGrath’s (2003) notion of ‘transignification’. Actually, within the enactivist paradigm the question may be falling into the trap of false dichotomising.

Whatever the truth, the existential importance of such a hierophanic event is that it is transformational and sacerdotal. This was apparently a theme in many Traditional esoteric, mystical, animist and creation-centred religio-philosophical systems, which offers the possibility of Deep Religious Pluralism (Griffin 2005). Furthermore, many of these premodern insights are apparently being rediscovered by contemporary or New Paradigm science offering the possibility of even greater Ecumenism. The remainder of this thesis attempts to contribute to this possibility. Chapters 4 through to 6 will present and attempt to justify an adequate ontological-epistemological model using a ‘mixed discourse’ drawn from across the ‘arts’, ‘sciences and ‘religion(s)’ in the light of the above discussion which provides both a legitimisation for, and framework or context within which to locate, the proposals and recommendations for an integral and transformative GEE for ESDGC which are presented in the final section (Chapters 7 and 8).
Chapter 4: Enacting the World – Perception and Reality

This world is but a canvas to our imagination

Henry David Thoreau

This chapter discusses an emerging post-Cartesian theory of mind variously termed ‘transactional constructivism’ (Altman and Rogoff 1987; Walmsley and Lewis 1993); ‘embodied/situated/grounded cognition’ (Johnson 1987; Lakoff and Johnson 1980; Preston 2003); ‘enactivism’ (Varela, Thompson, and Rosch 2000); ‘biological cognition’ (Thompson 1987); and ‘Perceptual Activity theory’ (Thomas 1999). The fundamental contribution of this perspective is that, in contrast to the radical Cartesian disjuncture between spatio-temporal materiality (res extensa) and mind (res cogitans), enactivism\(^{15}\) considers mind and environment to be two complementary and inextricable poles of the same functionally and structurally coupled autopoietic (self-generating) epistemological system: mind-in-environment. This chapter seeks to highlight some of the implications of this perspective in terms of human-place relations. However, enactivism has more-than-human application as a general theory of ‘biological cognition’ and it is helpful to start with these general considerations, not least because it demonstrates an epistemological continuity between humanity and other organisms (thereby working against extreme forms of anthropocentrism).

The ecology of epistemology: Organism, ‘Umwelt’ and Environment

The enactivist paradigm blurs somewhat the distinctions between ‘being’ (existential condition), ‘knowing’ (epistemology) and ‘reality’ since there is a functional connection between what (or how) an organism (or person) perceives, and the (relative) reality – world – that is perceived. This insight is articulated by von Uexküll’s concept of an organism’s ‘umwelt’ understood as the “world as constituted within the specific life activity of an animal” (Ingold 2000 p176 [emphasis added]). This is not ‘world’ in the sense of ‘totality’ but rather a relative world comprising just those aspects of relevance to the organism (with other ‘irrelevant’ aspects of this totality ‘existing’ beyond the umwelt

\(^{15}\) For the sake of brevity, and in homage to the late Francisco Varela, this will be the term generally used.
and therefore effectively beyond the purview of the organism). However, the umwelt constitutes for, and represents to, the organism its world, and therefore the world, in the sense of its existential horizon. It can be seen as the meaning-bearing (existentially relevant) dimension of the environment which is enacted or 'co-created' through the transactions between organism and environment. Furthermore, it can be thought of as a blurring, entanglement or folding of aspects of both organism and environment into one another to generate a distributive whole (i.e. organism+ ... relevant parts of the environment). A particularly important corollary of this is that an 'umwelt' is 'brought forth' or co-created from the environment as a consequence of a number of interrelated factors:

- the phylogenetic needs and dispositions (biological and, where relevant, cognitive) of the organism’s species, i.e. what aspects of the environment does a member of this species need to, and/or can, perceive?;
- the specific ontogenetic endowments of a particular organism in terms of the above given intraspecific diversity (e.g. myopia which may be an inherited condition but can also arise developmentally during the course of a lifetime);
- the affordances of the environment/cirumambient milieu/‘place’, i.e. what characteristics or patterns are there in this particular context that could be perceived given all of the above;
- the history of transactions that have taken place within the environment through which ‘learning’ (recognition of repeating patterns in the environment) has occurred.

This last point is true of individual organisms functioning beyond phylogenetically determined instinctual behaviours. However, even for those organisms operating purely through such inherited programming, this point is also true at the species level since these very instinctual programmes (along with body form etc.) are adaptive. that is represent a kind of ‘species-level’ or distributive learning which has taken, and is taking, place over an evolutionary (extra-individual) timespan.

From this perspective, the organism and umwelt (individually and collectively) mutually enact or co-create each other, and therefore represent, in combination, an
inextricable 'organism-umwelt' autopoietic or 'structurally coupled' system. However, this is ultimately subsumed within, and transcended by, the circumambient milieu within, and through, which the autopoietic system subsists. The 'organism' and 'umwelt' appear as relative 'figures' within the transcendent or environment/mileu which represents the more ultimate 'ground' (in both a literal and metaphorical\textsuperscript{16} sense) for the enaction event. This situation may be represented diagrammatically (Figure 4.1).

![Diagram of Environment/Milieu/Ground/Emplacement](image)

Figure 4.1: The relationship between organism, umwelt and emplacement.

In Figure 4.1 the grey shading indicates that dimension of the environment/milieu which is immanent in both 'organism' and its umwelt whereas the blank area indicates its eliminated, undetected or 'unrealised' transcendent dimension. Thus, whilst the organism and its umwelt are ontologically dependent upon each other (remove either box and the other would cease to exist), they are both ultimately dependent for their relative existence upon the conditions of their wider \textit{emplacement} which, therefore, represents their 'sustaining frame of existence'.

\textsuperscript{16} Literally in the sense of 'landscape'; metaphorically in the sense of the 'figure-ground shift' phenomenon in perceptual psychology.
Importantly, what is transcendent for one organism or species (due to the specific limitations of its sensorial equipment and cognitive capacities) might be ‘registered’ by a different type of organism (whether individual within the same, or from a different species) and consequently ‘brought forth’ into their umwelt or realised. Differences between the various umwelts enacted are largely a consequence of different sensoria.

This term sensorium is intended to describe much more than just the sensory equipment with which the organism has been phylogenetically and ontogenetically endowed. Rather it implies that the manner in which this equipment is utilised is dependent on epigenetically learned habits giving rise to an ‘embodied perceptual logic’ which informs or directs the perceptual transaction. Given that members of a species share roughly the same embodied forms one might expect the sensorium of one individual to develop in an approximately similar manner to another. However, no two individuals will share exactly the same perceptual biography (particularly in the formative stages) and so no two individuals will develop exactly the same perceptual habits.

The argument can be extended to communities living in different habitats so that the type of environment a species is living in will have an important formative influence on the type of perceptual habits developed by those living within it leading to different habitual modes of perceptual transaction. This might give rise to intraspecies, and ultimately interspecies, divergence, which is particularly well illustrated by the case of isolated troglodyte communities which effectively lose the efficacy of sight first as a habitual perceptual response and then, over generations, through the consequent atrophy and ultimate loss of the optic sensory organs. From this perspective, the most complete enactment of the environment is predicated on the greatest possible diversity of ‘perceptual perspectives’ or ‘species’ (etymologically derived from Latin specere: to look at) with their different ‘perceptual modes’ or habits. But even then there will always be transcendent dimensions beyond the purview of any and all of its denizens.
Existential considerations

For the sake of simplicity, consideration will initially be given to the purely hypothetical situation of a single organism in the environment. Whilst the resultant organism-umwelt complex is wholly dependent on the transcendent dimension as the ‘ground’ of its existence, the latter will not be ontologically dependent on the former as it could exist without ‘them’. Yet it is contingently or conditionally dependent on ‘them’ for its:

a) manifestation or expression as this particular environment/milieu with its associated characteristics (or conditions) including ‘their’ mere presence (this is a type of environment which incorporates this particular autopoietic system); but also the activities of the ‘organism-umwelt’ considered as an agent (i.e. capable of causing physicochemical alterations associated with metabolism and habitat modification);

b) signification, i.e. its meaning and relevance as an existential frame for ‘being’.

This second point requires elaboration (and should be seen as a possible, and not universally acceptable, implication of the enactivist perspective). The organism-umwelt dyad-in-transaction represents a processional autopoietic ‘meaning-making event horizon’ without which meaning in an existential sense will not be ‘enacted’ and the environment would be relatively ‘meaning-less’ (in an epistemological-existential sense). Indeed, it would no longer qualify as an environment, milieu or ‘emplacement’ in the literal sense (since these terms imply something environed or emplaced). Whilst it would be true that the ‘context’ would still exist without the organism-umwelt, it would not exist in this specific manifestation since they contribute existential meaning through their ‘being-in-context’ (existing and participating in, and thus affecting and bestowing significance on, the milieu). Whilst Figure 4.1 implies a hierarchical structure to reality, Koestler’s notion of ‘holarchy’ is preferable since it highlights the distributive nature of the meaning bestowing process and the mutual importance of each dimension or ‘holon’ (organism, umwelt and milieu) which is simultaneously a relatively autonomous whole in its own right and dependent on the whole autopoietic system for its complete realisation.
‘Semiosis’ or ‘meaning-making’ is a self-generated (auto) attribute of the whole unit, i.e. meaning resides in neither the subject/organism nor the context/milieu but rather in the articulation (or ‘dialogue’) between through which an umwelt is enacted or ‘brought forth’. Meaningfulness is, therefore, an emergent property dependent on the realisation (enaction or bringing forth) of an umwelt through a dialogic process. This understanding may be related to the six-armed cross introduced in Chapter 3 (Figure 3.1). The horizontal axes represent the spatio-temporal dimensions which only becomes a significant existential context, or world, by virtue of the presence of an organism-umwelt bestowing ‘being’ or the meaning dimension (vertical axis) within it. This latter dimension effectively creates an existential centre where none existed before, which is perhaps why it is often referred to as the axis mundi – the ‘world axis’ – since it is a requirement for the realisation (bringing into being) of a world. Yet this would not be possible without the horizontal axes and so the whole existential complex is mutually interdependent. In the language of Mahayana Buddhism, one might speak of the ‘dependent co-arising’ of the axes.

Of course, literal ecologies involve, by definition, many different species, and many more individual organisms, transacting with the same habitat or ecosystem. Each then represents a (relatively autonomous) autopoietic (sub)system transacting with different dimensions of the autopoietic supersystem – the ecosystem – and each enacting their own ‘private’ umwelts, every one with a different and unique ‘flavour’. Therefore, a further important characteristic of the environment or ecological milieu is that multiple perceptual or ‘meaning making’ – umwelt-ting or worlding – events take place simultaneously within it, thereby multiplying its total existential significance geometrically (or might that be Gaia-metrically). This means that, over and above the existential contribution of a single organism-umwelt (which is still significant), one should consider also the vastly greater existential significance (quantitatively and qualitatively) bestowed by the distributed, interdependent and polycentric ‘community of life’ or ‘land community’ (Leopold 1989) which, from the perspective of the Gaia hypothesis (Lovelock 1982), should more properly be considered the ‘planetary community’. This provides a rationale for the ‘ecogalitarian’ and ecocentric
understanding of existential significance so often associated with Deep Ecology. One might also extend this thinking to the cosmic level (see Chapter 6).

However, another perspective suggests that it is possible to derive a non-egalitarian system of existential valuation at least in epistemological (rather than ontological) terms which is a consequence of differential potentials to bring the ‘being’ dimension (vertical axis) into awareness. This perspective, which Zimmerman (1994 p122) refers to as ‘ontological phenomenalism’, represents a contentious yet recurring strand in religio-philosophical and ecophilosophical thought which privileges humanity’s (possibly unique) capacity to realise (bring into being) phenomena by providing the ‘space’, ‘locus’ or ‘clearing’ for their self-disclosure.

**Degrees of Being and Knowing**

Evolutionary psychology and the biological sciences suggest that there are degrees of ‘bio-logical’ meaning making. Pfenniger (2001) provides a hierarchical model of nervous system functions that summarises these findings (Figure 4.2).

![Figure 4.2: Hierarchy of nervous system functions (reproduced from Pfenniger 2001 p91)](image-url)
Illustrating this hierarchy in terms of animal diversity and evolution, for 'lower-life'\(^{17}\) or pre-sentient levels (for the sake of argument, the majority of invertebrates\(^{18}\) ) ‘significance’ represents little more than ‘survival’ and is a consequence of the excitation of evolutionarily-programmed behaviour patterns or instinctual survival drives (the lowest two levels in the diagram). Information in the environment is conveyed to the organism as the *sensory array* (through chemical diffusion, mechanical energy, light energy, etc.), only a part of which is sensed or ‘perceived’ by the organism through its *sensorium*.

The *sensorium* stimulates or causes sensations in the organism’s nervous system which brings forth habitual “structures and events in its [the organism’s] surroundings” (Bruce and Green 1990 p1) – the enacted ‘umwelt’; and elicits automatic (pre-reflective) behavioural responses. In a sense the organism is directed by, yet unaware (in a conscious sense) of, its ‘umwelt’. Individual subjective meaning cannot really be said to exist at this level although philosophically meaning can be thought to reside ontologically and/or phylogenetically by the mere fact of existence (Fox 1990b). Sentience – phenomenological experience or consciousness (the terms are approximately synonymous) – represents a qualitative shift whereby the umwelt may be seen to ‘shift into’ or become ‘foregrounded’ into consciousness. Indeed, this might represent a defining attribute of a ‘state of consciousness’. At this level, however, the ‘state of consciousness’ does not extend beyond what psychologists term the ‘specious present’, an ephemeral phenomenal experience that does not extend beyond the immediate ‘here and now’ and does not permit a sense of ‘subjectivity’ – self (and non-self). For phenomenal experience to extend beyond the specious present demands a further cognitive capacity that is able to sustain thought from one moment to the next.

This is a characteristic only of higher animals and is associated with the faculty for memory, from the third level onward in Pfenniger’s diagram. Of course, the earlier ‘modes’ of cognition are still in operation but these can now come under the aegis of a higher more reflective cognitive capacity which is able to recognise – *re-cognise* –

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\(^{17}\) It is not possible to avoid such hierarchical and value-laden language when discussing the cognitive capacities of animals in terms of the schema being developed. However, lower in an epistemological sense need not necessarily also imply lower in an ontological sense.

\(^{18}\) Cephalopods are likely to be higher up the hierarchy.
meaningful patterns. At this level, the percept is ‘perceived-as’ something either in terms of resembling a similar pattern stored in memory, or as something apparently ‘out of kilter’ from such patterns. Expressed another way, that which is noticed in the environment is recognised as something that has relevance to/carries meaning either as something already understood/familiar on the basis of past experience (re-cognised as another condition similar to something already known/experienced as significant); or as something new and potentially relevant (useful/pleasurable or a threat) but as yet not understood/‘known’ (not yet com-prehended and awaiting the ascription of meaning). Things that are neither meaningful nor perceived as meaningful (or potentially so) to this meaning-making system are simply not noted and therefore presumably fall outside – transcend – the organism’s consciousness.

Ascending meteorically through the stages of evolution, the next developmental level (including socialised monkeys) permits inter-individual communication through symbolic language which allows meaning to be conveyed from one member of a social group to another. At the next cognitive level – the level of humanity (and possibly some higher primates) – this language ability in turn furnishes cognitive tools for true subjectivity to be experienced in terms of an inner dialogue with oneself which ultimately gives rise to a sense of self and ‘other’, and subsequently still to the power of reflection and comprehension with the capacities of creativity and conscious problem-solving. The human umwelt and/or existential condition is one of phenomenal experience with its attendant ‘intentionality’ (perception-as) giving rise to the ‘sensible’ or mundane world. Here mundane is meant not in the pejorative sense of boring but to express the existence, and fundamental importance, of a world phenomenologically given as a sensible event or experience in the dual sense of firstly being ‘given to’, or manifest in, the senses (perception-as or pre-hension) and subsequently one allowing order or structure – and hence meaning – to be ascribed to it (comprehension). Mundane is therefore being reserved to describe the specifically human umwelt, the mundus or ‘world’ as humanly perceived at a variety of scales, and which may be interpreted from a variety of perspectives, as a coherent system – a sensible (in both senses of the term) Gestalt that characterises human everyday reality. Hence the term represents the emergent phenomenal world which is a consequence of the peculiarly human ‘emplaced
imagination' (see further below), upon which a ‘sense of place’ is predicated and, according to some religio-philosophical systems, from which derives the metaphysical significance of humanity as the locus for the realisation of reality (see above and Chapter 6).

**Enacting Mundane reality**

According to this combined enactivist-evolutionary perspective then, humans occupy a privileged and possibly unique position as creatures that have phenomenological experience of, and the subsequent capacity to reflect upon, the uniquely ‘human reality’ enacted through, and only with, their epistemological participation. To recapitulate, the human mind and environment are two poles of the same functionally and structurally coupled and highly sophisticated *autopoietic* epistemological system, with dimensions of the human umwelt being brought forth into consciousness as a holistic gestalt or ‘umwelt-as’ which is the ‘phenomenal human world’ or mundane reality. A special (and possibly unique) attribute of human mentation is that these mental and environmental poles can be epistemologically (and subsequently conceptually) differentiated. Indeed, this is the case so that mundane reality is generally perceived as comprising a separate ‘inner’ (subjective) and an ‘outer’ (objective/external) reality. However, it is crucial to stress that they possess only relative (not absolute) autonomy from one another and to consider otherwise – the Cartesian split – is illusory (and actually amounts to biological and epistemological ‘death’).

So how might this Cartesian split come about? This is because the degree to which the process can become increasingly (but not absolutely) solipsistic varies along a continuum. Generally, human-environment transactions of an epistemological nature occur automatically giving rise to the pre-reflective phenomenal experience. However, the degree of conscious attention or awareness can be enhanced by an increase in neurological activity; and the transaction between the relative poles can become attenuated (but never severed) or temporarily disengaged (like gears with the clutch deployed). Positively this can give rise to metacognition and contemplation, which are the bases for the processes of creativity and *semiosis* or generating meaning and ‘insight’. 
This is the very ability which has allowed *Homo sapiens* to achieve what it has as a species. More negatively, this capacity for metacognition led Descartes to erroneously dissociate the two conceptually identified poles and postulate that the two are disconnected categories which led inevitably to the dualistic conclusions made by him and those that followed.

This propensity to ‘detach’ from material reality if taken too far can also give rise to schizoid dysfunction (or *dys*-connection) and descent into ‘un-grounded’ realities which are non-consensual, megalomaniacal or schizophrenic. Obviously this is manifested at the individual level by some as mental illness or pathology. However, this maladaptive situation is also precisely the diagnosis now being made at the societal level in terms of the Western/Modern worldview which has supposedly emerged from this Cartesian schizoid legacy. This chapter and this thesis in general presents an argument for a *re*-articulating the two transactional poles (disengaging the clutch to reengage the gears), that is *re*grounding the Western worldview whilst still acknowledging the generative power, and *relative* autonomy of, the ‘mind’ pole.

**Ideation and Affect: Reason and Emotion in human mentation**

Of course, perception and transactions with the environment elicit subjective phenomenological experiences which might be figuratively considered as ‘residing’ or manifesting in the relatively autonomous ‘mind pole’. This introduces a further complication associated with human mentation in terms of the relative distinction between *ideation* (largely synonymous with ‘thinking’, ‘cognition’, ‘reasoning’ or ‘intellection’) and *affect* or emotional dimension, that is, the feeling, tone or mood. This is an ancient and commonsense distinction which is valuable for the purposes of analysis and might have some basis in brain structure in terms of hemispheric specialisation (providing this is not taken to imply discrete hemispheres involved with each) and the relationship that appears to exist between the emotions and the amygdyla on the one hand, and the cerebellum (particularly the pre-frontal cortex) and ideation on the other. However, as with many other themes being developed in this thesis, rigid dichotomising is erroneous and a relational, transactional or dialectical view is preferable. Thus
thinking and feeling must be seen as inextricable, although relatively autonomous, poles of the same mentation system, or two sides of the same coin, namely the ‘mind’. The superordinate category ‘mind’, in turn, is one side of the same autopoietic coin, with the obverse representing the environment with which it is in transaction. This gives rise to a complex of two ‘binaries’ (ideation-affect; mind-environment) which might, following Illeris (2002) be better thought of as a trialectic with the mundane world emerging in the tension field between (see Figure 4.3).

Figure 4.3: The ideation-affect-environment trialectic, with the ‘mundus’ (human umwelt) emerging in the tension field between.

Edelman and Tononi (2000) discuss how the sensory array is transformed into ‘value-category memory’ through the complex interaction of four interrelated neural processes:

*perceptual categorisation*, the ability to carve up the world of signals into categories useful for a given species in an environment that follows physical laws but itself contains no such categories [...]; the development of *concepts* ... the ability to combine different perceptual categorizations related to a scene or an object and construct a “universal” reflecting the abstraction of some common
feature across a variety of such percepts [...]. memory ... the capacity to specifically repeat or suppress a mental or physical act [...]. value

(PP104-105)

All four processes involve a complex interaction between ‘ideational’ and ‘affective’ subsystems, although the first two which are implicated in ‘categorisation’ are more specifically ideational in character. Stent (2001) presents a further elaboration in terms of the eliminativist view of cognition which is associated with structuralism:

Naïve realism and idealism both take for granted that all the information gathered by our senses actually reaches our mind. Naïve realism envisions that thanks to this sensory information, reality is mirrored in the mind, whilst idealism envisions that thanks to this sensory information reality is invented by the mind. Structuralism provided the insight, however, that knowledge about the world of phenomena enters the mind not as raw data but in an already highly abstract form, namely as ‘structures’ ... In the preconscious process of converting the primary sensory data, step by step, into structures, information is necessarily lost because the creation of structures, or the recognition of patterns, is nothing other than the selective destruction of information. The mind creates a pattern from the mass of sensory data by throwing away this, throwing away that. Finally, what’s left of the data is a structure in which the mind perceives something meaningful.

(p36)

Taken together, a view of human cognition emerges in which innate neurological processes create categories (the consequence of ideation) and meaning (the consequence of valuation and affect) from the sensory array which provides a neurological warrant for accepting that categorisation is an innate characteristic of humans and, indeed, other lifeforms. However, in humans (along with some other creatures) such categorisation need not remain rigid but can be, and ideally should be, flexible and dynamic since this represents the neurological basis for both learning and the highest cognitive brain function presented in Figure 4.2 – creativity.
Return of the ‘Real’

Hence it must be acknowledged that there is ultimately a reality (albeit a non-objective and open one) which provides the fundamental ground (emplacement or ‘situation’) for the enactivist transaction to ‘take place’ within, and from which mind (incorporating concepts and emotions) emerges. In terms of the argument being developed here, this reality may be thought of as the ‘more-than-human’ world (Abrams 1997) of Nature understood as ‘the self-arising’ (Bonnet 2004a, 2004b). Furthermore, whilst open and fluid this ultimate ground does not permit anything and everything but ‘circumscribes’ limits, or presents certain affordances, as to what is ontologically and semantically possible. Reality may be structured in many ways but not without limit since there are underlying structuring principles in Nature (which includes human contributions and structures). Were this not true there would be no-thing or no meaning at all for any ‘postmodernist’ to philosophise about since any kind of semantic purchase would be impossible; and certainly no two postmodernists would be able to enter into conversation since there would be no grounding for a consensual reality to discuss.

The structural dimension of mundane reality

Accepting that there are ‘Deep Structures’ (both material/spatial and mental) that cannot be observed directly but have to be inferred from observing how they are manifested opens up the possibility of exploring the nature of consensual reality. However, ‘structuralist’ philosophers (against whom the post-structuralists were right to argue) took too narrow, prescriptive and deterministic a focus on outworkings of these supposed universal structures and downplayed the possibility of diversity, difference and novelty. As a slight aside, ‘adequate structuralism’ (Wilber 2003c) and ‘critical realism’ (Sayer 2000) provide a more satisfactory philosophical formulation than either structuralism or post-structuralism in that they present a ‘falliblist’ (as opposed to naïve) realism predicated on a stratified ontology of structures with the ‘empirical’ (contingent domain of experience and representing the only legitimate realm for many postmodernists)
which is 'grounded' in the ineffable 'real' (the goal of metaphysicians and theologians) with 'actual' representing the domain of transaction and process between the two.

Whilst a broad analytical distinction may be made between 'external' and 'internal' structures (Walmsley and Lewis 1993) echoing the inner-outer dichotomy discussed above, enactivism suggests that there is likely to be functionally-coupled relationship between them. Thus Marxist-inspired (in the analytical rather than normative sense) approaches have focused on socio-politico-economic structures and their relationship to material modes of production, and the consequences of both upon human 'ideology' (Edwards 1995; Harvey 1993). Similarly, 'social constructionists' consider cultural structures or norms to be implicated in creating 'habits of mind' in an individual which shape how that individual comes to see reality in a socially sanctioned or constrained manner (Berger and Luckman 1966).

Cognitive psychology, on the other hand, has tended to focus more on supposed 'neuro-structures', that is mental schemas which are broadly universal within a species and a consequence of adaptive evolution at the phylogenetic (species cognitive endowment) and ontogenetic (individual learning through environmental transaction) levels (Walmsley and Lewis op. cit.) and how these might be 'projected' onto or into 'reality'. Neo-Jungian and Depth psychologists (e.g. Progoff 1977), structural anthropologists (following Levi-Strauss) and mythologists (Campbell 2004; Cousineau 2001; Stevens 2001) have suggested that these mental schemas are experienced at both the individual and collective levels as mythic and archetypal images which have given rise to symbol systems (personal and cultural) such as mythologies and worldviews which are characterised by particular 'Root Metaphors' (Pepper 1972). This provides a cognitive backing for the exploration of mythical and metaphorical routes to 'being-in-the-world' called for by Wright (see Chapter 3) and like-minded humanistic geographers, ecophenomenologists and 'mythologists' and which should therefore be considered as a legitimate approach within an integrative GEE.

Much of this thinking has focused on the 'socially constructed' nature of these meaning making processes and how we are sociologised into particular 'worldviews'. Significantly then, culture represents an essential supporting or sustaining frame for 'human being'. Without socialization into a culture and at least a basic worldview.
human meaning-making would be pre-dialogical and incoherent: witness the condition of so-called ‘feral children’ or cases of extreme isolationist abuse (and possibly extreme positions along the autistic spectrum), where irreparable damage to (or epigenetic limits of) the developing brain effectively arrests development at pre-linguistic stages thus negating the capacity for comprehension and human interaction at anything more than the most basic levels. The vast majority of humanity, fortunately, has both the capacity and the opportunity to be apprenticed to (i.e. socialized into) human culture. However, it has more recently been argued that there are potentially deeper sources from which we ‘learn’ our mental schemas that derive from our existential status as embodied and emplaced beings (Abrams 1997; Lakoff and Johnson 1980; Preston 2003). In this sense place represents our most significant teacher in a more-than-human sense.

Place as Teacher?

Embodiment in Place

Rodaway (1994) has focused particularly on the embodied level of human relating to the world. His focus is on “intimate geography”; one which begins with the senses and reaches out to questions of sense and reality” (px) or what has also been termed “the geography closest in” (Longhurst 1994). Rodaway (op. cit) demands “a return of geographical study to the fullness of a living world or everyday life as a multisensual and multidimensional situatedness in space and in relationship to places” (p4). It is a call for a geography (and by extension an ‘ecology’ or environmentalism) that is both humanistic and postmodern in inspiration. He demonstrates that the all sense modalities have both an exploratory and a performatory dimension and presents a general sensuous matrix (Table 4.1).
Sensation

<table>
<thead>
<tr>
<th>Perception</th>
<th>Presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>To feel or sense (contact)</td>
<td>to be touchable (tangible)</td>
</tr>
<tr>
<td>to notice a smell (generalised)</td>
<td>to be smelled (odour signature)</td>
</tr>
<tr>
<td>to hear</td>
<td>to be heard</td>
</tr>
<tr>
<td>to see</td>
<td>to appear, to be seen</td>
</tr>
<tr>
<td>To touch, feel (explore)</td>
<td>to touch or reach (communication)</td>
</tr>
<tr>
<td>to smell, sniff (specialised)</td>
<td>to give out an intentional odour</td>
</tr>
<tr>
<td>to listen</td>
<td>to sound, voice</td>
</tr>
<tr>
<td>to watch, to look</td>
<td>to look (appearance), to give an image</td>
</tr>
</tbody>
</table>

Table 4.1: Sensuous matrix with various modalities adapted from Rodaway (1994)

Rodaway goes on to demonstrate that different sense modalities give rise to, or (in terms of the present discussion) enact, different ‘sensual geographies’ partly as a consequence of their spatial reach and partly due to the qualitative differences between them so that, for example, the geography of the ‘soundscape’ is very different from that of the haptic (given to touch). He further demonstrates that different cultures can privilege different sense modalities over others which reinforces the notion of the social construction of reality. Thus Western culture is allegedly extremely ocularocentric (privileges the eye) at the expense of other sense modalities giving rise to a situation of **visualism**. Inuit society, in contrast, is much more focused on the auditory and olfactory modes presumably due to the nature of the snowy environment in which visual perspective is misleading and sound and smells conveyed by the wind can be more informative. Similarly ‘Traditional’ societies are apparently more open to more intimate modes of sensuous relating to other people than by sight and sound. For example in Arabic culture to be able to smell and touch another person is a measure of trustworthiness and contributes to intimacy. This is to be contrasted particularly with AmeroEuropean societies which have an almost pathological fear of natural odours (hence the emphasis on artificial ‘air fresheners’) and entering another’s ‘personal space’.

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Sacred and Profane space

Many authors suggest that human embodiment actually imposes (that is 'constructs') a meaning schema on space:

The posture and structure of the body generates a particular local geography – up and down, back and front, left and right – which are also culturally associated with meanings such as sacred and profane. We are the centre of our World, always experiencing the environment firstly from within this 'circumambient' space or immediate geography. As one moves, one's left and right, back and front, and so on also move. This immediate geography is extended by the body's senses, the intimate senses of touch and smell and the distant senses of sight and hearing. And more directly, the locomotion of the body allows it, with the aid of memory and expectation, to develop a wider map of the environment through which it travels. Technology also extends the reach of the body and can give us a sense of experiencing a world apart from the body. Here, technologies such as the telephone and television are everyday examples.

(ibid. p32)

Figure 4.4 (reproduced from Rodaway) demonstrates some of the ways in which human embodiment can project meaning onto space and place. It is interesting to compare this diagram with Figure 3.1 since, with a minor manipulation or rotation, they can be perceived to match up.
Figure 4.4: The imposition of meaning upon space as a consequence of human embodiment (Reproduced from Rodaway p33).

**Place in Mind**

The ‘embodied cognitivists’ also explore the inextricable relationship between human meaning and the environment or milieu but with a reversal of emphasis away from the human imposition of meaning upon the environment and towards the ways in which the circumambient physico-spatial environment structures human meaning-making. Preston (2003) presents an epistemology which is both ‘non-anthropocentric’ and postmodern in which:

there are deep connections between, on the one hand, the rational mind and the beliefs it forms and, on the other, the nonhuman, physical realities of our environments .... [In other words] reason is structurally wedded to the physical geographies of the earth ... [and so] every thought and belief depend ultimately
for its structure on the ways in which we are grounded by our physical environment.

(pp xiv-xvi).

Like the previous perspective, this one recognises the importance of human embodiment and orientation in the environment for ‘structuring’ meaning, although it differs subtly from the previous in terms of shifting the balance of agency from the human to the environmental pole. An important corollary is the insight that “[t]he structures that help us get around our physical world are the basis of those that help us get around our cognitive world” (ibid. p33). Thus, all the geographical metaphors used to describe the cognitive realm are more than merely metaphorical and figurative. Rather, the ways we learn to comprehend the physico-spatial geography of the ‘real’ world as a Gestalt, scene or vista and the ways we learn to physically negotiate or ‘find our way’ in it provides, through metaphoric projection, a (or rather the) model for our thinking. This provides an explanation for the importance of visuo-spatial imagery in particular as a mode of cognition which is explored briefly later in this chapter. Preston does allow, however, for a socio-cultural contribution to the construction of reality by subsuming the socio-cultural milieu within the broader geographical ground which is in keeping with the holistic notion of place as sociobiophysical context followed in this thesis.

Space, orientation and associated bodily and/or geographical metaphors are often used in descriptions of transformations of consciousness (Metzner 1987) and these probably require an explanation partway between either a purely human projection or environmental ‘injection’ explanation. Thus transformations of the non-spatial (consciousness or mind) is often figuratively described as involving movement through space to either deeper or higher levels. Smith (1992) presents a simple diagram (reproduced as Figure 4.5) which provides a partial explanation for the universal tendency to use either metaphors of depth, or height, or both across religio-philosophical traditions since they are a consequence of the universality of human embodiment.
Thus tall features, ascents upward or transmission downwards from on high are all used in religio-philosophical symbolic imagery (e.g. Jacob’s Ladder, ravens bringing the Bread of Heaven to Elijah, the Tower of Vairocana, ascents up sacred mountains) and architecture (ziggurats, mosques, stupas, temples, church spires etc.) to represent the ‘journey’ from egocentredness to Reality-centredness (see Chapter 5).

Malpas (1999) takes a more overtly philosophical stance drawing on Heidegger, Merleau-Ponty, Bachelard, Deleuze and Guattari amongst others as well as upon the fields of anthropology, geography and literary studies to demonstrate the fundamental significance of place to ‘human being’. For him place can be seen “neither in terms merely of some narrow sense of spatio-temporal location, nor as some sort of subjective construct, but rather as *that wherein the sort of being that is characteristically human has its ground*” (p33 [emphasis added]). Thus place is not merely an inert and passive ‘container’ for human action but rather “an open and yet bounded realm within which the things of the world can appear and within which events can ‘take place’” (p33) and, indeed, allows for the very possibility of ‘human being’. His metaphor of ‘topographical surveying’ as a model for contemplation about the human condition as always emplaced (pp39-41) involving ‘mapping’ the ‘terrain’ through ‘traverse’ and ‘triangulation’, and ‘sighting’ and ‘resighting’ relates back to the insight recognised above that negotiating the physical environment and visuo-spatial sense mode presents, through metaphoric projection, a model for negotiating and ‘mapping’ the mental or ‘inner’ world using
visual imagery. He also identifies embodiment in an environment as the ground of human meaning making and the very ground of subjective experience and a phenomenal world and agency within it:

Spatiality and embodiment – and so, also, the idea of the locality in which action is embedded – are essential to the possibility of agency. Moreover, as agency is, in turn, an indispensable element in the structure of subjectivity, so subjectivity itself can be seen as dependent on spatiality and embodiment … Certainly the idea of the subject would seem to be inextricably tied to the idea of an organised, differentiated body located within an objective space, while the ordering of mental life – and so the psychological organisation of the subject – is grounded in the ordering of the space and spaces in which the subject is located and with respect to the which the subject is defined.

(p136)

Mundus Imaginalis - Human Imagination as the seat of the world

Imagination is Evidence of the Divine

William Blake

Sack (1997) emphasises the emplaced nature of human existence by referring to our species as Homo geographicus. Nettle on the other hand refers to humankind as Homo imaginans (Nettle 2001 p182) to demonstrate the significance of the human imagination in mediating or, indeed, generating our reality. I wish now to combine these perspectives to suggest that we can properly think of humans as Homo geographicus imaginans which is to imply that, on the one hand, the world is imaginary or humans imagine the world into being; and, on the other, the world creates the human imagination. This requires further elaboration since the first set of statements could be mistakenly taken to imply idealism and that the world is ‘illusory’; and the second could be seen as supportive of naïve versions of empiricism or realism. In everyday parlance the terms ‘image’ and ‘imagery’ are taken to refer to something visual. However, mental
images and imagery can be thought of as referring to any mental content to which meaning or recognition can be said to have accrued (Thomas 1999, no date). The defining characteristic of a mental image is that a label or category is pre-reflectively attached to the content of perception, hence 'perceiving-as' (something). Indeed, it is only when a mental image has been generated in this way that intentionality – the phenomenological experience of perceiving the world as given(-as) – can be said to have occurred.

The whole process from sensation on occurs through the operation of a human faculty, or cluster of holarchically interconnected faculties, referred to here as imagination. Thus, objects, 'things' and events are enacted by the imagination which is a process underlying all levels (subconscious and conscious) of human perception (sensation through to comprehension and onto creativity and semiosis). Human experience is always multisensorial, yet distinct modalities (see Table 4.1) are distinguishable within the overarching human ‘sensorium’ (Rodaway 1994) and each modality may be associated with a corresponding type of ‘mental image’. Thus ‘visual imagery’ represents a more precise analytical term to refer to the experience of ‘seeing-as’ which may be distinguished from auditory imagery (hearing-as), ‘olfactory imagery’ (smelling-as), haptic or cutaneous imagery (feeling/touching-as) and gustatory imagery (tasting-as). Clearly there is a fundamental embodied dimension to perception.

Furthermore, some make the distinction between two types of mental content in each modality, depending on their principal source. Thus ‘perception’ (e.g. visual perception) is used to describe mental content which is derived from environmental sources (ambient sensory array), in contrast to ‘mental imagery’ which is reserved for ‘quasi-perceptual’ experiences which are imaginatively generated from (the ‘relatively autonomous’) within and in the absence of environmental stimuli, that is the data which furnish the mental content are wholly ‘mental’ in origin (i.e. when the mental ‘pole’ is relatively disengaged from the environmental pole as during metacognition, fantasy, hallucination etc.).

However, this distinction will be blurred for present purposes, and the term ‘mental imagery’ or simply imagery will be used to describe both classes of mental content – exogenous and endogenous – since this brings with it particular benefits.
Firstly, it emphasises the relational nature of each (exo- and endogenous) subcategory to the other – they share a family resemblance phenomenologically (hallucinations seem real) and functionally precisely because they represent two relative poles in a single continuum. Secondly, it emphasizes the particular human faculty – the imagination – which is the shared ‘ground’ of both varieties and which represents the ‘bridge’ which crosses the Cartesian chasm between the material and mental realms. This, of course, represents a broader understanding of imagination than that used in everyday speech and in most philosophising. Thomas (op. cit.) presents a cogent argument in support of this expanded view of imagination which he suggests has precedents in the views prevailing in the Middle Ages (both within and outside Europe) and in the European Romantic Movement. His definition neatly encapsulates the understanding adopted in this thesis:

Imagination is what makes our sensory experience meaningful, enabling us to interpret and make sense of it, whether from a conventional perspective or from a fresh and original, individual one. It is what makes perception more than mere physical stimulation of sense organs. It also produces mental imagery, visual or otherwise, which is what makes it possible for us to think outside the confines of our present perceptual reality, to consider memories of the past and possibilities for the future, and to weigh alternatives against one another. Thus, imagination makes possible all our thinking about what is, what has been, and, perhaps most important, what might be.

(Thomas no date)

Actually, it would be better to think of the human world or mundane reality not as imaginary but as imaginai or a/the mundus imaginalis. These term were coined by Corbin (1964) to deliberately avoid intimations of unreality. Rather, he wished to privilege imagination as a special human capacity through which, and only through which, we come to know reality. Actually, Corbin’s intention was to argue for a special kind of ‘visionary knowledge’ through which veridical metaphysical knowledge of reality could be attained. This carries many of the same connotations as the term Veda introduced in Chapter 3 (and the relevance of these perspectives is discussed further in Chapter 5).
Environmental Image: ‘worldview’

The whole mundane world is presented as (present-as) a multisensorial Gestalt, ‘scene’ or ‘view’ (the apostrophes are intended to stress, once again, that the visual is only one modality amongst many that contribute to this Gestalt) which should be thought of as a macroscale model or image of the circumambient milieu constructed by the ‘imagination’. Thus, knowledge of the environment is something that is created in the mind of an individual as that individual interacts with the environment. The end product of the act of perception and cognition has been given a variety of cognate labels which were introduced in Chapter 2 (mental map; cognized environment; phenomic world etc.) which together describe the innate psychosocial construct comprising a cluster of cognitive structures or schemata constructed by individuals in transaction with the sociobiophysical environment, and through which humans construct meaning in the world. Furthermore:

Environmental images can be thought of as learned and stable mental conceptions that summarize an individual’s environmental knowledge, evaluations and preferences ... In this sense an image is a partial, simplified, idiosyncratic, and distorted representation that is not necessarily isomorphic to the real-world environment ... [A]n image can be thought of as part of the culture in which it develops. That is to say, an image is both an individual phenomenon and a cultural phenomenon to the extent that similar individuals in similar milieux are likely to have similar images in their minds and hence they are likely to exhibit similar forms of behaviour.

(Walmsley and Lewis op. cit p96)

An environmental image or ‘worldview’ in this perceptual sense is comprised of at least ten features:

1. A spatial component accounting for an individual’s location in the world;
2. A personal component relating the individual to other people and organizations;
3. A temporal component concerned with the flow of time;
4. A relational component concerned with the individual’s picture of the universe as a system of regularities;
5. Conscious, subconscious and unconscious elements;
6. A blend of certainty and uncertainty;
7. A mixture of reality and unreality;
8. A public and private component expressing the degree to which an image is shared;
9. A value component that orders parts of the image according to whether they are good or bad;
10. An affectional component whereby the image is imbued with feeling.

(ibid. p97)

‘Emplaced Imagination’ as synonym for ‘human being’

The preliminary mode of operation of the ‘emplaced imagination’, which gives rise to a phenomenal and intentional world or what is being referred to here as ‘mundane reality’, can be seen to correspond to Coleridge’s ‘Primary Imagination’ with its esemplastic power to generate a coherent whole or Gestalt. Without this esemplastic capacity one might speculate that the world (if such it could be called) would be present as an incoherent kaleidoscope of constantly shifting sensations that would provide no mental purchase at all and lead to dysfunction and extinction. Instead, the esemplastic imagination brings forth the mundane world – that which has been or ‘brought forth’ sensibly to consciousness and apparently is constituted by both an inner (subjective) world and an external world and has both conceptual and affective dimensions which are inextricably interconnected. This corresponds to the Kantian ‘phenomenal world’. What exists outside – transcendent to – this level of awareness but is constitutive of it represents the Kantian ‘noumenal’. This is an antemundane (prior to ‘sensible’) and transmundane ‘world’ that is outside the compass of ‘mundane world’ and not necessarily to be found materially in the external environment! For example, the pre-reflective, unconscious and phylogenetically-derived dimensions of human mentation (which, in a naïve sense, are

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19 The term coined by Coleridge to refer to the synthetic propensities of the imagination.
spatially located within the skull) can be seen as legitimately falling ‘outside’ this ‘mundane world’ in that they are not objectively present. Equally, the ‘inner world’ must not be conceived in the Cartesian sense of purely res cognita, and the phenomenologically objective ‘external reality’ actually constitutes the ‘inner world’ since it is subjectively present. Rather, inner and outer really represent two poles of a single existential autopoietic system, the former representing the phenomenological foreground and the latter the noumenal background. From this autopoietic system two principal and apparently but not actually distinguishable ‘scapes’ emerge syzygially – the ‘mindscape’ and the ‘worldscape’. The ‘ground’ or ur-scape is actually the ‘Mind-in-World’ (or equally legitimately ‘World-in-Mind’) autopoietic system. Such an understanding is one of meanings to be conveyed through the title of this thesis.

From the existential condition of being an ‘emplaced imagination’ are derived the ‘inner private’ phenomena (some might argue epiphenomena) more usually associated with terms such as fantasy, hypnagogic imagery, hallucination and the purely mental imagery that supports thinking and creativity. This final category corresponds to Coleridge’s Secondary Imagination which permits the creative or artistic act of semiosis. As an aside, Coleridge’s distinction between two qualitatively different levels of imagination in terms of their creative powers (both are creative but the second exhibits a higher degree of creativity and autonomy) can be placed alongside the notion of higher ‘visionary modes of knowing’ implied by the terms veda and imaginal discussed earlier (and to be discussed further in the next chapter). Thus, the same mental imaging capacity or continuum – imagination - is at work in all human phenomenological experience whether the resulting mental content is:

a) pre-reflective or reflected upon (and even subsequently creatively manipulated);

b) derived from the externally ‘real’ sensory array or is a ‘quasi-perceptual experience’ generated purely internally (i.e. independent of external stimuli).

Mental imagery is both created by, and provides the furnishings or phenomenal content for, the ‘emplaced imagination’ which must therefore be seen as an autopoietic and inseparable whole. Without emplacement – an existential context – or without
imagination or mind, the peculiar existential condition that is 'human being' itself would not be possible. It is worth stressing once again that ‘image’ in the sense used here is by definition ‘mental’ whether perceptual or quasi-perceptual – and can take the form of any type of sense available to the human ‘sensorium’, namely haptic or cutaneous (touch), gustatory (taste), olfactory (smell), kinaesthetic (performative actions), organic or visceral (bodily sensation), auditory (sound) and visual (sight).

However, it is generally assumed that ‘image’ refers to visuo-spatial or pictorial mental representation which reflects the fact that (with the exception of the sight-impaired and perhaps in certain ‘audiocentric’ cultural contexts) the pre-eminent and consequently paradigmatic ‘imaginary’ mode is visual. Much has been made of the visualism of particularly the Western Modern world in terms of the ‘authoritarian’, hierarchical and subjugating gaze of the ‘Western Enlightenment Male’ and there is a great deal of sense in arguing for a move towards a more dialogic or conversational model of human existence (Sui 2000). Nevertheless this is to miss the point. *Homo sapiens* does, according to ‘Habitat theory’ (Muir 1999), privilege the visual as a consequence of its evolutionary ancestry first amongst arboreal primates (where colour and stereoscopic vision were essential) and then the savannah hominids where vision was crucial to planning journeys across open vistas, and stalking prey or fleeing pursuit depended on seeing or gazing but not being seen (hiding). Therefore working with visuo-spatial imagery and developing ‘visual literacy’ are fundamental attributes and skills of humanity and should legitimately, but not exclusively, be developed. This provides a further justification for the relevance of geographical education given its particular proficiency in terms of graphicacy or ‘visual literacy’ which represents (alongside literacy, numeracy and oracy) the ‘fourth ace in the education pack’ (Balchin and Coleman 1965).
Person-Plus ...: The hybrid, heterotopic and ‘more-than-human’ nature of the mundane world

At the risk of repeating the point ad nauseum, whilst providing an important corrective to ‘naïve realism’, the problem with extreme versions of social constructionism is that they seem to argue that these socio-cultural schemas are *all* there is to reality. Rather, ecopsychologists, ecophenomenologists and poststructuralists who take a more geographical and ecological trajectory (Murdoch 2006) are presenting the possibility of a non-anthropocentric constructivism in which “organic beings, technological devices and discursive codes, as well as people” (Whatmore 1999 p26) are folded together as a ‘hybrid collectif’ (Callon and Law 1995) which can be thought of as a ‘heterogenous association’ or Actant Network (Latour 1994; Murdoch 1997, 2006) across which cognition should be seen to be ‘distributed’ (Salomon 1993). Hence, cognition is not just a feature of an individual’s mentation (person solo) but is in fact a relational phenomenon involving the person-and-surround or ‘person plus’ (Perkins 1993). Whilst Perkins tends to privilege technological artefacts (computers, writing implements etc.), the ‘surround’ with which cognition is distributed or by which the person is ‘augmented’ can be taken to refer to the environment or milieu generally, or even those aspects of the local-Global nexus within which one is currently ‘plugged in’ (technologically or biophysically). Happily the phrases ‘person-plus’ or ‘person-surround’ chimes with the phrase ‘more-than-human’ used earlier (or the increasingly popular phrase ‘post-human’) to describe this extra-individual and extra-human dimension of reality.

This distributive or relational understanding of cognition specifically, and ‘being-in-the-world’ generally, offers the possibility of a “radical metaphysics of ‘relative existence’” (Demeritt 2002 p775) which collapses the dichotomised categories of micro/macro, local/global, subject/object and, importantly, self/other and even myself/world. Thus people, artefacts, material elements, other creatures and even symbol systems like language and Root Metaphors can, and indeed should, be implicated in expansive notions of self identity and ‘self understanding’. This perspective shares a great deal with Haraway’s (1991) notion of the *cyborg* and Deleuze and Guattari’s (1987) *rhizomatics* to describe creative and processional networks ‘of becoming’ without
beginning or end occurring at the material, social and ‘thought’ levels. Taken together these notions present “an ambivalent ontology of folds and flows that is open to ‘multiple becomings in every body” (Demeritt op. cit p776).

The Distributed Mind and the ‘Floating World’

Thus an important implication of the enactivist model which is supported by these other relational perspectives, is that cognition or ‘mind’ is a distributed phenomenon, that is it cannot be thought of as existing exclusively within the brain of the ‘cognising subject’ but rather is a dialogical process occurring as a consequence of many entanglements ‘in-between’ this subject and their circumambient milieu. In a figurative sense these entanglements between the person and the surround can be thought of as extensions of the neural network they have at their disposal which is expressed as ‘person-plus’. This strongly suggests that in order to truly ‘Know Thyself’, one must come to know, through ‘relational reflexivity’ (Murdoch op. cit. p197) the ‘actant-networks’ or heterogenous associations within which one is continually becoming entangled. These entanglements might represent the phenomena of nature (the sub/more-than human world depending on the perspective taken). It is when entanglement entails cultural artefacts (scientific instruments, texts, works of art, etc.) and relationships (dialogue and collaboration with other people), however, that the cognitive capacities of any individual are augmented geometrically. Similarly, the ‘mundane world’ must also be seen to exist not ‘out there’ but rather in the ‘space between’ the epistemological poles. The Japanese notion of the Ukiyo – e or (image of the) Floating World provides a nice metaphor for this understanding which works on many levels relevant to this thesis (enactivism, imagination, art and religion):

The concept of ukiyo (or the "floating world") came from Buddhism, which taught that worldly joys and aspirations are transient. Since beauty, money, fame, love, and even life itself are impermanent, detachment from desire and craving would lead to understanding and enlightenment. However, in the hedonistic world of Edo-period Japan, ukiyo took on a new aspect. If joys were indeed fleeting, why
not savour them to the full while they lasted? The pictures (e) of these joys became ukiyo-e, scenes of the floating world.

(Addis and Seo 1996 pp95-96)

A Perceptual model

To conclude this chapter, an expanded version of Illeris’ (op. cit.) three-dimensional model is presented which attempts to integrate a number of important themes identified in this chapter (Figure 4.6). The model/diagram is intended to convey the following key points:

- The ‘Minded World’ is enacted in the ‘tension field’ between the Mind (Mental/mentation/’person’) pole and the circumambient milieu pole which comprises other humans, cultural artefacts, symbols systems etc. and non-human phenomena and processes.
- This phenomenal or mundane ‘world’ is given to ‘awareness-as’ as a Gestalt constituted by mental imagery (expressed in the circular symbol to represent this holistic feature).
- However, not all aspects of the environment are enacted to generate this mundane reality. Rather, non-essential information is ‘eliminated’ through perceptual processes.
- The pre-eminent mode of mental imagery among most humans is the visual. This is suggested by the inclusion of a Ukiyo-e woodprint which also carries intimations of both the beauty and the ephemeral nature of this enacted ‘reality’. However, the enacted mundane world is multimodal/multisensorial.
- The Mind may be further differentiated into an/the ‘Ideation’ pole (expressed metaphorically as the head) and the Affect(ive) pole (heart) but which are, of course, ultimately inextricable. The former furnishes the content (con-ception or re-cognition) of the phenomenal world whilst the latter presents a felt response or valuation towards the content of experience.
Figure 4.6: Human enaction of the mundane realm – an integrative perceptual model

- **head**
  - ideation
  - cognition

- **mind**
  - interiority; human mentation;
  - personal/’private’ world

- **heart**
  - affect
  - emotion

**floating world**

- **conception**
  - formed in the tension field between

**em-place-ment**

- Exteriory; environment

**Value (/) judgement**
- motivation
- orientation/attitude/intentionality
- i.e. attachment/dissociation

Foregrounding (enaction) & ‘backgrounding’/elimination
Consequence of:
- differentiation
  - (perceptual categorization)
- integration
  - (concept forming)

↓
- ‘scene’ or ‘concept’
Chapter 5: Epistemological Development and Incre(-)mental Worlds

Learning in, and from, Place

It is a contention of this thesis that the various critical and transformational traditions, whilst having different foci, share a common goal of engendering a 'relational reflexivity' (Murdoch 2006) or, expressed another way, a 'reflexive relationality'. It is a further contention that this goal will be greatly facilitated through a focus on 'place' understood in the multidimensional way outlined so far, although the various critical educational traditions have tended to stress different dimensions of human-place transactions. Thus, liberal/holistic educators, aiming to promote intrapersonal relationality (integrity and growth of the 'inner' or 'spiritual' domain) and individual-world relationality or even self-cosmos relationality (transpersonal growth), are likely to stress the complementarity of the intellectual and affective dimensions of the mind; and embodied-emplaced dimensions of human-place transactions. Experiential learning activities intended to engender intimate and multimodal interaction with the immediate environment are likely to be favoured. Many ecocentric educational programmes which seek to engender a 'love of nature' in rural and wilderness settings are of this type. Of course, the same rationale could be used to justify comparable types of intellectual, emotional and imaginative engagements within architectural, urban and cultural landscape settings (see Chapter 7).

More socially constructivist transformative educators are likely to stress the importance of promoting interpersonal relationality in which mutual learning is achieved through dialogue and 'critical correspondence' (see Chapter 3) between members of a 'community of enquiry' (Lipman 2003). Such a community will be necessarily 'place-based' where face-to-face encounters are promoted. Should the communication be more mediated and 'virtual' (as is increasingly the case in contemporary education through, for example, the internet), the community can still be considered as sharing the same place, albeit in the more abstract sense of 'virtual space' (chat room etc.); or in terms of the local-Global nexus through which they are able to communicate, and within which they are all ultimately implicated. Finally, more overtly socially critical and counter-
Hegeonomic educators wishing to promote critical systemic relational awareness are likely to favour pedagogies encouraging conscientization (Freire 1970) through a critically reflexive inquiry into the material and symbolic conditions of lived (i.e. place-based) experience in order to reveal how these are shaped by the hidden power geometries of societal structures operating across the local-Global nexus. Such an enquiry will be place-based in two senses: firstly, because power geometries are always worked out within the contingencies of particular places (whether the focus be the home locality or a distant one); and secondly, because the local-Global nexus represents a multi- or trans-scalar ‘place’ in its own right.

Actually, the above approaches are not mutually exclusive and it is a corollary of the above that they are, indeed, complementary. This thesis therefore argues strongly in favour of developing educational programmes or frameworks capable of integrating these diverse yet complementary ‘place-based’ educational approaches in order to develop a multidimensional, multimodal and multiscalar ‘relational reflexivity’ or ‘relational holism’ (Barnhill 2001) which is both place-inspired and -informed. The final chapter will present indicative educational frameworks and programmes which are felt to be capable of contributing to this aim.

However, as outlined in Chapter 1, there appears to be a tendency in some critical circles to downplay the significance of the ‘vertical’ dimension of transformative learning. Reflexive relationality, considered here to be a synonym for wisdom, represents a highly sophisticated and flexible frame of mind which iteratively shifts back and forth between a first and third person perspective. This is intellectually and emotionally demanding yet empowering. It is not an innate capacity but must be nurtured over the lifespan. Furthermore, its development is predicated on the attainment of a certain level of intellectual and emotional maturity. Many critical educators have reached this level of understanding themselves (at least in respect to some dimensions) and are understandably keen to engender it in others. However, without an appreciation of readiness of learners to progress to this level, educators are likely to make unrealistic demands on learners, and their efforts could be counterproductive or even disempowering. Consequently, this chapter considers the goal of ‘reflexive relationality’ or wisdom from the perspective of
developmental psychology so that any educational formulation which has this as its goal will be better informed.

**Epistemological Levels: the perspective from developmental psychology**

Enactivism is a general biological theory of cognition which accounts for the moment by moment co-creation of transactional ‘epistemologies’ or ‘states of consciousness’. These can be thought of as “patterns of mind or brain activity that structure regimens of experience in certain ways” (Combs 2002 p10) and which are implicated in the enaction of an umwelt which, if brought into awareness, could be considered to be a ‘worldview’. Such epistemologies are generally habitual, that is a particular organism tends to undergo the process of enactivism in a generally similar way throughout its lifespan. However, when considering human enaction a significant, although not unique, additional characteristic is learning, that is, the maturation of these ‘patterns of mind’ in response to transactional dynamics. ‘Education’, whether formal or informal, is a universal field of human attention and endeavour (Segall et al. 1999) which is specifically concerned with this human maturation process, and which carries certain implicit assumptions about the human condition, namely that: human epistemology is modifiable; certain epistemologies are more adequate than others; the general trajectory is from less to more adequate; time and experience is important in this respect (e.g. young children are less able to function independently than older children); and this process is facilitated, even catalysed, by interventions from the wider socio-cultural context.

However, there is a disagreement amongst educational theorists as to whether this epistemological development occurs through a series of discrete stages or not. This thesis subscribes to a qualified version of the latter, namely a neo-Piagetian perspective (Kegan 1982, 1994; Kincheloe, Steinberg, and Hinchey 1999) which suggests that an individual undergoes qualitative epistemological shifts or transformations from less to more adequate functioning through the restructuring of cognitive schemas in response to ongoing environmental transactions and cognitive maturation. The Vygotskian (Vygotsky 1978) approach lays a greater emphasis on dialogic interaction with ‘external’ human others i.e. the socio-cultural context which must represent a crucial dimension of
any theory of learning. However, as has been stressed in previous chapters, dialogic engagement with other-than-human or more-than-human phenomena is also crucially important, and possibly more fundamental, as is cogently argued by Abrams (1997) and Preston (2003).

From the neo-Piagetian perspective human mentation passes through a number of qualitatively different epistemologies or ‘patterns of mind’, each associated with a different mode of ‘being and knowing’ and, consequently, each enacting a different mundane reality associated with different experiences of self and world/other. Clearly the term ‘neo-Piagetian’ implies an extension of, but also implicit critique (to a lesser or greater extent) of, Piaget’s original theorising. The most significant aspect of this critique is the expected ‘end point’ of cognitive development and the age at which this might occur. Thus, whereas Piaget believed that, to all intents and purposes, cognitive development had reached its apogee in adolescence with the development of formal operational thinking, neo-Piagetians identify a further post-formal level of development. For neo-/post-Piagetians, further development is possible for the remainder of the lifespan and, indeed, a significant, but largely ignored, phase of development is from late adolescence into adulthood i.e. the period of ‘post-formal’ education. This can potentially give rise to a qualitatively different (and more adequate) mode of thinking than the ‘either/or’ or categorical logic of formal thinking in favour of reflective and dialectical (both/and, or relational) thinking, precisely that demanded by ‘reflexive relationality’ or wisdom. This view of human mentation passing through a series of stages or ways of ‘being and knowing’ has a long history and is apparent in my religio-philosophical systems or so called ‘Wisdom Traditions’ (see below).

Another key criticism of Piaget is his apparent lack of attention to factors beyond the individual transacting with the material world. Thus, increasingly theorists and practitioners, following Vygotsky and others, are demonstrating the importance of interpersonal and social forces in thinking – specifically in the notions of the socially constructed nature of knowledge/understanding/meaning and ‘distributive cognition’ (Salomon 1993). This is giving rise to an extension of the idea of cognitive development and discrete ‘thinking’ stages beyond the level of the individual and an increasing emphasis in educational circles upon the development of skills of dialogic collaboration.
and argumentation (Morgan 2006) and what has been referred to in this thesis as ‘critical correspondence’ (Chapter 3). Other important criticisms of Piaget relate to the ethnocentric (White-Western), androcentric (male-focused), and logocentric (rational, universalistic and abstract thinking) biases apparently implicit in his work; and the rigid, invariant and universal linear sequence of stages to be passed through (Kincheloe and Steinberg 1999).

A number of neo-Piagetian formulations have been presented, some remaining firmly focused on one strand of development such as the purely cognitive dimension (Reich 2002); Moral development (Korthals 1997); or ‘spiritual’ development (Cartwright 2001). For the present purposes, the model proposed by Kegan (1982; Kegan 1994) shall be used since this can be applied to most dimensions of thinking. His model presents five qualitatively distinct epistemological stages or ‘orders of consciousness’ that an individual might pass through during the course of epistemological development (see Figure 5.1). In outline, Kegan’s perspective, following Piaget, sees the forces driving the shift from one epistemological level to another to be a combination of mental maturation and accumulated life experience which decentre erroneous and therefore inadequate habitual modes of transacting with reality, leading to a new and more adequate epistemological frame. However, Kegan extends Piaget’s theory in a manner which addresses the key criticisms outlined above. Thus Kegan recognises a post-formal level of development and adopts a more overtly social approach in his development theory and even goes so far as to imply that epistemological orders can be manifest at the level of both individuals and societies or civilisations.

The diagrams used by Kegan to exemplify the respective stages (Figure 5.1) are very useful heuristics for revealing the increasing categorical content and systemic complexity as one ascends the developmental ladder. Thus, at level one a single category – the (possibly) pre-egoic subjective-self – begins to be discerned (indicated by the black dot). At level two other elements of the ‘lifeworld’ are discerned and integrated into a durable category – the ‘self’ or ‘mine’ – which is, at this level, largely egocentric (indicated by the prevalence and centrality of the black dot). This corresponds approximately to Piaget’s stage of concrete operations. At level three durable categories
other than the self – non-self – are discerned and become part of an expanded ‘horizon of concern’.

![Figure 5.1: The Five Epistemological Orders: reproduced from Kegan (1994 pp314-315).]
At level four a deeper underlying structure is discerned to the ever expanding durable categories through the operation of abstract thinking. This permits logical systems of thought to develop and rational perspective taking. This stage corresponds to Piaget’s final ‘formal operations’ developmental stage. However, should this single rational perspective be challenged through the encountering of other equally rational, yet different, perspectives to one's own, then it is radically challenged or ‘decentred’ (the value of ‘critical correspondence’). Level five represents a stage at which these different, and potentially paradoxical, perspectives can be accommodated within an expanded multi-perspectival ‘trans-system’ of rationality which is intellectually demanding. The rewards, however, are great since the ‘thinker’ is now presented with a mode of thinking or ‘being and knowing’ which is qualitatively richer and more adequate that had previously been the case give the complex multidimensional nature of reality.

Kegan is not alone in suggesting that cognitive development can (and should) proceed beyond Piaget’s stage of formal operations. Indeed, Kincheloe et al. (1999) (working independently from Kegan) have instigated an increasingly popular critical constructivist position within educational theorising which they also refer to as ‘post-formal’. In addition to more sophisticated modes of cognition, their formulation of this ‘post-formal’ level of thinking integrates emotion, spirituality, intra- and interpersonal intelligence, a perspective which is strongly supported by this thesis. However, focusing temporarily on just the cognitive dimension, a key epistemological transition in transformational learning terms (vertical sense – see Chapter 1) is the shift from ‘categorical’ reasoning which utilises ‘either/or’ logic to dialectic reasoning and hermeneutics (stages 4 to 5 in Kegan’s schema). This key transition involves the shattering – deconstruction – of sedimented and habitual formal modes of thinking to permit the development of new more dynamic or ‘thixotropic’ ones (Chapter 3).

However, the danger is that this process becomes arrested in the deconstructive stage in which case the analysis of human existence becomes deeply unsettling and unworkable, potentially leading to nihilism, extreme relativism and solipsism. Hence ideally the ‘post-formal’ rationality permits the development of a new worldview which permits a qualified relativism, i.e. an acceptance of the relative truth validity of all perspectives, but the equally important recognition that, whilst never perfect, some
perspectives – multiperspectival ones – are ‘more adequate’ than others. This is important since it provides judgement criteria – perspicuity, perspicacity and inclusivity – against which to test an ideological perspective that means it is not necessary to resort to extreme relativism but is, rather, imperative to challenge and reject heinous exclusionist modes of thinking such as fascism and Nazism as woefully inadequate forms of thinking ‘arrested in development’ some way down the epistemological ladder, probably Kegan’s level 2.

**Individual and Geographical/Cultural differences and the thorny issue of development**

The second issue that Kegan’s model raises implicitly, if not exactly explicitly, is that he has related his ‘individual’ epistemological levels 3, 4 and 5 to ‘Traditionalism’, ‘Modernism’, and ‘Postmodernism’ respectively. This reflects a common tendency in some developmental psychology circles to relate individual stages to societal stages, a type of ‘ontogeny recapitulates phylogeny’ (or, in this case ‘individual thinking recapitulates the development of civilisation’) logic. The ‘Up from Eden’ hypothesis (Wilber 1996) and Spiral Dynamics (Beck and Cowan 1995) follow this same logic which is persuasive but replete with dangers, not least in terms of implying the relative superiority of one culture over another and privileging one’s own culture as occupying such a superior position (ethnocentrism).

Treated with caution, however, it is useful for the present purposes, since it suggests that the postmodern critique of modernity probably has a basis in cognition at the ‘individual’ level in terms of a mismatch between one (higher order) epistemological perspective and another, namely post-formal and formal respectively. It also permits a critique of one’s own culture and a re-evaluation of others in terms of the degree of post-formality in evidence. Hence some non-Western (geographical sense), ‘pre-Modern’ (chronological sense) and indigenous (locally contingent/contextual sense) societies might be re-evaluated as operating with a post-formal rationality (at least in a ‘distributive’ sense or in terms of *certain* members of those societies, most likely identified as ‘elders’ or the ‘wise’) whereas the ‘centre of gravity’ of Western society...
might actually qualify as, at best, merely formal but more probably pre-formal! The value of this 'developing civilisations' approach is that it sets individual thinking firmly within the societal context which is presumably supported by social psychologists from the (post/neo-)Vygotskian perspective. However, it also provides an epistemological justification for adopting a postmodernism of reconstruction as opposed to merely of deconstruction (Chapter 1).

This thesis supports the view that all societies have developed culturally specific, 'traditional' or 'indigenous' knowledge which is comparable with 'Western' science in that they all apply “the same general intellectual process of creating order out of disorder ... [involving] curiosity driven enquiry” (Berkes 1999 p9). Indeed, Livingstone (2003) has argued that Western science should itself be seen as an indigenous knowledge which has colonised the world. Such a perspective suggest that “[t]he worlds of the shaman and the scientist are two parallel modes of acquiring knowledge about the universe” (Berkes op. cit. p9). This is not to deny that there are important differences, namely that “the physical world is approached from different ends in the two cases: one is supremely concrete, the other supremely abstract” (Levi-Strauss cited in ibid p9). Similarly, Nisbett (2003) argues that Westerners and East Asians think differently, due to their respective socialisation into societies based on very different cultural trajectories, the former based on Ancient Greek and the latter on Ancient Chinese worldviews (see Table 5.1).

<table>
<thead>
<tr>
<th>Ancient Greek</th>
<th>Ancient Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>decontextualisation</td>
<td>contextualisation</td>
</tr>
<tr>
<td>identification of discrete categories, objects and essences</td>
<td>no essences apart from context</td>
</tr>
<tr>
<td>non-contradiction (either/or) logic</td>
<td>dialectical (both/&amp; ) logic</td>
</tr>
<tr>
<td>'stasis'</td>
<td>'flux'</td>
</tr>
<tr>
<td>'progress', discovery of Truth</td>
<td>'harmony'</td>
</tr>
<tr>
<td>dualistic – subject/object: human/nature; past/present/future</td>
<td>Non-dual</td>
</tr>
<tr>
<td>abstraction/logic</td>
<td>‘Middle Way’ (immersive) empiricism</td>
</tr>
<tr>
<td>individual: agency, freedom, rights</td>
<td>collective: agency (family, tribe. nation): support network. responsibility</td>
</tr>
</tbody>
</table>

Table 5.1: Contrasting characteristics of Ancient Greek and Ancient Chinese Worldviews (adapted from Nisbett 2003)
However, the crucial issue is that whatever form this culturally specific knowledge takes, it is not innate but must be learned across the lifespan. That is developed. Whilst some are suspicious of any linear developmental logic, seeing it as a Western perspective emerging from the region's Judaeo-Christian heritage and/or the Enlightenment project, it is difficult to see how one can understand education and learning without such a perspective. Harvey (2005) reveals that the tendency within anthropology in the past to dismiss animism amongst indigenous cultures as merely the childish magical thinking of a primitive society was indeed based on an erroneous ethnocentric developmental perspective. What it also failed to do, however, was to apply a developmental logic within the primal society thereby failing to recognise that "Elders, more than children, are better acquainted with 'the way of being human' [as they able to] ‘... blend phenomenological ‘facts’ – of the kind that present themselves to fully engaged and reflective people – with knowledge that is counter-intuitive or contested by what presents itself as self-evident or veils itself as extraordinary" (p173). Harvey’s use of the term ‘wisdom’ to describe this mode of “being more human and more engaged in the life of this world” (p173) is commensurate with the way the term is being used in this thesis to refer to the post-formal or multiperspectival level of development.

The post-formal subject? 1: inter- and trans-disciplinarity

Focusing specifically on the Western Academy, this constructivist position can be applied to the perspective of a specific discipline (made up of many individual academics working from a particular perspective or paradigm) which is the approach adopted by Kuhn (1996) in his notion of paradigm shifts. Sternberg (2003) suggests that creativity is required for a discipline to evolve and creativity, as understood in this thesis, is also associated with post-formal thinking. Thus a postformal level of thinking allows some innovators to question and creatively reshape the discipline from within. By way of exemplar, the discipline of geography which already straddles a variety of disciplines and paradigms has, increasingly in recent years, been attempting to reintegrate its diverse sub-disciplines. It has also increasingly looked outward, benefiting from the insights of other academic disciplines. Massey’s (1991) ‘Global Sense of Place’; Haraway’s (1991)
notion of the ‘Cyborg’; Whatmore’s (1999) ‘Hybrid Geographies’; and Soja’s (1996) ‘Third Space’ represent a short selection of recent creative advances in the discipline of geography brought about through, it is argued here, the application of ‘post-formal’, dialogical and dialectical reasoning or a ‘reflexive relationality’. Two anthologies have recently been produced that almost represent ‘manuals’ of creative/post-formal thinking in geography, environmental studies and cognate disciplines, namely Patterned Ground: Entanglements of Nature and Culture (Harrison, Pile, and Thrift 2004) and Imagining Nature: Practices of Cosmology and Identity (Roepstorff, Bubandt, and Kull 2003). Similar inter- and trans-disciplinary trajectories can be traced within other subjects and, indeed, the whole post-modern or post-structuralist informed Academy.

**Wisdom: Postformal Thinking, creativity, and reflexive relationality**

The concept of ‘wisdom’ was an important dimension of philosophical discourse up until the Enlightenment but with “the process of secularization, wisdom lost its salience as one of the fundamental categories guiding human thought and conduct” (Staudinger and Werner 2003 p584). However, there has been something of a resurgence in attention to ‘wisdom’ particularly in the fields of developmental psychology (ibid.; Sternberg op. cit.) and transpersonal psychology (Miller and Cook-Greuter 2000) which point to the importance of the human mind and its capacities for transformation leading to different modes of relating to, or ‘being and knowing’ in, the world. According to Staudinger and Werner (op. cit.) there are six universal characteristics of wisdom (Box 5.1).
1) Wisdom deals with important and/or difficult matters of life and the human condition;
2) Wisdom is truly superior knowledge, judgement and advice;
3) Wisdom is knowledge with extraordinary scope, depth, and balance applicable to specific situations;
4) Wisdom is used for one’s good and the good of others;
5) Wisdom combines mind and character; and
6) Wisdom is very difficult to achieve but more easily recognised

Box 5.2: Six characteristics of Wisdom common to different cultures and historical times (adapted from Staudinger and Werner op. cit. p585).

Similarly, Sternberg (2003) identifies six components of wisdom based on a study of college students: reasoning ability; sagacity; learning from ideas and the environment; judgement; expeditious use of information; and perspicacity. He also identifies five components:

(a) rich factual knowledge (general and specific knowledge about the conditions of life and its variations), (b) rich procedural knowledge (general and specific knowledge about strategies of judgement and advice concerning matters of life), (c) life span contextualism (knowledge about the contexts of life and their temporal [developmental] relationships), (d) relativism (knowledge about differences in values, goals, and priorities), and (e) uncertainty (knowledge about the relative indeterminacy and unpredictability of life and ways to manage).

(Stemberg 2003 p150)

It is a contention of this thesis that ‘post-formal’ thinking or reflexive relationality is the cognitive basis of ‘wisdom’. Effective intelligence and creativity are necessary but not sufficient features in the development of wisdom (ibid.). They are necessary in that wisdom demands the transcendence of the ‘either/or’, i.e. categorical, logic of formal thinking in favour of reflective and dialectical (both/and, i.e. relational) thinking.
However, unless this is undergirded by a trans-egoic motivation of service to the 'greater good' then wisdom cannot truly be said to be in operation (ibid.). Thus, according to some neo-Piagetian theorising, wisdom represents a post-formal and trans-egoic level of 'thinking and feeling' that is developed through the lifespan as a consequence of iterations between cognitive development and the incremental and ever varied experiences derived through transacting with the 'lifeworld' and the resources or 'things' therein: human, societal, artefactual and 'more-than-human' (nature). This development proceeds through increasingly sophisticated and higher order cognitive phases leading to ever-deepening experiences of 'being-in-the-world' and more adequate modes of 'being and knowing'. Most subscribers to the 'post-formal' perspective:

emphasize the importance of various kinds of integrations or balances in wisdom. At least three major kinds of balances have been proposed: among the various kinds of thinking [multiple intelligences] ..., among various self-systems, such as the cognitive, conative [volitional], and affective ..., and among various points of view.

(Sternberg op. cit. p151)

Kincheloe and Steinberg (1999) delineate the characteristics of post-formal thinking from their perspective, as summarised in Box 3.3. Hopefully the relevance of these features to the notion of ‘wisdom’ as being developed here will be self-evident.

- **Etymology** – exploration of the forces that produce what the culture validates as knowledge
  - The origin of knowledge
  - Thinking about Thinking – exploring the uncertain play of the imagination
  - Asking unique questions – Problem Detection
- **Pattern** – the understanding of the connecting patterns and relationships that undergird the lived world
  - Exploring Deep Patterns and Structures – uncovering tacit forces, the hidden assumptions that shape perceptions of the world
  - Seeing relationships between ostensibly different things – Metaphoric Cognition
  - Uncovering different levels of connection between Mind and Ecosystem – revealing larger patterns of life forces
• **Process** – the cultivation of new ways of reading the world that attempt to make sense of both ourselves and contemporary society
  - Seeing the world as text to be read
  - Connecting Logic and Emotions – stretching the boundaries of consciousness
  - Non-linear holism – transcending simplistic notions of the cause-effect process

• **Contextualization** – the appreciation that knowledge can never stand alone or be complete in and of itself
  - Attending to setting
  - Understanding the subtle interaction of Particularity and Generalization
  - Uncovering the role of power in shaping the way the world is represented

Box 5.3: Characteristics of post-formal thinking (adapted from Kincheloe and Steinberg 1999 pp62-81).

**Developing the Emplaced Imagination; Transforming the Mundane World**

Having justified a general critical constructivist and neo-Piagetian developmental schema, and pointed to the possibility of a desirable end state – wisdom – which is characterised by a ‘reflexive relationality’, we may now return to the model presented at the end of Chapter 4 in the light of this. Following Kegan, a series of stage-diagrams will be presented to show how the general ‘trialectic’ model presented in Figure 4.3 undergoes transformation (i.e. is dynamic) through the lifespan. In the early stages of development (neonatal and early months) mentation is somatopsychic, that is thinking-emotion-embodiment-environment are all inextricable (Figure 5.2a). Gradually, the different dimensions of the trialectic model condense out of this chaotic morass to generate the stable categories of self and other (Figure 5.2b) which corresponds to Kegan’s stage 1. Here the trialectic has formed, and the ‘mundane’ world starts to emerge but is not as yet distinguished (the dashed circle) and the single most salient feature of this world is the newly identified ego-self (black circle). This ego-centre (egocentricity) is the focus from which the emerging mundane world proceeds. As development continues, other salient features in the milieu are perceived-as and thereby
incorporated into (foregrounded or enacted within) the mundane world (Figure 5.2b – the white circles). Consequently, the mundane world can be thought to become more defined, detailed and expansive in scope as more of ‘reality’ is epistemologically enacted or ‘encompassed’. These are then integrated into a self-referential (my or mine) system (Figure 5.2c which relates to Kegan’s level 2). Gradually ego-centricity gives way to an appreciation of the ‘other’ (i.e. not directly self-referenced) features (other people, artefacts and non-human features) in their own right. This stage (Kegan’s level 3) is characterised by interpersonal modes of relating and the integration of other-than-self-referential systems (indicated in red in Figure 5.2d). However, the rationality associated with these early periods is likely to be pre-rational, i.e. sense of the world is made through recourse to ‘magical thinking’ and/or an indoctrinated ‘mythic’ worldview, that is an uncritical acceptance of the received ‘orientating story’ hegemonic within one’s culture.

Figures 5.3a and b focus on development after Piaget’s ‘formal operations’ has been reached and the application of abstract systems of logic permits ‘rational’ or categorical thought. At this level the prevailing societal orientating story or mythic system is no longer accepted uncritically (and, indeed, may well be rejected), and meaning-making proceeds through recourse to rational argument. Thus, Figure 5.3a represents formal and abstract thinking which is capable of identifying an underlying logic to phenomenal world, albeit a monological or syllogistic one and utilises a linear, literal and discursive logic. Figure 5.3b represents a higher order of formal thought and possibly post-formal thinking. At this level, the holarchical nature of reality is starting to be discerned. The final diagram in this sequence (Figure 5.3c) represents the post-formal level associated with ‘wisdom’, that is a mode of ‘being and knowing’ characterised by ‘reflexive relationality’. This stage is characterised by mythopoietic thinking associated with the emergent reflexive ‘imaginal’ capacity or ‘creative imagination’. At this level, creative re-evaluation of the previously unreflective worldview leading to the discernment of deeper meaning concerning the mystery of existence at the autobiographical (depth psychology) and/or societal levels is possible, as is the reflexive generation of new more relevant (personally and/or socially) ‘meaning-bearing stories’ or
‘myths’. This hermeneutical (concerned with establishing meaning) level is associated with poetical, metaphorical and mythopoietic discourses.

Figure 5.2a: The inchoate somatopsychic complex (as yet undifferentiated into the epistemological trialectic [background image source: http://www.ocean.washington.edu/research/gfd/disk.html - accessed 8.10.06].

Figure 5.2b: Epistemological trialectic now established and durable categories discerned (ego/self being paramount).

Figure 5.2c: Self-referential/egocentric relational network – ‘mine’ – established.

Figure 5.2d: Other-referential systems also acknowledged.

Figure 5.2: The development of self and other systems permitting the development of formal rationality
Figure 5.3a: Monological/syllogistic/'either-or' rationality.

Figure 5.3b: Complex/holonic/multidimensional rationality.

Figure 5.3c: Mythopoietic/transpersonal mode of 'being and knowing'.

Figure 5.3: The development of increasingly sophisticated/more adequate 'rationalities' – from formal/monological/syllogistic to relational/dialectical.
The post-formal subject? 2: personal

Much has been made of the 'death of the subject' in deconstructive postmodern discourses which refers to the loss of a stable sense of 'self'. This makes sense within the developmental schema being developed here in terms of the dissolution of a Modern or formal sense of self (Kegan's level 3; Figure 5.3a) which is characterised by a tendency towards dichotomising; applies a monological/syllogistic rationality ("I am this, but not that"); and is logocentric (privileges rational thought over other modes of knowing). This mode of 'being and knowing' is engaged with reality 'centrically' or through self-referential categories (ego-, ethno-, logo-, anthropo-) and the 'self' is narrowly identified with the 'skin encapsulated ego' (Macy 1990), or a community of identity (ethnicity, disciplinary/scholarly, species). This mode proves woefully inadequate in terms of postmodern complexity and is consequently decentred. However, a reconstructive postmodern reading would suggest that this situation should give rise to a 'resurrection' of the self – a more adequate sense of self that is fluid, dynamic and multidimensional ("I am this but also so much more than this").

Musgrove (1977) identified the tendency for people living on the societal margins, either involuntarily and stigmatized (due to disability or sexual preference) or voluntarily (religious communities), to undergo creative 'modifications of consciousness' and positive personal development through this experience of marginality. These observations are likely to have more generalisability relevance within contemporary society than was perhaps the case in 1970s Britain given the processes of globalization and environmental degradation outlined in Chapters 1 and 2, features which are, to an extent, making us all live 'on the margins' (e.g. between cultural identities and the 'human-nature divide'). Similarly, Lifton (1993) presents exemplars – such as Malcolm X and Vaclav Havel – of people who have undergone a sequence of personal maturation in response to the adversities of their lifeworlds, and he suggests that the contemporary world is increasingly calling for this level of maturation from us all. Lifton refers to this emerging 'sense of self' as protean (after the Greek shape-shifting sea-god). Two further neologisms are offered here: first, the thixotropic self (following the previous discussion); and second, following others (Bowie 1998; De Botton 1998; Tzonis 2003; Malpas 1999).
the *Proustian self*. The latter suggestion is offered partly because of the pleasing alliteration with Lifton's term but more importantly because these authors all identify Proust as an exemplar of a richer and more fulfilling sensual and imaginative – mythopoietic – engagement with the world which, given Proust's artistic (as opposed to geographical or environmental) credentials, fits well with call for an integrative manner of 'being in the world' called for in Chapter 3 and throughout this thesis. Still, Proust was undoubtedly very self-centred and so a further level of 'personal' development might be posited in terms of the *trans*-personal in which the ego-centredness gives way to 'Reality-centredness' (Hick 1989, 2004).

As one proceeds through these levels of development, the 'scope' of mundane reality is 'expanded' as more of 'reality' is encompassed or 'brought forth'. This can be represented diagrammatically as a series of expanding concentric spheres (Figure 5.4) so that mundane reality at the transpersonal level is vastly more expansive than at the 'ego-centric' level. Actually, this should not be take to imply that once a certain level has been reached that becomes the only mode of 'being and knowing', since the pre-reflective mode associated with a narrow empirical ego-centred sense of self remains the norm or 'ambi cognitive'. Rather, the capacity to *occasionally* shift into the mythopoietic and transpersonal modes is made possible once these capacities have been 'drawn out' (*educere*), uncovered (*alethia*) or nurtured (the choice of terms is deliberate to stress the education implications of this perspective). Thus, the various spheres should rather be imagined as expanding and contracting in one who has developed to this level.
Figure 5.4: The ‘types of self’ arranged hierarchically.

Ideation and Affect revisited: a neurological basis for the expansive nature of reason and emotion in human mentation

Chapter 4 discussed the mind in terms of an ‘ideation-affect’ dyad through which ‘value-category memory’ is derived. Generally, human mentation can be seen as being either functional or adaptive, on the one hand, or dysfunctional or pathological, on the other. Thus, functional or adaptive mentation is associated with ‘consensual reality’ and permits ‘normal’ functioning within the world. Pathological mentation leads to a breakdown of normal functioning and may be associated with diagnoses such as schizophrenia (ideational dysfunction) and depression, anhedonia or mania (affective dysfunction) although these pathologies may be interconnected given the close connection between thought and emotion, and the generic term schizoaffective disorders might be more appropriate (Nettle 2001).

Recent thinking in the cognitive science posits that a continuum of ‘ideational-affective’ processes exists within human mentation ranging from ‘normal’ or
ambicognitive through to pathological with an intermediate or 'liminal' zone between. The term thymotypy has been coined to refer to "the liability of having one's mood spiral off centre" (ibid. p155). This can be seen as beneficial in terms of the argument presented in this thesis since 'deep' discontentment and/or 'heightened' emotions such as ecstasy and sustained high mood could provide the catalysts and incentives for personal transformation. Similarly, the term schizotypy has been coined (Claridge 1997) to refer to ideational processes associated with divergent thinking and the loosening of categorical associations. Less information is 'eliminated' through neurological processes (see Chapter 4) and new and innovative connections or relations between phenomena are discerned. This might, for example, give rise to a "loss of the boundary between the self and the world" (Nettle op. cit. p126) and/or a 'loss of the middle distance' in which "the objects of the world do not always present themselves at the conventional, person-sized level of analysis ... [and a schizotypic might be] strangely aware that other people are composed of atoms, or of cells, or alternatively overwhelmed by the vastness of the universe while talking to someone" (ibid. p121). Schizotypal cognition might represent the neurological basis for 'relational reflexivity' in which an individual has a "heightened awareness of the world and of imaginative connections within it" (p135). Nettle uses the term 'Strong Imagination' to refer to a combination of schizotypy and thymotypy. This phrase is taken from *A Midsummer Night's Dream* and therefore links nicely back to the Shakespearian sense of Art discussed in Chapter 3 and to the recurring focus on the human imagination throughout this thesis.

'Strong imagination' is something which might come naturally to some – societal eccentrics, creatives, charismatics – given their genetic and epigenetic endowments but can also be cultivated (ibid.). However, this is likely to make great intellectual and emotional demands and require a concomitant focus on learning to handle the emotional and intellectual rollercoaster which is unleashed to avoid a 'descent' into pathology. Consequently, for ethical and intellectual reasons, efforts to nurture a 'strong imagination' should not be undertaken lightly and requires a prerequisite level of intellectual and emotional maturity to have been reached. It is a contention of this thesis that many of the world's esoteric religiophilosophical Traditions have evolved sophisticated practices precisely in order more safely to cultivate this type of 'strong
imagination’ or ‘benign schizotypy’ (Jackson 1997) which is why they are often referred to as ‘wisdom traditions’.

**Epistemological Development from a religio-philosophical perspective**

The choice of a Celtic/Insular Christian pattern (from the Book of Kells) to represent ‘reflexive relationality’ (Figure 5.3c) is intended to convey a possible relationship between the cognitive and religio-philosophical perspectives in terms of developmental dynamic and thereby open up the discussion and ‘mix the discourse’ by integrating certain insights at the intersection of these perspectives. Fowler’s developmental schema for religious thinking (cited in Wulff 1991) can be most clearly related to this neo-Piagetian schema but it would employ a circular argument to use this as warrant for a stage-like progression since he purposively attempted to apply Piagetian thinking to this field. However, various religio-philosophical systems have posited a stage-like progression to ‘enlightenment’. For example, Chan/Zen Buddhism teaches of 10 stages to enlightenment which are artistically/metaphorically exemplified by the famous Ox-herding sequence20.

Hinduism teaches that the individual soul (jiva) is surrounded by five sheaths (kosas): the food- (annamaya), vital- (pranamaya), mental- (manomaya), intellectual- (vijñanamaya) and bliss-sheath (anandamaya). It is interesting to compare these sheaths with the different levels of cognition presented in Figure 4.2. Morgan (1990) discusses the Hindu principle of adhikara or level of religious competence which might be seen to represent the extent to which an individual is aware of these different levels of being:

our reactions to the Holy, the Sacred, are determined by the level of competence we have attained, a level that may go up or down depending on varying circumstances. Some persons can see almost nothing that could be called divine, some with little competence have distorted vision, and some people have attained amazing wisdom.

He goes on, however, to stress that it is important:

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20 The 10 Zen Oxherding pictures may be accessed from [http://zen.thetao.info/perceive/10oxen.htm](http://zen.thetao.info/perceive/10oxen.htm).
... to observe the level of competence of individuals – but without making comparative judgements like a professor grading papers from A to F, without judging any person’s religious competence to be higher than another’s, or using one’s own level of competence as a measure for comparing others.

(ibid.)

Similarly, according to Pleins (2003), Medieval Christian and Jewish scholars adopted a four-tier interpretive or hermeneutic framework when dealing with divine ‘texts’, namely the literature of the Bible or the ‘Great Book’ of Creation (the material world). Thus, Christian scholars considered these texts from one or more of the following perspectives: literally; allegorically; anagogically (mystically); tropologically (morally). Medieval Jewish Rabbis employed a system known as ‘pardes’ which was a Kabbalistic acronym for the fourfold layering of the Torah, which consequently directed the possible hermeneutic frame to adopt and implied that no one frame in isolation could lead to divine revelation:

**Peshat** - literal
**Remez** - use of metaphor
**Drash** - ‘midrash’ – legend or allegory
**Sod** - mystery

That appropriate divine knowledge was to be found within and between these hermeneutic frames is also implied by the term *pardes* which is etymologically related to ‘paradise’ (enclosure, park, pleasure garden [Persian *pairi-daeza*]).

Returning to the model being developed here, earlier or more restrictive modes of ‘being and knowing’ can be considered to lie at the literal end of the spectrum of hermeneutic frames, with more ‘advanced’ ones lying towards the metaphorical and even possibly mystical. At the level of relational reflexivity ‘rationally’ – the form of thinking which divides up (*ratio*) reality into discrete categories (see Chapter 3) gives way to systemic and relational – *trans-ratio-nal* - modes of ‘thinking’. This perception of a mundane ‘world of relatedness’ cannot be separated into intellectual and affective
dimensions (which are equally experienced in relation) and the mundane world is perceived as a wondrous place which elicits devotion, respect, reverence, humility and invites communion (possibly even identification), worship (worth-ship) and service. At this level distinctions between self and other; inner and outer; intellect and affect; mind, body and spirit are partially collapsed and a transformation from an ego-centred to a 'Reality-centred' (Hick op. cit.) mode of 'being and knowing' has taken place.

The mundane world at this level of 'being and knowing' is an hierophany, that is a manifestation of the underlying Ground of existence which is 'sacred', 'holy' and 'divine'. The mundane world perceived as such is realised as a 'precinct of Heaven' full of signs and wonders that articulate a deeper Reality beyond the surface appearances and one to which the perceiver is intimately implicated. This may represent a prelude to Mystical levels of awareness. Theistic traditions identify this underlying reality with the Deity with Whom they can enter into dialogic communion. Non-dual Mystical traditions profess a level beyond this – Advaita (non-duality) – in which all categorical thought dissolves into 'emptiness' or Sunyata/Nirvana (although echoing the above discussion of a pathological version of mentation, such a Heaven could represent a Hell for those not suitably prepared for such non-Being). In terms of the diagram sequence this level of being and knowing would have to be represented by a blank page or the Zen circle.

In some respects, this level can be related to the very earliest level in the developmental sequence prior to the development of a categorical or literal epistemology (neonatal through to perhaps toddlerhood) when no coherent mundane reality is in reality enacted. This has been characterised by some as a period of unrivalled non-dual bliss but has also been identified as a type of 'hell' in terms of Klein’s schizoid period. However, to equate the two ‘periods’ would be to commit what Wilber terms the 'pre/trans fallacy' (Wilber 1997) since there has been a whole developmental sequence which generates an existential gulf between them.

Figure 5.5 attempts to model how the type of ‘mundane’ reality ‘brought forth’ is consequent upon the type of epistemological frame being utilised (the concentric circles relate to those in Figure 5.4). The ‘Heaven/Hell’ zone(s) lying outside of mundane reality indicated at the very centre (pre-epistemological) and/or beyond (trans-epistemological) the limits of mundane reality. A significant implication is that the type
of mundane reality enacted will influence the type of behaviour considered appropriate. Thus, an instrumental, self-centred and exploitative engagement is acceptable in terms of a profane/banal world, whereas an ‘enchanted’ world encourages a reverential and participatory engagement. The former is more likely to work against the achievement of social and ecological justice; the latter more likely to do so.

Figure 5.5: Incremental worlds: Spectrum of mundane realities enacted

Figures 5.6a and 5.6b attempt to symbolise this developmental dynamic by recourse to the six-armed cross heuristic but this time replacing the straight line of the central axis with an ‘unfurling’ one (like a fern). In so doing, it should become immediately apparent that we have created the Chi-Rho monogram most strongly associated with Christianity but which, according to Freke and Gandy (2003) actually has earlier pagan associations standing for the Greek chreston meaning ‘auspicious’. Smoley (2002) also presents the symbol in terms of the six-armed cross as a symbol in esoteric Christianity to refer to the “consciousness, interiority, the sense of an “I” experiencing” (p68) which, at the level of ‘Christ Consciousness’, is able to transcend the categories, or
rather ‘crucifix’, of space and time upon which humanity is ordinarily ‘crucified’. Actually, neither Smoley nor Freke and Gandy go on to discuss the specific shape as implying ‘unfolding’ of consciousness but Smith (1992) does make this overt connection. Smoley rather implies that the curve of the Rho is symbolic of the head, where consciousness was, and is, thought to reside. Once again Celtic/Insular Christian symbology proves potentially helpful, since these hidden and metaphorical themes may be discerned in, for example, the Chi-Rho page of the Book of Kells (see Figure 5.7).

![Figure 5.6a: Chi-Rho monogram as symbolic representation of the unfolding reality (horizontal cross could represent space and time)](image)

Figure 5.6a: Chi-Rho monogram as symbolic representation of the unfolding reality (horizontal cross could represent space and time)

![Figure 5.6b: Chi-Rho monogram adapted to symbolise the unfolding of reality sequentially giving rise to ever more expansive mundane realities (extending horizontal axes)](image)

Figure 5.6b: Chi-Rho monogram adapted to symbolise the unfolding of reality sequentially giving rise to ever more expansive mundane realities (extending horizontal axes)
As suggested in Chapter 4, religious imagery of vertical ascent such as used above are likely to have their basis in human embodiment and emplacement. Similarly, imagery of descent or depth (hence 'profound experiences') have been also been utilised to convey aspects of 'spiritual' development (such as the various mythic accounts of 'descent' into the underworld or hell, the 'cave of the heart' in Buddhism, diving for the Pearl of Great price in the Monotheistic traditions etc.). Once again, this is likely to have a basis in bodily metaphors since most of our most vital organs are deep within the body cavity. Alternatively, it would seem that descent into caves (Lewis-Williams 2002) and 'near-death experience' inducing submersion in water (possibly the original form and purpose of 'baptism') were both sometimes used to induce Altered States of Consciousness (ASC's) (Tart 1990). Alternatively, descending into the 'valley of the shadow' provides an important dramatic counterpoint (as in Psalm 23), or complementarity (as in the Daoist Yin in juxtaposition with Yang) to the condition of height and light. Sometimes the orientations of height and depth are combined such as
the Axis Mundi and the World Tree (with its branches in the heavens and its roots in the earth). The ‘Interior Castle’ of St Theresa of Avila represents an image which paradoxically conflates notions of extending higher and deeper in the space of the imagination. All of these ‘geographical’ metaphors emphasise the importance of experiential transactions between the ‘emplaced imagination’ and the conditions of its emplacement for furnishing it with the symbolic language of epistemological and/or spiritual development.

Another key metaphor of consciousness identified by Metzner (1987) is that of a temporal flow as in a ‘river’ (stream of consciousness). In this case a temporal cycle often being used to refer to different phases of transformation. For example, a 24 hour period can be used to refer to the ‘soul’s sojourn on earth’ or ‘journey through life’ (French *jour* – although it is probably the case that this sense will be understood more immediately in terms of metaphor of travelling and pilgrimage [see Chapter 7]). One may speak of the ‘dark night of the soul’ or express awe and wonder in terms of ‘morning has broken like the first morning’. Equally, the seasons of the year are often used metaphorically to describe the transformation through life. Finally, the stages of a person’s life are often seen to correspond to different phases of spiritual development as in the case of the Hindu division between the four obligations or *dharmas* of life, each of which is associated with a different locale or *ashram*.

Metaphors of biological unfolding are also common such as the unfolding of plant (such as the mystic rose in the west or the lotus in the east) which combines the sense of transformation through space and time (as the flower unfurls slowly upwards and outwards). Another common temporal metaphor from the biological world is that of the metamorphosis of arthropods from one life form to another (e.g. butterflies and dragonflies) or from one size to another (e.g. crustaceans) which often occurs through the process of *ecdysis* or shedding of the skin (sometimes over several successive stages) which represents a traumatic process entailing a period of extreme vulnerability but which ultimately leads to a better mode of being. This provides a wonderful metaphor.

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21 *Brahmacharya* - the student/disciple who leaves the family home to join a *Gurukula* or residential school run by a *Guru*; *Grishastha* - householder – the youth who returns home to the village to accept the responsibilities of family life; *Vanaprastha* - the forest dweller – the person nearing the age of retirement who retreats from society to the forest in order to cultivate the inner life; and finally *Sannyasin* - the renunciate who has achieved *moksha* (liberation) and who becomes the homeless wanderer in the world.
for the transition undertaken by a person through successive epistemological levels discussed above. Finally, a universal metaphor for spiritual development which is particularly key in terms of this thesis which combines the symbolism of moving through space and time and encountering a variety of additional symbols (creatures, landscapes, buildings etc.) along the way is the pilgrimage, journey (understood in the everyday sense), 'hero’s quest' or Odyssey.

The relevance of this *excursus* into religio-philosophical symbology is to demonstrate that humanity has an innate predisposition at both the individual and collective levels to utilise symbols and metaphors in thinking which is necessary for healthy functioning. Drawing on and learning from the symbolism of religio-philosophical systems from across the world and across epochs, whilst creatively exploring and developing new, more inclusive and holistic symbolic systems as one interacts with the world represents an important task of humanity into the twenty-first century and will, therefore, represent an important dimension of a 'more-than-humanism' and attempts to develop an integrative GEE. By way of conclusion to this chapter the recurring motif of the six-armed cross may be seen as emblematic of some key themes emerging from this Thesis since it represents a particularly sophisticated symbolic device which combines (at least) two archetypal symbols of wholeness associated with different ‘Global’ cultures and which are derived from a consequence of human emplacement (that is existential status as embodied beings orientated in space) – the cross (heuristically representing the West) and the *Mandala* (representing the East) – which together generate a three dimensional device which intimates a third symbol – the Globe or sphere - which is respectively reminiscent of the whole perfected World and a self-actualised person. Further, the whole symbol provides a kind of existential ‘map’ for the journey of life (see Figure 5.8).
Figure 5.8: The Anthropokosmic Cross, a) Globe (outer dimension) and b) Sphere (inner dimension).
Chapter 6: Weak and Strong ‘More-than-Humanism’: A Speculative Metaphysics

Towards a reconstructive postmodern spirituality or theologia

The final section of the previous chapter started to present a ‘mixed discourse’ integrating scientific and religious perspectives. There are some who would find the focus on the ‘spiritual’ to be problematic but it is justified in terms of this thesis for three interconnected reasons. Firstly, a great deal of the literature within environmental philosophy (Hay 2002; Zimmerman 1994, 2000) and transformative learning theory (Ferrer, Romero, and Albareda 2005; Kovan and Dirkx 2003; McWhinney and Markos 2003; O'Sullivan 1999; Tennant 2005; Tisdell and Tolliver 2003) is explicitly concerned with this dimension. Secondly, it is increasingly recognised that environmental and social activists and educators run the risk of ‘burnout’ and need emotional resources to deal with the ‘despair’ that accompanies their efforts so that attention to their spiritual needs represents an important aspect of their personal ‘sustainability’ (Macy 1995). Finally, as emphasised in Chapter 1, this thesis has a personal motivation to follow the Delphic injunction and this personal journey has (as with so many others) led to a consideration of matters ‘spiritual’.

However, the term ‘spiritual’ remains problematic and likely to cause some confusion and possibly antagonism (at least from the more materially and scientifically minded) to the perspective and ‘mixed discourse’ being developed. It is therefore essential to clarify the sense(s) with which the term will be utilised here. Expressed simply, the term denotes both a situation in which relationship is prevailing and the dynamic process or vitality that is inextricably associated with it. Thus to speak of ‘spiritual realities’ is really to speak of ‘relational realities’ associated with dynamic systems, particularly those which are self-organising or autopoietic or self-creative and sustaining. The Hindu quest for the ‘supreme personal good’ (parama-purusa-artha) (Phillips 2003) and the Delphic injunction to Know Thyself as understood in this thesis can be seen as calls to develop a relational account of one’s own personhood within a wider, even cosmic, context. Miller uses the term theologia to refer to “[a]ny thinking
about ultimate matters of human meaning and being” (Miller 1981 p48) and this chapter presents a preliminary and partial consideration of an appropriate critical postmodern theologia which draws on contemporary scientific and traditional religious discourses, and more recent integrative and (re)constructive theologias (Fox 1983; Kaufmann 1993; Primavesi 2000, 2003; Wilber 2006) and which, hopefully, holds the potential for global ecumenism or ‘deep religious pluralism’ (Griffin 2005).

More-than-Humanism

The goal is to realise (in the dual sense of come to understand and ‘bring about’) appropriate ‘human being-in-the-world’ which is, in turn, implicated in notions of sustainability and the Good Life. Consequently, achieving a sustainable lifestyle, coming to ‘Know Oneself’, and contributing to the Greater Good are seen to be commensurate. Such a project places the focus of attention on the ‘human’ dimension of existence and could, therefore, be seen as falling within the scope of ‘humanism’. Indeed, the humanities provide important sources of insight. However, the foregoing discussion should alert the reader to the fact that any attempt at presenting an account of any one ‘part’ of the reality or the Kosmos22 (in this case ‘humanity’ either considered at the individual or collective level) necessarily demands at least consideration of those other aspects of the total system which are both immanent (inextricably implicated) within it, and transcendent of it. It is a form of humanism that, therefore, cannot see the ‘human’ as the ‘measure of all things’ nor as the sum bonum of creation and consequently rejects anthropocentrism. But neither is it a position of extreme ecocentrism which sees humanity as at best an equal partner in a great unidimensional ecogalitarian economy or, at worst, a prodigal aberration that is best excised from such a system, a perspective sometimes associated with Deep Ecology (Hay 2002). Rather, it is a position somewhere between anthropo- and eco-centrism: a ‘more-than-humanism’, an ‘anthropokosmology’.

Hopefully, this approach will go a long way towards guarding against the two extreme philosophical positions identified by Cooper (2002) which have prevailed in both

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22 This spelling being preferable to distinguish it from the purely ‘scientific’ Cosmos reductively conceived as merely physical/material.
East and West from antiquity to the present. On the one hand has been a type of metaphysical 'absolutism' in which 'The Given' (whether of a religious or scientific nature) independent of human concerns is presented with certainty. Such positions "exaggerate our capacity to ascend out of our 'engaged' perspective to an objective account of the world" (publishers blurb). On the other hand is a kind of exclusivist 'humanism' which either prefers not to undertake, or rejects outright the very possibility of, a consideration of 'realities' beyond the human realm. This commits the error of explaining "not only 'whatever is' in relation to man [sic.], but evaluates it 'from the standpoint of man'" (p16). In both cases, the position has tended to lead inexorably towards a position of hubris from which can be traced many of the crises facing us in the contemporary world. Cooper prefers to develop a type of 'humble humanism' located within a 'doctrine of mystery'. Interestingly, Cooper notes an etymological connection between the words human and humble through the word humus, that is 'of the ground' (Latin) and which also refers to organic matter in the soil. This insight lends support to a perspective, such as that being proposed here, which 'grounds' humanity within the natural order thereby guarding against the worst excesses of human hubris. However, this thesis is prepared to allow humanity a greater access into the transcendent 'mystery' of existence than Cooper would appear to through, for example, ever increasing scientific explorations, and 'transpersonal ways of knowing' (Braud and Anderson 1998) such as are associated with esoteric and mystical experiences.

This is not to place humanity above and beyond other phenomena but rather to acknowledge a kind of existential or even kosmic division of labour within a multidimensional economy with each aspect of reality having a fundamental and unique role to play in the great Holarchy of Being (see below). Thus, following the wonderful insight of Margulis (1987) which has so inspired ecocentrists/biocentrists and Gaianists, even the 'lowly' bacteria in the soil (our 'humic' relations in a triple sense – humble, 'grounded' and organic) should, from one perspective at least, be given priority since "[w]ithout their [prokaryotic microbes'] achievements – their adaptations to extreme environments, their exchanges with the atmosphere, and their production of oxygen – the spectacular spread of eukaryotes would not have been possible. Without the prokaryotes’ continuing activities, neither we nor the animals and plants on which we depend would
continue to exist” (pp108-109). In terms of the holarchical perspective being taken here it would be wholly appropriate to talk about this crucial role or ‘place in the scheme of things’ as a bacteriokosmology, that is the service which the prokaryotes perform for the holarchy. Similarly, one could prefix the suffix ‘-kosmology’ (implying an understanding of the ‘place’ in relation to the Holarchy or Kosmos) with any relevant descriptor of a phenomenon under consideration in terms of the service, in whatever capacity, it provides to the entire holarchy. In this way, the completed term (prefix+suffix) is meant to focus attention upon a particular aspect of reality’s (considered from either individual or collective perspective) contribution to the ‘Greater Good’ in a Kosmic sense and consequently refers to that particular phenomenon’s ‘proper place’ in ‘the scheme of things’. Despite the apparently instrumentalist value system implied by this description, the intention is actually to suggest that all holarchical beings have an intrinsic value, namely to follow its own ‘nature’, this being ultimately understood in terms of service to the holarchy or to follow their own ‘Way’ (Dao) within the ‘laws of creation’ (Rta/Dharma).

This is the sense in which the term anthropokosmology is being used – to focus attention upon the particular and ‘proper place’ of humanity in the scheme of things as a participant in the whole or Kosmos. However, unlike most if not all other earthly residents whose ecological services are largely an existential and unconscious given by virtue of their very ‘nature’, humanity has the potential to either provide a service or a disservice in terms of the Greater Good and this is largely a matter of intentionality understood in the phenomenological sense of ‘directedness towards’ the world. Thus intentionality at the individual or societal level might be self-serving – an ‘intentionality of centration’ or ‘self-centred-ness’ with an often attendant ‘intentionality of domination’ – in which case humanity (individually and/or collectively) cannot be said to be acting anthropokosmically but rather is acting egocentrically, ethnocentrically and/or anthropocentrically which leads inextricably to socially exclusionary, anti-ecological or contra-holarchical behaviours. It is only when humans act for the Greater Good of the Holarchy – an ‘intentionality of service’ or ‘communion’ – can they be said to be acting anthropokosmically! Such an intentionality will be best suited to the realisation of ecocultural sustainability.
An important, but not exclusive\textsuperscript{23}, potential of this peculiarly anthropic role concerns the realisation of the vertical axis of the six-armed cross heuristic developed in previous chapters. This ‘axis of Being’ is always ontologically ‘present’ yet it is a peculiarly human capacity to bring it to conscious awareness, that is enact it phenomenologically (see Chapter 4). Thus, under certain conditions, humans are able to achieve what might be termed ‘holarchical consciousness’ or ‘kosmic consciousness’ and this represents a special contribution to the Greater Good in one of two senses. Firstly, it is special in the sense that it will be a peculiarly human (from the Latin specialis – meaning relating to a particular species) realisation of the Holarchy. This is an observation which may put humans on an equal, yet unique, footing alongside each and every other special, that is entity- or species-specific realisation or kosmic enaction. Secondly, and more contentiously from an ‘ecogaletarian’ perspective is that this human realisation is potentially of a qualitatively different order to (most) other realisations given the greater capacity for conscious awareness and reflection. This must, however, be qualified with the observation that this qualitatively different order is a double edged sword since it can lead to either powerfully damaging or wholesome repercussions for all concerned – the individual, society and/or nature depending on the prevailing intentionality. Thus, an ‘intentionality of centeredness or domination’ is ultimately personally, societally and ecologically damaging whereas an ‘intentionality of communion or service’ is wholesome in all these respects, although the positive benefits to the individual person may not at first be obvious.

The realisation of ‘kosmic consciousness’ represents a great responsibility which requires the cultivation of a ‘higher intentionality’ (Hoffinan 1981) which is Reality-centred rather than ego-centred (Hick 1989). Unfortunately, this is achieved only through effort and trial throughout the lifespan which involves ‘dying’ to the (prevailing) self many times in order for a new and expansive transformed self to emerge. It also brings with it the attendant responsibility and potential burden of compassionate identification with, and service to, all aspects of the Holarchy which can give rise to great pain and despair. Yet the rewards are great – a life of fulfilment, awe and wonder; a life

\textsuperscript{23} Humans also perform, along with other living organisms, important ecological functions although these are increasingly being offset by the ecological damage resulting from exploitative behaviours which are a consequence of an ‘intentionality of domination’.
authentically lived; and a sense of truly being ‘at home’ in, and belonging to, the Kosmos. Both these responsibilities and rewards are taken here to be neatly encapsulated by the term wisdom and are associated with a ‘reflexive relationality’. They represent the true ‘birth-right’ of humanity, that is potentially available to all members of the human community (although the prevailing conditions in the consumerist West are likely to ‘arrest development’). Wisdom is only truly developed through transformational learning throughout the lifespan and comes to fruition only as one approaches an anthropokosmic level of development. This is taken to be one of the universal messages of the religious traditions of the World, at least in their esoteric and mystical strands.

**An integral and holarchical account of (-)personhood: a trialectical approximation**

A figurative approximation to the holarchical ontology being championed in this thesis might be a skein of wool with many tangles and knots. One could envisage pulling out one ‘tangled knot’ from the whole skein and attempt to ascertain its internal composition and relations but in so doing the strands connecting it to the other knots (of various sizes) and, ultimately, the whole skein – the superknot – would be tugged too. A disadvantage of this imagery is that it is rather static whereas the ontology is dynamic. Better still would be to imagine an ever-expanding and complexifying self-knotting, unknotting and reknotting skein or, after Mathews (1994) a liquid body containing many swirling eddies of various sizes and durations which interact thereby influencing and giving character to each other and, indeed, the whole body of liquid.

Whilst images of tangled skeins and swirling liquids may go a long way towards conveying the inherent complexity of the relational reality being envisaged, for the purposes of exemplification a simplified orienting framework is desirable. Consequently, a tripartite heuristic device will be adopted based on a relational ‘trialectic’ that seeks to provide a nondual account of ‘personhood’ or mind-world relations. This will be represented using a triquetrous knot (Figure 6.1), a common symbol in religio-philosophical systems since it models unity-in-diversity and a relational whole
comprising several parts-in-relation. In this model\textsuperscript{24} the ‘personal’ (individual human) knot (or eddy) is a relatively autonomous autopoietic unit which may be partially teased apart from the whole and considered in its own right. In so doing it becomes one of the three ‘cardinal points’ or ‘moments’ of the whole trialectic. Once teased apart from the rest an exploration of innate aspects – \textit{intra}-personal – of personality and personal development may be considered relatively autonomously. However, this dimension of reality is seen to be inextricably tied to other, larger, autopoietic tangles namely the ‘\textit{interpersonal}’ or sociocultural realm on the one hand, and the still ‘larger’ non-human or ‘more-than-human’ autopoietic system referred to as the \textit{transpersonal} realm on the other – the two other ‘moments’ or ‘cardinal points’. These ‘three moments’ could be related respectively to the ‘three ecologies’ identified by Guattari (2000) – psyche, \textit{socius} and nature. Taken together, the whole trialectic is then supposed to represent actualised reality or ‘created existence’.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{triad-diagram.png}
\caption{The (-)personhood Trialectic comprising intra-, inter- and trans-personal dimensions}
\end{figure}

\textsuperscript{24} It is worth noting from the outset the similarities between this analytical tool being developed here and the ‘circuit of place’ model developed by Sack (1997). However, Sack is an avowed ‘modernist’ and his model is not the direct or sole inspiration for the ‘personhood’ trialectic being presented here. Also, he lays too great an emphasis on greater adequacy and universalism being attained through ever greater abstraction from concrete particulars of embodied-emplaced existence which is one of the greatest errors associated with Modernity.
Alternative terms are also presented in Figure 6.1 to describe the three moments of actualised reality, namely 'self', 'community' and 'Nature'. The final term should not be simply equated with 'natural' in the common sense usage of the term but rather following Bonnett who sees 'nature' as "the 'self-arising' whose intrinsic integrity, mystery and value implicitly condition our understanding of ourselves and of the reality in which we live" (Bonnet 2004a p117)\(^{25}\). Nor should this be equated with all that is other-than-human since humans (both individually and collectively) are nested within this dimension. Nature is therefore immanent within the human dimensions both materially and transmaterially. For example imagination – a quintessentially human intrapersonal trait – has its bases both in the biology of the brain (at least in part), in perceptual autopoietic relations between the individual and their milieu, and the evolutionarily adaptive somatopsychic archetypes of human mentation (see Chapters 4 and 5). Similarly, human cultures are (or at least were) shaped to a large extent by the conditions – limits and affordances – of the natural environment which constituted their emplacement\(^{26}\). Thus 'Nature' is the human realm and more hence it is 'more-than-human' or transhuman (trans in the sense of including yet exceeding). A 'more-than-humanism' therefore must focus on this dimension since it is crucial to an understanding of the specifically human dimensions of self and society.

An important qualification of the trialectic schema being developed is that it need not be seen as exclusively anthropocentric. Thus, the condition of 'personhood' or 'selfhood' could be applied to any autopoietic system and therefore need not be seen as an exclusively human value. Indeed, this is the approach taken by Mathews (1994) who suggest that personhood could be applied to non-human autopoietic entities such as animals and plants and even ecosystems and possibly even galaxies/the whole Cosmos. Such an expansive 'personalist' perspective would also appear to be a defining characteristic of 'animism', although what qualifies as a 'person' differs between different animist worldviews (Harvey 2005). Should this be the case, the non-human 'person' equally exists in relation within a 'community' of like- or self-similar 'persons' but also within a wider 'more-than-like', that is transpersonal network.

\(^{25}\) It has been felt preferable to capitalise the term 'Nature' to convey this understanding in order to distinguish it from other understandings discussed by Bonnett.

\(^{26}\) This is not an argument in favour of 'environmental determinism' but rather 'environmental possibilism'.

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Whilst it is a contention of this thesis that there is no radical ontological break with the rest of nature in evolutionary, ecological and indeed enactivist epistemological terms, humanity's 'superior' capacities for mentation introduce qualitative differences in terms of both their self-awareness and their potential contribution to the whole trialectic in respect of semiosis or 'meaning making'. Therefore, whilst a human's ontological status of personhood may also be shared by other autopoietic entities, their existential and possibly metaphysical agency is greatly augmented by their superior epistemological capacities. Thus the reality which emerges from the interrelationships pertaining within an anthropic (that is human) trialectic will be superior, in terms of the realisation of the dimension of 'being' (vertical axis of the six-armed cross) providing this involves an individual who is not operating from an intentionality of extreme self-centredness and domination.

However, despite the observation made above as to the potential significance of an individual human, their 'personhood' must properly be seen as a consequence of the whole trialectic, that is their 'significant' status is ultimately distributive and relative, it is a gift of the whole rather than a self-derived or autonomous given. It is impossible, therefore to conceive of a fully human person, that is an 'emplaced imagination', existing outside of culture since even those who elect (or are forced to) withdraw from it will have been shaped by the social-symbolic system to which they have been apprenticed in their formative years. Similarly, neither an individual nor a society/culture could possibly exist in isolation from its 'sustaining ground', that is, the biosphere and, indeed, the rest of the Holarchy, although apparently Western consumerist society appears to operate as if this were possible.

Rather then, an individual's anthropokosmic potential is as a locus for the realisation in consciousness of the relational whole that is 'Creation', or at least aspects thereof. An individual who realises this potential is likely to experience peak emotions such as awe and wonder, joy and completeness, grace and gratitude. However, this can be seen as a role performed for the benefit of the whole and not for the specific node (the individual), in isolation. Rather, kosmic realisation or holarchical enaction is a distributive, participatory and reflexively relational event with human consciousness.
providing a particular, and possibly the most significant in creaturely terms, locus for this sacerdotal event.

The 'creative theologia' being presented here is not merely a pantheistic schema (in which case the Nature category would present the sustaining frame or Ultimate Reality from which all else emerges and to which the person's Ultimate Concerns are directed) but rather a panentheistic frame since the whole trialectic – the pan in the dual sense of Nature and everything (Gunderson and Holling 2002) – emerges from and is sustained by the mysterious and ineffable Ground of Being and Becoming which is immanent within, yet beyond, Creation and, for want of a better term, should be considered a 'sacred' or 'divine matrix' (Bracken 1995). In this schema the adjective 'anthropokosmic' is being used to describe the paradigmatic and ideal level of fully realised personhood, that is a person who is fully and healthily articulated with all aspects of the trialectic – intra-, inter, and trans-personal – and thereby serves, to the best of their ability, all aspects of Creation (themselves included but not in a manner which is entirely self-referential or egocentric) and thereby ultimately serves the ineffable ground as well.

Of course this ideal is exceedingly hard if not impossible to achieve or realise. What matters is for an individual to strive towards it and, in so doing, provide a service to the trialectic to the best of their abilities. Such service will take the form of overt behaviours: in terms of the community or socio-cultural moment, this is likely to include the championing of social justice and intercultural dialogue (hence the relevance to Global Citizenship/Education); in terms of the Nature moment, this is likely to include efforts to sustain the ecological sustainability of the natural environment and to enter into some sort of dialogic communion with it. These both – social and natural – represent key dimensions of the concept of 'sustainability' or 'sustainable development' to which this thesis subscribes and to which it seeks to contribute.

Service towards the self moment will include behaviours which promote both physical and mental health and wellbeing. However, it is also a crucial form of service to nurture the imagination, that is to attend to the intrapersonal dimension, in two senses. Firstly, the positive behaviours outlined above are predicated on an expansive conception of justice, moral relevance and compassionate identification. This requires a widening of the person's 'horizons of concern' away from egocentricity ultimately towards to a
perspective which is Creation-centred (Fox 1983, 1990a) or Reality-centred (Hick 1989). This demands a higher intentionality (Hoffman 1981), understood here as an enhanced imagination characterised by reflexive relationality. Secondly, and more esoterically, imagination represents a locus of the enactment of its emplacement or world. The greater the imaginative capacity, the greater the degree of its emplacement – which is ultimately the whole of Creation – which can be brought forth or real-ised in terms of both breadth and depth (the horizontal and vertical dimensions of the 6-armed cross respectively). This brings us again to a consideration of the 'spiritual' capacity of humanity as the special (particular to the human species) anthropokosmic hierurgy (sacred performance or work) to be the realisation of Creation.

An important corollary of the theologia or religio-philosophy being developed here is that each moment of the trialectic – self, community, Nature – represents:

- either a potential route, or focus for imaginative exploration, towards the sacred or divine, which is immanent throughout each;
- or a series of 'stations on the way' towards the sacred since they are holarchically related.

It is also important to consider how personhood and/or theologias can become unbalanced and therefore unwholesome in these respects. To be locked into a condition of egocentricity is to be imprisoned in a state of arrested development and 'spiritual autism' (i.e. the incapacity to enter into relation with any dimension of reality deeper than the ego including with the deeper aspects of the personality). However, for those motivated to move beyond that epistemological level of development there are dangers since it is entirely possible for an individual to focus all their attention upon transformation between the self and only one other transaction within the trialectic. For example, all efforts might be focused upon developing the 'inner life' – intrapersonal dimension – to the exclusion of the community or Nature moments. Such would appear to be the situation in the condition of extreme asceticism or 'world denying' spiritualities. It would also appear to be the underlying cause of the 'spiritual materialism' associated with the worst excesses of the Human Potential movement and its associated 'me, me ME!' mentality. Conversely, all attention might be focused towards the Community
moment which runs the risk of a wholly ethnocentric or, at best (in terms of expansiveness) anthropocentric spirituality which prevents a wider consideration of the Nature dimension. Furthermore, such an allegiance may also arrest the inner spiritual development of the individual through an overly rigid insistence (often literal) on the received dogma of the group (perhaps leading to fundamentalism and/or fascism). Finally, whilst ‘Nature Mysticism’ such as might be associated with the New England Transcendentalists represents a kind of ‘spiritual individualism’ which is not world-denying and therefore has a great deal to commend it, an exclusive emphasis upon the Nature dimension with an attendant rejection of the ‘community’ dimension can lead to misanthropy and even eco-fascism.

Whilst by no means guilty of these extremes, Bonnett (2004b) makes very little overt reference to the human community preferring to focus upon an individual’s relationship with ‘Nature’. The same could be said of this thesis in terms of the focus placed on individual-‘nature’ (in an expansive sense) transactions in the next chapter. Thus, once again, it is essential to stress that the scheme being developed is trialectic in nature – all three moments or cardinal points, and all the transactions which pertain therein, are to be attended to for a fully realised personhood to be achieved. The mundane reality so enacted carries the potential for a concomitant re-enchantment and re-qualification of, in the words of Weber and Mumford respectively, the disenchanted world and disqualified Universe we have inherited as a legacy of the project of Modernity. Such a relational perspective holds forth the promise of a postmodern re-signification or, indeed, re-spiritualization or re-sanctification, of nature, reality and human existence which this thesis advocates. There are, however, two possible versions of such a ‘postmodern spirituality’ which can be developed from this basic relational premise – a weak version and a strong version. Both alternatives are preferable to the prevailing despiritualised situation, although each is based upon very different metaphysical assumptions which carries implications for the relative legitimacy ascribed to them from different religio-philosophical standpoints.
Weak postmodern spirituality

If we rest briefly with the notion that the term ‘spiritual’ is simply describing (or a synonym for) a situation in which a self-organising yet purely material system is functioning then, whilst perhaps unhappy with the apparent semantic liberties taken, many mainstream scientists could be persuaded that it is an insight to which they can be sympathetic. On the one hand, there is seen to be an ‘invisible’ and ‘extracategorical’ animating force or vital principle – an élan vital – at work in autopoietic systems which could be seen as a purely naturalistic yet mysterious spiritus. On the other hand, many scientists experience feelings of awe and wonder – affective reactions closely associated with the world ‘spiritual’ in phenomenological terms – when contemplating natural phenomena considered as relational wholes. They cannot fail but to marvel at the intricacy and beauty of these systems, from atoms and cells through organisms and ecosystems, to galaxies and, indeed the entire cosmos, a beauty and intricacy that is magnified exponentially when one considers how these systems nest within one another to create a vast system of cosmic proportions. Thus even Richard Dawkins, the atheist and passionate scourge of religionists, acknowledges a sense of awe and wonder when contemplating the process of evolution, a mitochondria or the entire cosmos27 as integrated and dynamic systems.

Furthermore, these emotional responses are often associated with feelings of respect and even reverence on the part of the beholder to what has been beheld, even whilst they remain avowed materialist, believing there to be nothing ‘more’ to reality than science can (or will ultimately) be able to discern. What science reveals – ‘things-in-relations’ – is enough to warrant affirmation of the worth-ship (from which, to recall, we derive the term worship) of reality. Such a perspective does not require, or indeed may deny the possibility of, further metaphysical speculations, yet may still be prepared to admit that to see the world relationally or systemically is perhaps worthy of the name ‘spirituality’ in a weak or qualified sense.

Holarchy and Panarchy

It is appropriate to say something more about the intricate nesting of systems within systems which is being revealed in by contemporary science as this has a bearing on much of what follows for both weak and strong versions of postmodern spirituality. Reality is increasingly seen to comprise a nested hierarchy of smaller systems within larger systems within still larger systems and so on. As mentioned previously, given the somewhat negative connotations of the term hierarchy in everyday language (rigid, top-down, structures of exploitation and control), alternative terms have been coined to convey a more positive interpretation, namely holarchy and, more recently panarchy. There is much overlap between the notion of holarchy and panarchy although the latter does introduce some important features which go partway to accounting for the dynamics of such nested systems and so it is desirable to briefly outline the salient features of both conceptions.

Holarchy and the associated holon, were terms coined by Koestler (1976) to describe the ‘part-whole’ relationship that pertains in a nested hierarchy. Thus a ‘holon’ represents a relatively autonomous system in its own right but which is also implicated, along with other holons, as a part of a still larger system which, in turn, represents a holon of another order of magnitude. Each holon is Janiform, that is faces (just as the Roman god Janus) in two directions simultaneously – it ‘looks’ both ‘below’ or ‘inwards’ towards its own internal organisation and the lower holons of which it is comprised and which it subsumes; and also ‘outwards’ or ‘upwards’ towards the higher holon of which it is a part. The whole system of holons within holons is described as a holarchy which could be considered at any order of magnitude where a coherent system prevails but which theoretically extends to the entire universe. The important feature of a holarchy is that both top-down and bottom-up processes of relation are equally important and so the individual holons at the lowest level in the hierarchy are essential for the proper functioning, indeed existence, of higher order holons and, indeed, the entire holarchy. Figure 6.2 (a and b) represents recent attempts to represent a holarchy diagrammatically. Some similarities are discernible in terms of intricacy and aesthetic beauty between these diagrams and the detail from the Book of Kells presented in Chapter 5 (Figure 5.3c)
which is suggestive that modern society's discovery of the concept of holarchy is really a rediscovery of a Traditional (that is premodern) insight.

Figure 6.2: Diagrammatic representation of the Holarchy concept

a) [image source: http://www.holon.se/folke/kurs/Bilder/spir4.jpg captured 22.11.05]

b) [image source: http://pespme1.vub.ac.be/Images/Holarchy.gif captured 22.11.05]

The Panarchy concept has been described in detail elsewhere (Gunderson and Holling 2002) and just some salient features will be outlined here. The term was coined at the turn of the millennium to refer to a 'transdisciplinary heuristic theory of change' that attempts to account for dynamic systems in both the natural and human spheres. The prefix *pan* is intended to convey two senses (which are etymologically related): first it refers to everything – all physical and material entities – which are considered to be implicated in this total system without exception (i.e. it includes physical, biological and human systems); secondly, it refers to processes of nature – the Greek God Pan being a personification of these natural forces. The Panarchy concept comprises two parts: a four-phase ‘adaptive cycle metaphor’ (which applies to self-organising systems whether they are physical, biological or human), and the panarchy itself – a structure of such
nested sets of adaptive cycles at progressively larger scales. The Panarchy thesis as developed by Gunderson and Holling is meant to be applicable (to a great or lesser extent) to all adaptive systems, whether they are physical, ecological or social (institutions, organisations).

The authors are, however, reluctant to see the model as being applicable to the realm of thought and ideas. This is a reluctance that is heeded yet not shared here and the model could be used as an heuristic device to consider the dynamic nature of self-organising systems including those associated with human thought – concepts and ideas – at the individual and collective (worldview) level. In this sense, it points to possible ways in which the ideologies of individuals and collectives can bring down or overturn civilisations through the cross-scale process of ‘revolt’ (the Soviet revolution of 1917 and the downfall of the Soviet Union in the late 1980s provides a testament to this process at both ends of one maladaptive, that is unsustainable, ‘polito-social system’ and ideological cycle). Alternatively, it reveals how cultural resources from long established or Traditional civilisations can be present in, and enrich, the creative growth of a smaller contemporary cultural cycle and even the mental life (seen as an adaptive system in its own right) of an individual.

From this perspective, the current ecological and existential crises facing contemporary humanity represent ‘external triggers’ that are causing the collapse of the prevailing Modern system/ideology. The ecological cycle represents a larger (that is ‘external’ in a literal sense) and slower cycle that is being disrupted by, and therefore, rebounding back upon, the prevailing Modern worldview which represents the ultimate cause (through ‘revolt’ or disruption of its encompassing and sustaining ‘ground’) of its own downfall. Conversely, the existential angst experienced by individuals and societies represents smaller, faster ‘mental cycles’ which are ‘revolting’, that is disrupting the Modern monolithic and hegemonic worldview which is found wanting and which is being deconstructed and even reconstructed through postmodern critique.
Scientific Pantheism and its ‘stronger’ variants

Nothing discussed so far requires a belief in extra-material reality. merely an acknowledgement of the relevance of extrahuman realities and the relations that exist between and beyond human systems. Such a perspective may develop into what might best be described as a form of ‘scientific pantheism’ which appears to have been the perspective developed by Spinoza in the seventeenth century and Einstein in the twentieth. Here the prefix pan is used to convey the same double sense as its use in the term Panarchy, that is to implicate everything in an all pervading and natural (as opposed to supernatural) structure. From such a perspective the whole of material reality can be seen as a vast, integrated, self-contained and wondrous self-organising system – a holarchy or panarchy.

This is a powerful reinterpretation of the nature of things which, far from disenchanting the notion of the spiritual by stressing its natural or purely ‘this-worldly’ dimension should be seen as achieving quite the opposite, namely to re-enchanting the everyday world, to re-emphasise the super-in-the-natural, the fantastic processes of self-organization and holarchical structuring and panarchical cross-scale linking to be found in material reality. Thus, the notion of the spiritual as developed so far pertains to feelings of awe and wonder elicited in those people (and societies) capable of discerning the mysterious, awe-inspiring and marvellous quality of natural relational events and/or the recognition of extrahuman forces at work. Viewed ‘externally’, a ‘spiritual’ phenomenon would appear as a ‘unity’ or ‘relational field’. Viewed internally, it would appear to be a dynamic and synergistic system of integrated yet relatively autonomous ‘parts-of-the-whole-in-relation-in-change’ in which humans are implicated yet not the sole agents. All that is required for such a ‘spiritual reality’ to exist is a discernible collective of relatively autonomous items or ‘things’ working coherently in a relational whole. Given that the holarchical or panarchical view of reality sees all ‘things’ to be essentially holonic in nature then, providing one’s faculties are suitably attuned, any material ‘thing’ could be seen as a ‘spiritual reality’ in this weak sense, or at least intimations of one. To be involved or implicated in such a system would be to participate in a ‘spiritual reality’. Furthermore, any holon within a holarchy actually carries
intimations of the whole Holarchy, which ultimately means everything hence Pantheism. Such a sensibility appears to be a recapitulation of Blake’s ‘vagaries of innocence’ (see Chapter 2) (although Blake was actually an exponent of a ‘strong’ spirituality which is discussed below).

The terms ‘Deep Ecology’ & ‘Gaianism’ refer to relational worldviews which are largely inspired by the sciences of ecology and systems thinking and which may be considered as varieties of scientific pantheism and ecocentrism. It is sometimes the practice to consider these two terms as synonymous but actually it is better to see them as having a ‘family resemblance’. Indeed, each actually can be seen to cover a variety of ‘shades’ from Weak spiritual versions, that is materialistically reductive ‘scientific pantheism’ to ones that have a more overtly ‘Strong’ spiritual dimension, positing a ‘more-than-material’ or ‘matter-plus’ ontology which becomes the focus of the next section. Since its inception in the 1970s by the philosopher Arne Naess, Deep Ecology has exerted a strong influence on the emerging discourse of Ecophilosophy thanks to the intense arguments that have raged between its advocates and critics. Space precludes a detailed description of this increasingly diverse perspective and the reader is referred to key texts (e.g. Devall 1990; Devall and Session 1985; Fox 1990b; Hay 2002; Naess 1989; Zimmerman 1994, 2001).

The Gaia hypothesis is principally associated with Lovelock and Margulis (Lovelock 1982) who hypothesised that the whole planet represents a polycentric self-organising biofeedback system which creates the conditions for its own continuance. That is to say, the Earth itself is an autopoietic holarchic system. The Gaia hypothesis has undergone a number of reformulations and a spectrum of opinion exists regarding it. For example, O’Riordan (1989) represents an example of a more scientific materialist conception of Gaia as “essentially a randomly occurring, multi-centred homeostatic process of quite extraordinary scale and complexity ... [which] is transcendental to human beings ... [but which] has neither conscience nor compassion” (p91). This might be contrasted with more ‘New Age’ conceptions of Gaia as an ‘intelligent organism’. The latter description might have a place in stronger postmodern spiritual discourses but is possibly unhelpful and too extreme for the position being developed here since should there be a ‘consciousness’ attributable to Gaia or, indeed the whole cosmos, it is far
removed from normal experience. Primavesi (2000; Primavesi 2003) presents a ‘strong’ perspective which does not commit the rhetorical excesses of a ‘conscious Gaia’ and is more commensurate with the perspective being developed here. It might serve more than a playful purpose to suggest that, from a Gaian perspective, the corresponding notion of holon, that is an integral part of whatever type (physical, biological, human) and at whatever scale (atomic, cellular, tissue, organ, organism, collective) on Planet Earth, might be termed a Gaion.

In defence of relationalism: the ANTs shall inherit the Earth

Other pertinent relational perspectives worthy of consideration alongside those discussed above were presented in Chapter 2, namely Latour’s Actant Network Theory (ANT), Deleuze and Guattari’s rhizomatics, and Haraway’s ‘cyborg’. Whilst by no means completely congruent, all of these models do represent part of an emerging zeitgeist that is increasingly relational and posthumanist. One might be forgiven for suggesting that each and all of these perspectives – Holarchy and Panarchy, Deep Ecology and Gaianism, ANT, rhizomatics and cyborgs – have at least a weak ‘spiritual’ dimension in at least one of the two senses discussed above. Firstly, there is the emotional response of ‘awe and wonder’ that these perspectives are more likely to engender. Secondly, however, there is the possibility of an ontologically real extrahuman (although not necessarily extramaterial) and relational animating principle (or principles) that ‘breathes life’ – spiritus – into them (be it ‘cross-scale’ ‘revolt’ and ‘remembering’ of Panarchies; or the transactions that pertain between actants in a network; or within rhizomes; or between organisms and machines). Thus, all of these perspectives represent postmodern (relational) perspectives that are broadly commensurate with the relational and spiritual (whether weak or strong) worldview being advocated in this thesis.

However, such relational worldviews do have their critics and it becomes necessary to pause to defend the relational view developed so far before progressing to consider ‘stronger’ versions of the postmodern spirituality which this thesis, in the spirit of critical agnosticism (see Chapter 3), at least entertains. A detailed critique of the relational worldview is presented by Kirkman (2002). Basically, the charge levelled
against the 'relationalists' is that they indulge in pseudoscience, forms of thinking which exceed the proper limits of philosophical and scientific speculation since they are not firmly grounded in empirical observation and logical (both deductive and inductive) reasoning but rather engage in metaphysical speculation, an endeavour which is ill-advised and which reaches conclusions which are unwarranted.

There is much to commend Kirkman's critique which provides a useful warning against projecting or extrapolating scientific concepts into philosophical and metaphysical domains, and vice versa. He further demonstrates that it need not be necessary to engage (or rather from his perspective indulge) in metaphysical speculation to be a committed environmentalist. However, this view may be challenged as 'antirelational ratio-nalism'. Firstly, the notion that it is ill advised to engage in speculative metaphysical enquiries is problematic from the reconstructive postmodernist perspective which sees it as a necessary task to arrive at, or even 'construct', a more adequate cosmologically informed orienting story or worldview. Kirkman isn't necessarily arguing that metaphysical speculation is wrong per se, but that it should not implicate and even bastardize 'proper science' but remain where it belongs, in the philosopher's and theologian's ivory tower. Such a view is untenable since it places a 'glass ceiling' on scientific endeavour and suggests scientists cannot, by definition, be persons who consider or profess metaphysical beliefs informed by their work. Secondly, Kirkman commits the error of only admitting certain approaches to knowledge acquisition as legitimate, presumably ones that employ empiricism and objectivity. To put all ones 'eggs in this one basket' is ill-advised given the postmodern critique that such a path is never entirely objective, value free, ahistorical and universal but is rather always historically and socio-culturally situated, that is set within the constraints of 'paradigms'.

Furthermore, Kirkman commits the error of supposing that all there is to know, or rather is worth knowing or useful to know, is available through 'proper' science thereby denying both the possibility of aspects of reality which are inaccessible to this preferred field of endeavour and the denying the efficacy of 'ways of knowing' other than 'proper science'. The simplest rebuttal to this is to point out that 'if you only have a hammer, all you see is nails'. that is, if your only epistemological tool or orienting frame is a logic which employs discursive (which is typically linear, or 'cause-effect'), and/or rational
(which is to say categorical [Latin ratio – to divide]), thinking applied to data that is empirical (that is available to the human sensorium either directly through the senses or indirectly through measuring instruments which effectively augment these senses) then all one is likely to perceive are material self-sufficient categories which are related. If at all, only through the operation of forces of ‘cause-and-effect’. ‘Invisible’ dimensions of reality – the realm of which includes, amongst other things, emotions, thoughts, values (intrinsic or otherwise), meanings etc. are metaphorically and literally beyond one’s scope or purview.

A counterargument is to admit the possibility of alternative ‘ways of knowing’ associated either with alternative logical epistemological approaches (such as phenomenology and hermeneutics) favoured in other domains (the ‘arts’ and humanities including philosophy and theology); and/or non-logical ways of knowing associated with ‘Altered/Alternative States of Consciousness’ (ASC’s) (Tart 1990), such as intuitive or ‘surrational’ and/or mystical or transpersonal (translogical or transrational) approaches to ‘being and knowing’ (Braud and Anderson 1998). Such a perspective is in keeping with the postmodern project of challenging and deconstructing ‘monological’ worldviews – what Blake poetically referred to as the ‘single vision’ of Newton’s science – and advocating multiple perspectives involving multiple, and even possibly transpersonal, epistemologies. If such a project is allowed (the position advocated in this thesis), then alternative, that is to say relational, realities may be not only hypothesised but positively and genuinely discerned. Indeed, this is the great contribution of those Traditional epistemologies and religiophilosophies seen as operating at post-formal, transrational and transpersonal levels. ‘Proper science’ cannot bear the sole burden of responsibility for achieving ‘total’ knowledge, and to hold such a view is fraught with hidden metaphysical assumptions (generally materialistic reductionism and the Kantian impossibility of ‘transpersonal knowing’). These rebuttals to Kirkman’s critique open up not only the possibility, but also the desirability, of considering the claims of non-reductively materialistic or ‘strong’ postmodern spirituality to which we now turn.
**Strong postmodern spirituality**

Rather than presenting a perspective which is entirely in accord with mainstream 'naturalistic' science and its associated 'material reductionism', the postmodern understanding of the spiritual as developed here does not rest with this purely materialistic conception of the 'spiritual'. Equally, it refuses to reject the amazing insights provided by contemporary science in favour of a retrogressive religious fundamentalism which tends to posit 'matter-spirit' dualism, the radical separation of these two dimensions of reality with the only way to account for a connection is in terms of 'Divine Intervention'. Rather, it argues in favour (or at least a consideration of the possibility) of a dimension of reality that, whilst implicated in and through material and spatiotemporal phenomena, is ultimately something more than merely them. Thus the spiritual is immanent within, yet also transcends (incorporates yet goes beyond) the merely natural as understood in scientific materialism. Instead, one might think in terms of a 'more-than-material' or 'material-plus-spiritual' naturalistic account of reality.

Whilst of course not all postmodernists would necessarily concur with the observation that relational systems are inherently spiritual in the sense that follows, this is a perspective apparently shared by many 'relational' theorists engaged in religio-philosophical and metaphysical speculation who are likely to see themselves as part of the 'postmodern reconstructionist' or integralist camps (e.g. Barnhill and Gottleib 2001; Fox 1990a; Fox 1990b; Mathews 1994, 2003, 2005; McDonald 2003; McGrath 2003; Smith 2003; Spretnak 1991, 1997; Wilber 2006). In such a view, the 'spiritual' dimension is real (i.e. it is in disagreement with reductive materialists of either a modern or postmodern stripe) but it is not a purely supernatural phenomenon in the sense of a realm outside of nature which miraculously intervenes in natural processes (placing such a perspective in opposition to those who believe it to exist outside of creation in some purely transcendent realm of the 'divine'). It is, rather a dimension in which natural – that is physical, biological and human – systems are fully implicated yet not the whole story. Indeed, many subscribers to this perspective actually support the view that humans are (perhaps uniquely) capable of discerning this 'higher dimension' through their superior powers of mentation and, possibly, through mystical states.
The distinction between a materialistically/mechanistically reductive – weak – conception of postmodern spirituality and a ‘more-than-material’ – strong – spirituality is best explained by recourse to the recurring six-limbed cross heuristic. Put simply, the ‘weak’ version simply acknowledges the horizontal limbs and the spatio-temporal material realm which is considered to be holarchically structured (with all the positive connotations and responses – weakly spiritual – that such a worldview implies), but denies the vertical whereas the ‘strong’ version acknowledges all dimensions (Figures 6.3 a and b respectively).

In the ‘weak’ version, the nested holarchy or panarchy (represented by the concentric circles) is located within a unidimensional, that is purely material, ontology or
‘Flat Land’. In such a perspective, there is little to distinguish between degrees in the holarchy other than in terms of quantity (bigger space, longer time, more things), and the perspective could be considered a kind of ‘mechanical spirituality’ since the ‘spiritual’ dimension is merely a function of the dynamic functioning of the intricate relational whole and nothing more. In the ‘strong’ version, however, there is an acknowledgement of an additional dimension which is the category of ‘Being’ discussed in Chapter 2. It is this additional dimension which provides a proper valuation system that sees some ‘levels’ of being (e.g. purely mechanical-material systems) as inferior to higher order – autopoietic – systems in terms of their level of ‘being’. This is represented diagrammatically by the concentric circles in Figure 6.3a now being ‘telescoped’ outwards along this ‘being’ dimension (Figure 6.3b). Actually, a spiral or helix with ‘staging posts’ or ‘stations’ – representing holons or adaptive cycles at different stages – at various points would be a better way to visualise this dimension.

Thus higher order being is represented by holonic systems reaching positions towards the top of the vertical axis. Furthermore, higher order systems are seen to be both more inclusive and possess greater efficacy than lower ones, represented by the ever increasing diameter and length of the ‘telescope’. The whole system remains holarchical, however, so that all elements of the whole system (lower order through to higher order holons) are implicated in, or make an essential contribution to, whatever level of being the whole has reached. Thus it is impossible for a holon or adaptive cycle to exist at the top of the vertical dimension without the ‘support’ of all the holonic layers below. From such a perspective, the weak version presents a ‘Flat Land’ model of reality which misses out this whole, and supreme, dimension of Being and therefore does not even recognise the essential valuation criterion – degree(s) of Being – against which to judge the relative merit of any particular holon.

In contrast to both postmodern, that is relational perspectives (weak and strong), Figure 6.4 illustrates the position of ‘matter-spirit dualism’. This non-relational or dualistic perspective could be considered a form of ‘naïve’, ‘premodern’ or ‘Cartesian/modern spirituality’ in that it is predicated on categorical distinctions and radical discontinuities being posited within reality between wholly different ‘types’ of phenomena. Thus it is a ‘strong’ version of spirituality in the sense that it accepts that
there is both a material dimension (which may, or may not, be considered holarchical in structure) and a 'spiritual' dimension, but it is not postmodern since it considers these two realms to be radically discontinuous and not relational, the latter being the origin of, but wholly transcendent of, the former. This radical distinction means that the only way for the two realms to be connected or articulated is through miraculous agency of the transcendent realm upon the material or created realm. Such a view does not sit well with the insights of later modern (e.g. evolutionary theory, ecology) and 'New Paradigm' (e.g. systems thinking, quantum mechanics etc.) science which are likely to be rejected in favour of a religious fundamentalism expressed in such beliefs as 'Creationism', 'Divine Intervention', 'Divine Providence' and 'Manifest Destiny'.

![Figure 6.4 Spirit-Matter dualism](image)

It should be clear that this 'dualistic' model is to be rejected since it commits the Cartesian error of disassociating, rather than simply differentiating, different aspects of reality and, furthermore, results in a retrogressive, impoverished and generally exclusivist worldview. The weak postmodern spirituality is preferable since it presents a relational view of reality which is considered to be more adequate both as an ontological account, and as a basis for aesthetic, phenomenological and existential appreciation, of reality and more inclusive identifications both within and beyond human realities. Therefore, a move towards a worldview informed by such a philosophical perspective would represent a significant advancement. However, the strong postmodern conception of spirituality which combines the concept of holarchy with a 'more-than-material' graduation, spectrum or continuum is considered superior still as a more adequate account of Reality.
So understood, the strong notion of 'spiritual' realities no longer becomes the sole purview of theological and metaphysical speculation on transcendent realities but can be seen to function in 'everyday' circumstances of the human lifeworld or umwelt, here referred to non-pejoratively as 'mundane' reality (see chapter 4). Indeed, contemporary developments in the natural sciences such as systems thinking, chaos and complexity, quantum mechanics and relativity, ecology and psychology are increasingly identifying a relational, rather than 'atomic', basis to reality.

This brings us to a further consideration of the distinction between the materialistic/mechanistic relationalism of 'weak postmodern spirituality' on the one hand and, on the other, contemporary scientifically-inspired perspectives which provide a 'stronger', 'more-than-material' account of reality. An occasional theme in this thesis has been the references to quantum theory to support an emerging postmodern spirituality. Whilst it is questionable whether it is either helpful or appropriate to conflate extramaterial efficacy or 'divine action' with quantum mechanics (Reiss in press) it is true to say that a number of authors suggest that the 'quantum realm' provides a fruitful candidate for both the Ground of Creation (and the personhood trialectic presented here) and the vehicle of Being. For example, Zohar and Marshall (1990; 1994) suggests that there is a quantum reality underlying psychological processes and social relations (two of the three trialectic personhood moments) which accounts for their holistic attributes, citing the Bose-Einstein condensate as a potential vehicle for such 'non-point communication' within the parts both of the brain and of society. Similarly, Mathews (1994) posits a quantum basis to the whole of Creation (the third transpersonal trialectic moment) which gives rise to a 'substance monism' ontology which could be fruitfully accounted for by the Einsteinian concept of geometrodynamics (GED).

Most pertinent to the present discussion is the perspective presented by Bohm (1981). Chapter 3 introduced Bohm's distinction between the 'explicate' and 'implicate' orders. The former, which includes material and phenomenological phenomena, represents the focus of, and indeed the only reality admitted by, 'weak postmodern spirituality'. However, Bohm posits a 'total order' which is contained, or enfolded within this 'explicit order' of reality and, indeed, each region of space time - the 'implicate order'. Furthermore, Bohm suggests that the implicate order is 'carried' by what he
terms *holomovement* "which is an unbroken and undivided totality ... [which] is undefinable and immeasurable" (p191 [emphases in original]) and which gives rise to an ‘undivided wholeness’ to the explicate order – within and between material and phenomenological phenomena. The efficacy of this *holomovement* is not merely attributable to the mechanistic relations which pertain to the explicit order but represents a qualitatively different level of agency, indeed represents the potentiality from which actuality emerges or is ‘unfolded’. Selby (2007) considers the relevance of Bohmian thinking and the notion of holomovement for social learning for sustainability (see Chapter 8).

Why it is desirable to engage in these speculations is explained by Griffin (1990b) who sees “modernity’s lack of a cosmology that stresses the ecological interdependence of all things and mystical relations between the microcosm and the macrocosm, between the self and the Divine Mystery” (p4) lying at the heart of contemporary environmental and existential crises. This call for a relational cosmology and the importance of acknowledging a spiritual dimension to it is a recurrent theme in the postmodern reconstructionists and integral literature. Thus, Wilber and colleagues are developing an ‘integral spirituality’ (Wilber 2006). Similarly, Griffin and colleagues are calling for a ‘postmodern spirituality’ that is characterised by: “a nondualistic relation of humans to nature and of the divine reality to the world; the immanence of both the past and the future (albeit in different ways) in the present; the universality and centrality of creativity; postpatriarchy; communitarianism (versus individualism and nationalism); the “deprivitization” of religion, meaning the rejection of the autonomy of morality, politics, and economics from religious values; and the rejection of materialism, in the sense of economism, meaning the subordination of social, religious, moral aesthetic, and ecological interests to (short term) economic interests” (Griffin *op. cit.* p3). It is a conception of reality strongly supported in this thesis in which:

The reality of spiritual energy is affirmed, but it is felt to exist within and between all nodes in the cosmic web of interconnections. It is thus dispersed throughout the universe, not concentrated in a source wholly transcendent to it. ...[T]he relations between things are regarded as internal to them, and as their participation
in the universal web of interconnections, which is itself holy or sacred, being the source of all value and power

(ibid. p2)

According to Griffin (ibid.) the “modern nonrecognition, or denial, of essential interconnections” (p4) and the constructive postmodern recognition is, in part, a matter of both theory and experiential insight. A theoretical framework capable of ‘mapping’ the essential interconnectedness of reality and suggesting how the experiential dimension might be admitted in terms of a consideration of mind-body metaphysics and the possibility of mystical experiences is desirable. Wilber’s AQAL model (aqwal – ‘All Quadrats, All Levels’) potentially provides such a framework. Unfortunately, space precludes a detailed description of AQAL and the reader is referred to cited sources (e.g. Wilber 1997, 2000, 2006). However, one particular innovation is worthy of mention – its ‘four-aspect’ ontology. Thus each holon is seen to possess, simultaneously, four non-reductive yet correlated aspects (see Figure 6.4) which are, in turn, a consequence of two ‘divisions’ of reality, namely between individual and collective (top and bottom semicircles respectively); and interior and exterior (left and right semicircles). Of course, these differentiations are made for the benefit of analysis and ultimately any one holon must be seen as a multidimensional whole with four ‘facets’. Nevertheless, Wilber’s 4-Quadrats model presents an alternative, and in some respects preferable, schema for substituting into, or superimposing upon, the horizontal dimension of the six-armed cross heuristic (which has been presented so far using only the categories of space and time).
More-Than-Human spiritual realities with a necessary corrective to Misanthropy

The picture being painted, or worldview promoted, is of a vast, intricate and harmonious Holarchy of Being which should be considered a ‘more-than-human’ spiritual reality in at least three ways: Firstly, the holonic structure of the ‘Great Holarchy of Being’ is significant since it demonstrates, at one level at least, a continuity rather than radical break between the physical, biological and human world. Such is the perspective of the Deep Ecologists and Gaianists who argue in favour of a biocentric or even ecocentric worldview which stresses this continuity between humans and the natural – ‘more-than-human’ – world (from which we have evolved and upon which we are dependent) above all else. This provides an important corrective to the prevailing anthropocentric worldview with its implied, if not explicit, radical discontinuity between the human and non-human spheres. Following from the first, the second sense refers to
the fact that the atomistic view of human individuals or societies divorced from the rest of humanity, and more fundamentally, the rest of creation must be corrected with the view that we are only relatively autonomous aspects of a relational whole that includes us but is more than us. This requires a shift in perspective in which the nominal category ‘human’ must always imply ‘human+’ or ‘more-than-human’ even when particularly human dimensions are the overt focus. Following from this, anything that might be described as human spirituality must perforce be really seen as ‘more-than-human spirituality’.

Third, the existence of autopoietic systems (a defining attribute of spiritual realities) need not depend on the presence of humans at all, in which case something other or more than human is implied. Indeed, the holonic view of spirituality sees relational or spiritual realities to exist at all of levels or at any scale of creaturely existence, possibly from the subatomic to the cosmic. The ‘human scale’ represents merely one slice of this reality, what might, for the purposes of analysis, be termed the mesocosm (Allan 1987) and is meant to refer to the human existential realm, which might be considered to cover all scales from the human body to the whole planet. Therefore, there are whole other slices of reality – the microcosm (organs down to subatomic particles) and macrocosm (solar systems, galaxies and the whole cosmos) – in which humans are either absent or possess only limited agency.

Furthermore, humans are not the exclusive agents in the mesocosm, but rather share this realm with very many autopoietic spiritual realities in which they are either absent or merely part-players. Generally, ecosystems are considered to be small-scale features. However, they should properly be seen to exist in a nested hierarchical or holarchical relationship with only ‘fuzzy borders’ separating different levels of analysis. Thus the ecological perspective, with the attendant recognition of ‘relational’ (and therefore ‘spiritual’) realities which are ‘more-than-human’, can be applied at the microscale (e.g. a rockpool), through the mesoscale (ecosystem), macroscale (bioregion and biome) and, according to the Gaia Hypothesis, even up to the planetary or sublunary scale (which marks the current fuzzy boundary of the mesocosmos). Thus, as in the Deep Ecology and Gaianist perspective, ecological relationships, the complex web of interconnections between plants, animals and non-biological elements in the natural
environment, can be considered mesocosmic spiritual realities in their own right, whether humans are present or not (and if they are, then they can be seen as merely another ecological element in the whole). Essentially, this is a perspective that sees a spiritual import in the 'new' or postmodern perspectives emerging in the sciences such as chaos and complexity theory, fractals, quantum physics, relativity, systems thinking, ecology, and cognitive science with their shared emphases on the importance of relations and relativity. Furthermore, it is a perspective that hopefully points to the possibility of the distinction between prosaic spirituality as outlined above and that described by metaphysicians and religio-philosophers being a matter of degree and not of kind. Thus, the acceptance of the possibility of 'earthly spirituality' as presented above might therefore intimate, or at least make more palatable the possibility of, spiritual realities at the cosmic level and beyond: 'As Below, So Above'. From such a standpoint the term 'spiritual' could equally be applied to supralunary natural phenomena such as planets, solar systems, galaxies and the whole cosmos.

Despite having correctly stressed the natural credentials of humankind and the possibility of spiritual realities that do not depend on human instrumentalism for their significance, Deep Ecologists all too often appear to adopt a somewhat misanthropic tone. Such a position is self-defeating and fails to acknowledge that it is their very humanity which has furnished these same Deep Ecologists with the requisite capacity for metaphysical contemplation – their 'imagination' – that permits them to arrive at such an ecogalitarian perspective through the application of 'reflexive relationality'. At the risk of distancing myself wholly from the Deep Ecology and Gaian perspectives which are both seen to have a great deal to commend them, particularly their profoundly 'creation-centred' and 'world-affirming' orientation, this thesis aims to argue the case for special consideration and significance being applied to humankind as a counter to such radical ecogalitarianism, and its attendant danger of misanthropy. This position recognises that humans do have at least one qualitatively different characteristic from the vast majority of holons in the Holarchy, which allows them to make a possibly unique contribution to 'realisation' of spiritual realities thanks to their sophisticated levels of mentation (see Chapters 4 and 5).
It is worth noting that, for Wilber, Gaian and ecological systems are lower down the holarchy (that is invested with less ‘being’) than human beings. Such a conception represents a challenge to more ecocentric or biocentric minded individuals such as Deep Ecologists who would undoubtedly reverse this ranking. The explanation is that, although the existence of humans is predicated on firstly the ‘material-physical’ dimension, and subsequently the biosphere, without which they could not exist, Homo sapiens actually exist in an additional level of ‘being’ – the noosphere – the dimension of reality associated with sentience or self-awareness. Just as the biosphere supersedes the material-physical dimension in level and quality of being due to the additional criterion of ‘life’, the noosphere in turn supersedes the biosphere because of the additional criterion of sentience or self-awareness. Of course, this is not to deny that sentience is a feature of other animals, but to acknowledge that it reaches a far greater extent in our species. Self-awareness opens up the possibility, indeed necessity, of semiosis or ‘meaning making or discerning’ in an existential, and not merely survival, sense (see Chapter 4).

Even with this additional qualification, the important insights of Deep Ecology are not lost, merely re-evaluated. Thus, pre-sentient ‘creatures’ or holons (including planets as well as single-celled organisms) are still definitely important spiritual realities by virtue of three characteristics: the simple fact of their existence or ‘being’ (ontological argument); the possibility of their possessing ‘subjective presence’ (Combs 2002), to whatever degree (intrinsic value argument); and the important relational role they play in the whole of Creation which, without their presence and particular contribution, no matter how small or apparently insignificant, would not be this Holarchy (communitarian or participatory argument). However, such pre-sentient creatures are simply not aware of any of this as they cannot apply, or engage in, ‘reflexive relationality’. Sentient creatures such as humans, on the other hand, possess all the same attributes as such creatures which bestow them equally with spiritual significance but they also possess the qualitatively superior capacity still of having ‘self awareness’ with which comes the ability to know the ‘facts’ of both their and other’s existential status, and the capacity and striving to make meaning – recognise significance – out of them. This capacity bestows them with greater ‘being’. Deep Ecologists make the error of ignoring this superior and possibly unique human capacity in their rush to ontological ecogalitarianism despite the fact that it
is this very capacity which has permitting them to arrive at such a philosophical position in the first place.

The call to recognise that humans are qualitatively different is not necessarily a call to anthropocentrism since semiosis cannot be considered the sole property of *Homo sapiens* in two important senses. Firstly, other creatures (if not all creatures) should be seen as having, to a greater or lesser extent, a ‘type’ of meaning-making (or signification) capacity, and therefore ‘intrinsic value’ and ‘self-concern’, by virtue of their ‘subjective presence’. This means that there is a continuity rather than a radical break across creation in this dimension (although the spectrum appears to be structured through quantum shifts). Secondly, and more importantly, however, is the necessity of not losing sight of the holarchical and relational nature of reality since, just as it takes a village to bring up a child, ‘it takes a universe to make a mind’. That is to say when properly viewed as holons or Gaions or Actants in a relational whole, humans should not be seen as atomistic entities acting solely on behalf of themselves, but rather relational ‘beings-in-communion’ who should act on behalf of the whole from whom they have been granted this privilege and responsibility. Thus, semiosis should be seen as a service or role that humans are able to play on behalf of creation – they are (potentially) the ‘Self-Awareness of the Universe’! This is a very special role, but then so are so many other roles undertaken by other holonic creatures, and without which semiosis would not be possible.

This perspective is *anthropokosmic* rather than anthropocentric in suggesting humans have a unique capacity within, and possibly existential obligation to, the Kosmos (understood as the Ultimate Holarchy) for Self-, that is Kosmic-Realisation or Consciousness. This can only be achieved by moving away from egocentricity (centring all meaning in one’s ego) and anthropocentrism (centring all meaning in humanity), towards a ‘Reality-centeredness’. Such a perspective urges for kosmic or Holarchical (understood in the Strong sense) processes that are apparent in the World (understood as multiplicity, a cosmic whole, and one’s existential frame) to be ‘centred’ in the mind of ‘human being’ (emplaced imagination) both individually and collectively. However, such a capacity is not a given, but rather something to be striven for. This implies an additional epistemological developmental aspect addressed in the previous chapter but also in evolutionary terms.
Evolutionary Dimension

Another important aspect of much relational thinking is that it emphasises dynamic processes and Whitehead’s Process Theology (Whitehead 1979) represents a recurring inspiration within postmodern spiritual discourse. Wilber’s AQAL model is also predicated on a dynamic process of development, that is the Levels are not always present but rather emergent, being unfolded through the process of evolution. The beauty of Wilber’s four quadrant schema is that, rather than being exclusively concerned with, and therefore as privileging, the evolution of consciousness, it stresses all quadrants, each of which has a unique and significant contribution to make.

On the nature of the spiritual: final thoughts

Whereas naturalistic science either denies the possibility of non-material realities or at least prefers to remain silent, metaphysicians, religio-philosophers and theologians are specifically engaged in speculations as to whether or not relational (and therefore spiritual) realities exist beyond purely material and earthly existence. Clearly one conclusion is to say ‘no, they don’t’ (and some might even dispute the fact that ‘spiritual’ realities as developed here are discernable on earth itself). However, for those who either accept, or are at least prepared to entertain the possibility (critical agnosticism), that they do, as is the case in this thesis, certain key questions present themselves. Chief amongst these is: are ‘How might the various levels of reality be ‘spiritually’ articulated?’; ‘What is the place of humanity in this scheme of things?’; and ‘In the final analysis, can spiritual realities be traced to an Ultimate source?’ . Hopefully, this chapter has gone part way towards addressing the first two questions, and this final part will finish with some initial observations regarding the third. Following Hick (1989; 2004), who presents a pluralistic account of theological responses to the same transcendent reality (understood here as the Great Holarchy of Being), for the theistically minded, the most satisfactory conclusion is that there is an Ultimate source which should best be thought of as a personal God (or other culturally appropriate appellation) Who is active through Divine agency. For non-theistic spiritual perspectives, an ‘Ultimate’ reality might be best
considered an impersonal and unlimited Absolute (e.g. Platonic ‘realm of ideas’). From non-dual and relational perspectives the notion of an acentric network of monadological or holarchical co-constitutive Kosmic Relationships is preferable to the concept of a (singular) centralised Ultimate source. This final religiophilosophical metaphysic is the one most preferred in this thesis.

The more-than-material ‘vital’ (both essential and animating) dimension – Being (or perhaps preferably, Becoming) or Bohm’s holomovement – that has been defended in this chapter is strongly associated with situations of relationship within a self-organizing holarchy or panarchy which is ultimately Kosmic, that is, More-than-Cosmic’ (merely materio-spatio-temporal) in scope since it incorporates, and is grounded within, yet exceeded by, this spiritual dimension. This ‘spiritual’ reality could be seen as a feature of the whole system that is ‘enfolded’ within it and emerges synergistically (i.e. is a consequence of a situation of relationship being in existence). Alternatively, one might consider it to be the causal ‘power’ which ‘gives rise’ to (or from which ‘emanates’ or is ‘unfolded’) the relational event in the first place – its ‘Ever Present Origin’ (Gebser 1986). Rather than categorically determining which should be seen as the causal factor (structure or process) which might actually be committing the error of false dichotomising, it may actually be preferable to see a spiritual reality as a dialectical, iterative and co-creative relationship between the situation of relationship (and all the implicated ‘parts’) on the one hand, and the vital force that animates it on the other. Indeed, quantum mechanics suggest that, at a profound and mysterious level, matter (which makes up the ‘things’ in relationship) and energy (the animating principle) might in fact be one and the same, the former perhaps representing a condensed or ‘crystallised’ form of the latter (or the latter a fluid form of the former).

The ultimate and mysterious source for both could be considered a quintessential spiritual realm which might be considered sacred given that it is wholly other to, yet the source of, ‘creation’ – relational reality. This Ground of Being or ‘implicate order’ would be both immanent and transcendent, that is implicated within and contains everything in creation in the manner of Bohm’s holomovement, yet exceeds it also. The paradoxical nature of this spiritual reality or realm of Being is conveyed by the term ‘panentheism’, a position to which this thesis ultimately should be seen as subscribing. Thus, everything –
pan – is derived from and contained within – en – therefore exceeded by its Source or Ground – theos (Greek for a god, that is a divine reality). The inclusion of the element ‘theism’ within the term should not be taken to imply that it is necessarily a Theistic or Deistic perspective which believes in a personal God, although neither is that possibility ruled out.

An implication of a panentheistic perspective is that, whilst fundamentally derived from this spiritual realm, ground or ‘implicate order’, the ‘subsequent’ realm of creation – the ‘explicate order’ of ‘creaturely existence’ (which is characterised by relational systems) – is essential for the former’s manifestation or ‘incarnation’. Thus, the ‘spiritual’ and ‘created’ realms must be considered as co-creative, albeit in an immensely asymmetrical relationship: the former since it is the source of the latter; the latter since it is the context of the contingent ‘realization’ or ‘incarnation’ of the former. Perhaps the term ‘performative’ best conveys this dialectical nature of spiritual events since the term ‘performance’ can be used as both a noun (structured event) and a verb (process). Such a metaphysical schema of ‘relational holism’ has found expression in religiophilosophies such as Hua Yen Buddhism (Barnhill 2001; Cleary 1995; Cook 1997), Brunerian Cosmology (Mendoza 1995), neo-Leibnizian Monadology (Marshall 2005), Whiteheadian ‘Process Theology’ (Odin 1982; Whitehead 1979), and ‘radical interconnectedness’ (Selby 2002). Furthermore, the Bohmian conception of holomovement (an implicitly dynamic term/notion) understood as a Kosmic ordering principle from which reality or the Cosmos emerges or is ‘unfolded’ bears comparison to some Traditional metaphysical concepts such as the Vedic notion of Rta, the Buddhist notion of dharma, the Daoist notion of the Dao, and the Hellenistic/Judaeo-Christian notion of the Logos. These are seen to represent mutually compatible (although not wholly congruent) perspectives that are representative of the highest wisdom of cultures ranging across premodern/Traditional, Modern and Postmodern epochs and both East and West and therefore hold the promise of the development of a truly ‘integral’ or ‘reconstructive postmodern’ spirituality but one which can only be ‘known’ in the sense of understood and, more importantly, the Biblical sense of communion through the achievement of ‘wisdom’ – a reflexive, participatory and experiential relationality.

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Chapter 7: Re-Enchanting the Landscape: Travelling between Thick and Think Boundaries of Place and Mind

A recurring trope in many postmodern discourses is the need to ‘re-enchant’ the contemporary, Modern worldview (Bennett 2001; Gablik 1990; McGrath 2003; Raboteau 1995). From this perspective, the reductive-mechanistic-materialistic rationality associated with Modernity has dis-enchanted the world i.e. has led to a worldview devoid of mystery and wonder giving rise to instrumental valuation which, in turn, permits social and ecological exploitation. The requisite task therefore becomes for the West to re-discover this mystery and wonder through re-visioning reality in non-reductive and holistic terms. Such a perspective is particularly in evidence in certain radical ecological and more spiritually minded sustainability discourses which advocate the transformation from a ‘self’-centred worldview (ego-, ethno- and anthropo-centric) with its attendant self-destructive behaviours (psychologically dysfunctional, socially unjust, and ecologically unsustainable) towards more creation-centred worldviews characterised by humility in the face of the awe and wonder of reality. Furthermore, such a project is often seen to be a rediscovery or re-cognition of the wisdom associated with premodern and non-Western cultures.

Such is the perspective taken in this thesis but with a crucial qualification: the ‘re-enchantment’ called for is associated with the achievement, either individually or collectively, of the post-formal, multiperspectival and mythopoietic level of epistemological development (see Chapter 5). This qualification is necessary in order to avoid committing Wilber’s ‘pre/trans’ fallacy in which anything premodern/non-Western is perceived to be superior to the Modern worldview. This is erroneous since rational is preferable to irrational thinking or generally pre-rational is less adequate than rational thought. This is not to deny the legitimacy of intuitive and/or instinctual ‘thinking’ which could also be considered as pre-rational in a non-pejorative sense, although it is perhaps preferable to use the term ‘surrational’ to distinguish this legitimate mode from irrational ones. However, whilst rational is preferable to irrational, formal rationality associated with syllogistic logic is less adequate than a post-formal dialectical thinking which integrates higher order thinking and feeling – wisdom. The purpose, and
consequence, of re-enchantment is not to regress into some pre-scientific superstition but to go beyond monolithic and monological worldviews, whether premodern or modern, to arrive at a multiperspectival and/or transrational postmodern one. Such is the goal of the transformative GEE being advocated in this thesis.

**Person-World Relations**

The model of personhood presented in Figure 6.1 is trialectic in nature, that is each component is determined by, and, in a qualified sense a co-creator of, the other two. Hence the phrase ‘emplaced imagination’ has been presented to stress that the human inner domain – imagination – is always and already existing within, and emerging from or a derivative of, its condition of emplacement within both the socio-cultural milieu and the (meta)physical environment. Conversely, in an epistemological sense, it is the ‘emplaced imagination’ which enacts – brings to subjective presence – the conditions of its own emplacement, that is it *brings forth* particular aspects (whilst eliminating others) of its (meta)physical environment and socio-cultural milieu to create the human umwelt of ‘mundane’ reality or ‘worldview’. Finally, those aspects of both the more-than-human and the intrapersonal dimension which are ‘viewed’ or brought to awareness are, to a large extent, socio-culturally determined or socially constructed. The whole trialectic-in-transaction represents the source from which the world or mundane reality proceeds or is performed, and any worldview is derived. Chapter 6 presented a relational ontology in which the more-than-human dimension should properly be perceived as always and already ‘enchanted’, that is a vector for the ‘being’ dimension. However, the realisation of the enchanted nature of reality may require the application of a mythopoietic level of being and knowing which, in turn, demands the transformation of the emplaced imagination.

The heuristic value of the trialectic model is that it provides a signpost for exploring each dimension of human personhood relatively autonomously (the corners of the triquetrous knot) whilst always highlighting their inextricable linkages (the knot itself). Thus one might consider a corner, cardinal point or moment in relative isolation. Alternatively, one might (or rather should also) consider direct links between two
components (semi-circular arcs), indirect links between two components through the mediation of the third (two arcs together), or the transactions between all components (the whole knot). In human terms, given our capacity for reflexivity and the fact of our entanglement with the whole trialectic as a crucial component, one can consider each dimension from two interrelated perspectives: etically (from an outsider’s perspective) or emically (from an insider’s perspective). The development of a capacity for ‘reflexive relationality’ should ideally permit an iteration between these perspectives. Thus, one could consider the ‘intrapersonal’ knot in isolation and focus on the rich interior, subjective dimension. Such a focus would, from the perspective of an ‘outsider’, most likely benefit from insights drawn from the field of psychology and its more recent critical variants (Positive, Depth, and Transpersonal) along with existential phenomenology and the liberal arts; with autobiographical reflection, contemplation or meditation, and creative expression providing the ‘view from inside’. Similarly, one might consider the ‘community’ knot in isolation with an etic perspective most likely drawing on sociology, anthropology and social psychology; whilst the emic perspective will be explored through hermeneutics and reflexive participation in community activity. Given the significance of social constructivism and the need to engage in ‘critical correspondence’ for a better informed perspective, both foci would benefit greatly from a consideration of the iterative transactions between these two knots or cardinal poles (arc between). This ‘personal-in-transaction-with-social’ dimension must, therefore, represent a crucial dimension of any transformative GEE. Some consideration of how this transaction might be facilitated educationally will be undertaken in the final chapter.

However, this present chapter will focus more overtly on the transaction which pertains between the intrapersonal and the transpersonal or ‘more-than-human’ dimensions because, on the one hand, such a focus naturally subsumes a consideration of the human dimension; and, on the other, because it was suggested in the previous chapter that a crucial form of anthropokosmic service is to nurture the imagination (intrapersonal pole) which is considered to be particularly well served through a focus on intra-/transpersonal transactions. To recap some key points form preceding chapters, this thesis argues that the goal of human development is the nurturance of wisdom – an emplaced imagination which is ‘Reality-centred’ and characterised by a ‘higher
intentionality', relational reflexivity and a mythopoietic capacity. This is deemed desirable for the following reasons. Firstly, because such a perspective is considered to be the most adequate terms of the discerning the relational nature of reality. Secondly, because the positive social and ecological behaviours demanded by ecocultural sustainability will be promoted through such an expansive subjectivity in which the person’s ‘horizons of concern’ extends beyond merely the egocentric to encompass a consideration of and/or identification with the ‘other’ (whether human or non-human) and a desire to contribute to the Greater Good. Thirdly, such an enhanced subjectivity is perceived to be intrapersonally or ‘spiritually’ fulfilling and consequently is preferable to the ‘shallow’ subjectivity associated with egocentricity and accumulative consumerism. Finally, and most contentiously, since the ‘emplaced imagination’ represents a locus of the enaction or ‘realisation’ of its own emplacement or world, a ‘higher intentionality’ should enact, or ‘realise’, a ‘higher’ reality, a fact which might carry metaphysical agency and/or import. Thus, such an emplaced imagination might provide the context or locus through which the transpersonal or transcendent or, indeed the divine, can be ‘brought forth’ into subjective presence. In this sense, the imaginative act of coming to ‘know’ (literally and Biblically) reality is a form of ‘para-eucharistic work’ (Nesteruk 2003, 2004) or hierurgy (‘sacred performance’ [Gk. Hiero – sacred; ergon – work]).

It should be obvious that the intrapersonal-transpersonal poles are in direct transaction biologically since the latter furnishes the former with its requisite existential necessities (habitat and materials for metabolism). Enactivism provides a perspective which accounts for such a direct transaction epistemologically also. The situation in human terms is considerably complicated however, given that social constructivism suggests that much ‘knowledge’ of the transpersonal must be seen to have been mediated through the societal worldview that is, the transaction between the transpersonal and intrapersonal is indirect passing via the ‘trans-inter-intra’ double arc (and vice versa). However, the argument for extreme social constructionism (this double arc is the only transactional route) was rejected in previous chapters in favour of a perspective which acknowledges the actuality of an extrasocial communication between ‘the Real’, that is between body, place and Nature (Spretnak 1997). Furthermore, given the developmental epistemology presented in chapter 5, the possibility of ever more adequate (although
never complete) ‘knowledge’ (literal and Biblical senses) of the transpersonal realm *ein sich* is admitted through the development of a reflexive relationality and even possibly mystical experience.

**The Geography of Consciousness**

In Chapter 3 a distinction was noted between esotericism and mysticism with the latter being solely concerned with achieving a direct and unmediated knowledge of the transcendent or divine, whilst the former is concerned also with the different levels of ‘Being and Knowing’ and the associated ‘worlds’ in between everyday reality and mystical knowledge. In a sense, this thesis is arguing for a type of postmodern esoteric geography since the mesocosm or mundane reality is the principal topic of, or route to, enquiry into the transcendent but the application of different epistemologies – surrational, formal and post-formal – reveals different ‘worlds’. Perhaps esoteric Gaiography would be a preferable term since it is more encompassing (Gaia being associated today with both mythology and ecology or environmental philosophy) and permits individual Gaions (earthly holons whether considered from a geographical or ecological standpoint) to represent, in a Blakeian or Thoreauvian sense, particular routes to the universal. Such a perspective suggests that it is desirable to approach a study of the world through a postmodern equivalent of the *pardes* model discussed in Chapter 5. Thus ‘literal’ approaches are acknowledged (perhaps Modern rational and scientific discourses) as well as metaphorical and symbolic and mystical approaches. The argument has already been made for integrating (rather than rejecting) the former (Chapter 2) and this Chapter attempts to justify the integration of the latter also.

**Mental Modules, Depth psychology and symbolism**

Stevens (2001), presents a cogent argument that the universal use of symbols in human culture has its origins in evolutionary and psychobiological foundations which are universal across the species and he suggests that one might refer to humanity as *Homo symbolicum* (p21). Thus, following Jung and other ‘Depth Psychologists’, he
posits that humans “… possess an innate symbol-forming propensity which exists as a healthy, creative, and integral part of our total psychic equipment. Although possessing a flexible capacity for local variations, this symbolizing ability proceeds on an archetypal basis which gives rise to characteristic symbolic manifestations” (p10). For example, “… the most ancient of symbolic configurations - the quaternity, the mandala, the cross – all symbols of totality … owe their origins to the neuropsychic capacity to conceive coordinates – North-South, East-West, up-down, left-right – a capacity which is indispensable to orientation in the real world of phenomena (px)”. The significance of the geographical world in terms of the genesis of these particular symbols should be immediately apparent and represents an important theme of this thesis. Such a capacity is ‘hardwired’ neuropsychologically yet Stevens then goes on to demonstrate that it is culture – the ‘software’ – which provides the programme through which these hardwired neuropsychic structures are realised as symbols which accounts for their variations across humanity. Stevens refers to these archetypal formulations and the neuropsychological structures underlying them as ‘mental modules’, with many such modules working in concert to provide us with the necessary furnishings for thought. Furthermore, these modules tend to come together to generate a “predisposition to develop certain kinds of perception, ideation, or action” (p10 [emphasis in original]) which can be seen to be implicated in the evolutionary history of the species as a whole, and in terms of the shared worldviews of particular cultures and groups (which relates again to the interpersonal dimension), the former accounting for the apparent universality of symbolism across humanity and the latter for the divergence amongst different socio-cultural groups.

Interestingly, the key influences coalescing to form a symbol identified by Stevens (p17) – personal, cultural and phylogenetic – correspond directly to the three ‘moments’ of the trialectic model presented above (Figure 6.1). Thus the personal influence (the particular biography and personal meaning making capacity of the individual who is either generating or interpreting a symbol) corresponds to the (intra)personal or ‘self’ moment; the cultural influence (socio-symbolic system) corresponds to the ‘community’ moment and relates to the ‘socially constructed’ nature of symbol systems; and finally the phylogenetic influence corresponds directly to Nature
understood as the deep, that is un- or sub-conscious structures of consciousness which emerge from our somatic, evolutionary and ecological status as biological and cosmological creatures emplaced within Creation. Thus, at one and the same time, a symbol, and indeed the very capacity for thought itself, is the outcome of the continual relational circuiting of personal, interpersonal and transpersonal factors. It is an emergent property of the whole trialectic.

The power of symbols lies in their capacity to ‘bridge’ the conscious and unconscious realms, a capacity which is suggested etymologically. Thus a symbol has the ability to cast the known alongside the unknown – from the Greek sym meaning together and ballein – to throw (ibid. p13). This represents an important adaptive function since humanity, as a meaning making and craving species, requires a mechanism to bridge the intolerable epistemological gaps between the known and the unknown to prevent mental turmoil and so achieve mental health and peace as well as providing a spur for exploration, discovery and inventiveness which represent perhaps the key defining features of Homo sapiens. Furthermore, symbols may “correct deficient modes of psychological functioning” and “… open up the personality to new symbolic meanings … [giving them] potentially enormous transformative power” (ibid. p17). Finally, “[s]ymbolism is a language that transcends race, geography, and time. It is the natural Esperanto of humanity” (ibid.).

Each of these observations has significant relevance to this thesis which claims transformative educational and ecumenical or intercultural relevance. These observations, together with those made in Chapter 4 as to the importance of visual perception, hopefully now provide a powerful legitimisation for the reliance on symbolic diagrams and devices in this thesis and the recourse to religio-philosophical symbolism since they are seen to possess considerable power as heuristic devices largely as a consequence of their archetypal correspondence with phylogenetic ‘mental modules’ and their cultural outworkings. Indeed, Stevens (following Burkert) characterises a religion as “a system of symbols incorporating ideas and beliefs which are emphatically accepted as true even though they cannot be verified empirically … [a] propensity to create them is implicit in the mind-brain of humanity” (ibid. pp19-20) (which provides a significant counter-argument to those who wish to reject religion out of hand and
hopefully also supports the tendency in this thesis to engage in a degree of constructive religio-philosophising).

States and Stages as Strange Attractors of the mind Across the Lifespan

Another way to think of Stevens’ neuropsychic ‘mental modules’ might be as conceptual schemas which returns the discussion more specifically to the field of cognitive psychology. The notion that there are ‘states’ or ‘structures’ plural of consciousness carries with it the significant implication that a crucial characteristic of the inner life of an individual is that is not static but rather is dynamic and capable of multiple transitions between structures or states of consciousness over time, each with a correspondingly different ‘mind-set’ or ‘worldview’ in terms of what conditions and processes have occurred to bring it about and the resulting phenomenal experience. This dynamism can be considered moment by moment in terms of the generation of an idea or thought, but the focus is generally over a longer timescale in terms of the transformation of a conceptual schema or indeed ‘worldview’ over the lifespan (chapter 5).

One of the greatest challenges made to the neo-Piagetian formulation is explaining the qualitative ‘jumps’ which are understood to occur between epistemological levels. Combs (2002) provides a useful perspective as to how such ‘quantum shift’ transitions from one structure of consciousness to another may occur. Drawing on complexity theory, he posits each structure or state of consciousness to be like a ‘chaotic’ or ‘strange attractor’ towards which the mind may be drawn and thereby reconfigured. The mind settles into, and remains within, one such attractor ‘basin’ should it prove adequate to the needs of the prevailing situation. Moving from one epistemological ‘strange attractor’ to another requires considerable mental energy which we understand as learning. However, once reached the newly learned mental patterns and processes – noema (Spinelli 1989) – prevailing within this epistemological level are likely to become habitual which brings with it the benefit of a reduction in required mental energy. Unfortunately, it also brings with it the danger that the noema will become ‘sedimented’ (ibid.) which means that a considerable amount of mental energy
(and existential angst) will be required to break through to the next epistemological strange attractor or level.

A particular noema will prevail until the habitual structure is no longer adequate to the situation and a critical threshold is reached – a bifurcation point. At this point the configuration of the structure – in this case the ‘mind’ – becomes increasingly unstable and ‘far from equilibrium’ (Prigogine and Stengers 1984) until a catastrophic restructuring occurs shifting it into a completely new and emergent structure and/or state. Such is believed to happen in human developmental terms: “When, through maturation or experience, a person’s physical and mental systems cross critical thresholds of complexity, that person is thrown out of his or her comfortable previous state into a temporary but fertile period of chaos which heralds the appearance of a new stage of development” (Combs op. cit p49). Recent attention within the Academy towards the notions of ‘troublesome knowledge’ and ‘threshold concepts’ has great relevance in terms of the above. Their importance lies in providing the epistemological conditions necessary for catalysis of a transition (hence threshold concept) from one level of understanding to another. They present to an individual a degree of complexity beyond the capacity of their prevailing mental frames (hence troublesome knowledge) which catalyses the creation of new, more adequate, frames.

Unfortunately this is potentially a traumatic experience and an individual needs to pass through a number of such destabilising and/or decentring crises for full maturity to occur. Nor will this developmental process always prove successful with either a impasse being reached, a regression to a previous less adequate epistemological level being precipitated; or a extended period of mental chaos or ‘mental breakdown’ being real possibilities along the way. It now becomes appropriate to extend Kegan’s scheme (Chapter 5) into mythopoetic and even ‘transpersonal’ levels of development or ‘strange attractors’ which represent the higher goals of transformative learning as understood in this thesis.
A Mystical dimension?

Whilst Stevens (op. cit.) defines religion as a symbol system which defies empirical verification, he does make a further observation, however which carries with it significant implications namely that religious beliefs or symbolic insights “... are confirmed, however, through meditation, trance and ecstatic experiences” (p20). This is a contentious claim yet one which is supported within the field of transpersonal psychology and many esoteric religio-philosophical systems. Consequently, the issue of Transpersonal knowing is explored below. This requires a shift of attention, partially at least, back towards the intrapersonal moment or inner ‘spiritual’ dimension of the ‘self’ since this is recognised as the locus of this level of knowledge. However, there is considerable debate as to whether or not the self moment has direct and unmediated communion with the transpersonal moment (represented by the single arc from self to Nature in Figure 6.1) or whether this is always mediated through social-symbolism of the interpersonal moment (the double arc from self through community to Nature).

There has been something of a resurgence of interest recently in spirituality. A particular field in which this certainly is the case is ecophilosophy, one of the key areas of inspiration of this thesis. However, to engage in such an enquiry is a risky enterprise within the Academy since a widespread distrust of this kind of speculation remains prevalent. This is understandable yet should be challenged. According to Marshall (2005), this distrust is firstly a consequence of “the opinion that questions about transpersonal contributions [to experience] are unanswerable or misconception” (p14). The first point, that such questions are ultimately unanswerable represents a major qualification of this thesis given the ambiguous nature of reality, therefore the only reasonably secure position to adopt is one of critical agnosticism (Chapter 3). However, the second opinion that it is misconceived is challengeable since a wilful decision to ignore something because it might not be true means that one is excluded from finding things out that which actually might be true.

The second issue that Marshall draws attention to is that as soon as one engages in a discussion about the ‘spiritual’ dimension it “raises suspicions that a confessional agenda is being pursued, at odds with the academy’s ideal of objective study” (ibid. p14).
This point is equally open to critique given the now widespread realisation that personal beliefs, values and attitudes are always and already implicated in the creation of so-called objective knowledge. It is better to be honest about the worldview that one does possess otherwise one runs the risk of committing the error of ‘internalized metaphysical assumptions’ implicitly shaping the position developed (ibid. p15). Furthermore, “[t]here is a clear link between mysticism and metaphysics: both are directed towards reality, the former seemingly through a direct intuition, the latter through discursive reasoning” (ibid. p15). Thus if it is legitimate to engage in metaphysics speculations, why is it not equally permissible to engage in transpersonal enquiry? This is providing a context for a return to mysticism and esotericism and a re-evaluation of the ‘wisdom’ of ‘premodern’ and non-Western societies that has, until the present time in certain circles, been largely dismissed as superstitious nonsense. It is also opening up the possibility that esotericism and mysticism (kept alive in certain marginalised circles in the West but a vibrant feature in many societies beyond the West) might be rehabilitated not only as a legitimate field of enquiry and lifestyle but a crucial one in terms of both addressing the complementary issues of personal and global transformation.

For the purposes of this section, spirituality refers to the existence of a relationship between a person and something greater than their empirical self or, indeed, human reality as it is normally experienced. Hay’s notion of relational consciousness and Emmons’ notion of Spiritual Intelligence, introduced in Chapter 3, are highly pertinent as, taken together, they refer to a phylogenetic propensity of humanity that, providing the appropriate conditions prevail, permits members of species to access the transpersonal realm. Part of the prevailing conditions are a suitably receptive individual – a person who is capable of, and open to, entering some kind of relationship with a transpersonal level of reality to a greater or lesser extent. Given the discussions undertaken in this thesis, one kind (if not the kind) of spiritual relationship which humans are, possibly uniquely, capable is an epistemological one and is associated with surrational or intuitive and/or, or more likely both/and, mythopoietic and transrational knowing. For Hay (Hay and Nye 1998) all humans have the capacity – a relational consciousness – yet this may not be utilised. For him young children are particularly ‘in tune’ with transpersonal realities through their relational consciousness since they have yet to develop habituated
mental schemas which, in the case of older persons, serve as barriers. For Emmons (2003) the ability to access transpersonal realities is an intelligence that, as with other intelligences, has a basis in natural ability but requires cultivation to become fully efficacious.

A distinction may be made between a spiritual relationship with something deeper within the self such as the unconscious and ultimately pure consciousness on the one hand, and a relationship with a deeper reality beyond the confines of the ‘skin-encapsulated ego’ (Macy 1990). Nicholsen (2002) terms these the ‘beyond within’ and the ‘beyond without’ respectively. In a sense this distinction is arbitrary since that which lies deeper in the psyche may be thought of as representing an aspect of Nature as used in the trialectic sense develop here (i.e. Deep Archetypes represent a kind of phylogenetic inheritance which is a derivative of the adaptive evolutionary history of the human species over millennia; and pure consciousness might ultimately be the very ground of both the self and creation as in the Hindu doctrine that Atman is identical with Brahman). However, staying with this explanatory dichotomy, Marshall (2005) makes the distinction between two kinds of mystical states:

a) Introvertive Mystical Experiences (IME)

These are mystical experiences which are devoid of content, that is they lack any spatio-temporal characteristics. They are likely to represent a ‘Pure Consciousness Event’ (PCE). In terms of the trialectic, they are likely to correspond to an individual withdrawing their awareness from the ‘world’ (community and Nature moments) in an attempt to explore the deepest recesses of their (intra)personal or ‘inner’ world. They are also likely to be elicited under conditions of extreme sensory deprivation such as during meditative practices.

b) Extrovertive Mystical Experiences (EME)

These represent transpersonal experiences in which the ‘...the mystical features – unity, knowledge, reality, love, luminosity, and so forth – characterize experience of the natural
world, not experience of something completely beyond the natural world, such as a transcendent god, self, or realm” (ibid. p2). It is important to note, however, that the definition used for ‘natural world’ is very broad and therefore is in keeping with the sense to be conveyed by the label Nature in Figure 6.1:

... it refers to the world of objects and processes that we find presented or represented in everyday sensory experience, a world that includes familiar items such as mountains, trees, animals, human beings, tables, and bicycles, as well as objects and processes that are not capable of being perceived in the ordinary manner but which have a claim to be contents of the universe in the way that the familiar objects are. These include items that are not visible to the naked eye because they are too small, too large, or too distant ...

The extrovertive category so defined is quite broad: it includes experience of the cosmic and mundane, of the wilderness, countryside, and town, of the non-human and human, of the natural and manufactured, and of supernatural realities so long as the natural world is also centrally involved.

( Ibid. p28)

Given the ecological and geographical dimension emphases of this thesis, EME’s are clearly relevant to the developmental and ‘place-based’ spirituality championed in this Thesis.

Bulkeley (2005) has presented an important analysis which attempts to integrate insights from both religion and cognitive neuroscience in order to explain the experience of Wonder which is strongly associated with the active imagination and visionary capacity – both features of the mythopoietic imagination as understood here – and may contribute to psychological health and happiness, creativity, spiritual experience and religious revelation (p9). Wonder is important in developmental terms since “[t]o feel wonder is to experience a sudden decentering [sic.] of the self. Facing something surprisingly new and unexpectedly powerful, one’s ordinary sense of personal identity is dramatically altered, leading to new knowledge and understanding that ultimately recenter [sic.] the self” (p4 [emphasis in original]). He goes on to suggest that “moments of wonder ... forcibly propel us outside that normal range of experience,
shattering our preconceptions, disclosing new possibilities, and revealing previously unknown dimensions of reality” (p17). The ego or empirical self is an important fulcrum in this process since:

In terms of the psychoanalytical model of the mind, wonder can be defined as the feeling evoked by an encounter with stimuli from either external sources (conscious perception) or internal (unconscious id) sources that surprise the ego and defy its ordinary structuring of personality. If ... the ego is best understood as a system of stimulus barriers that modulate arousal, then the dynamic effects of an experience of wonder is to overwhelm the ego with a sudden, extraordinary flood of stimulation that at least temporarily washes those barriers away.

(p91)

These moments of opening of the barriers, whether introvertive or extrovertive in origin, can lead to a metanoia or transcending of the habitual mind and a fuller encounter with reality. This represents a spiritual, that is relational and more profound, encounter with the world or aspects thereof which is associated with feelings of awe and joy. Rather than purely rational consciousness, it is an exercise of relational consciousness or ‘reflexive relationality’ which may ultimately lead to kosmic consciousness.

Young children may well be better at entering into this level of ‘being and knowing’ than adults as their egos are yet to ‘sediment’. Yet, an important distinction must be made between on the one hand becoming childlike (that is to enter an intentionality which is not clouded by egocentricity and which is fully in the present moment) and, on the other, regressing into a condition of childishness or infantilism. The first represents ‘progressive transformation’ which “leads from limitation to freedom, from darkness to light, from fragmentation to wholeness, from separation to oneness, from sleeplike inertia to awakened awareness” (Metzner 1987 p14). The second, however, represents ‘regressive transformation’ which take one from “limited ‘normal’ consciousness to even greater limitation or imprisonment, to deeper darkness, more extreme fragmentation and separation …” (ibid. p14). To confuse the two – progression versus regression – is to commit Wilber’s pre/trans fallacy.
Liminality - Crossing Boundaries

A recurring motif in the foregoing discussion may be captured by the term *liminality* i.e. the existence of metaphorical thresholds (Latin. *limen*) between different levels of Being and Knowing. Progress between different epistemological levels requires the transition of, or *travelling across*, these thresholds leading to a more adequate knowledge system. This is suggested in purely prosaic terms by 'threshold concepts' and 'troublesome knowledge' within HE but is also a recurring theme in Transpersonal and Depth psychology, and Transformative Education which are concerned with crossing thresholds into 'higher' or 'deeper' states or levels of maturity than are normally admitted in the West.

Thick and Thin Boundaries

1) ... in the mind (intrapersonal dimension)

Hartmann (1990) presents a psychological model in which the human mind is: made up of parts, functions or processes which are in a sense separate from one another and yet in communication with one another. We can consider them separated by a “boundary”; the degree of separateness is considered boundary thickness, the degree of communication boundary thinness. We also think of some kind of boundary around our whole selves, separating us from others and from the world; again this boundary may be relatively thick or thin ... [W]e can think of some individuals for whom everything is separate and in it place: order, organization; thoughts are one thing, feelings another; such a person may be seen as solid, perhaps somewhat rigid, well-defended or even “armored” [sic.]; thick skinned”. This is a person with thick boundaries in many senses. At the other extreme are people in whose minds things are fluid; thoughts, images, feelings readily merge; they are unusually sensitive, open, vulnerable. These people can be thought of as having thin boundaries.

(p71)
This model may be related back to the discussion in Chapter 5 of schizotypic and thymotypic modes of mentation, which would represent ‘thin’ boundary modes. Whilst Hartmann appears to suggest that personality types are either ‘thick’ or ‘thin’, it is a contention of this thesis that these mental boundaries are ‘thixotropic’: under ordinary (or ambicognitive) conditions they are ‘thick’ or solid but under special conditions cross a threshold to become ‘fluid’ (just as certain landscapes undergo ‘liquifaction’ during a seismic event) with the consequence that ideation and affect and conceptual dichotomies (e.g. inner-outer, self-other, fact-symbol) coalesce or even collapse and innovative and creative associations may be made. Mentation is then likely to be in the mythopoietic mode. However, it is neither desirable nor possible to function constantly at the mythopoietic level and it becomes necessary for the mental boundaries to ‘thicken’ once again (just as the landscape solidifies after energy levels attenuate) in order to re-enter consensual and functional reality. Thus, one has passed from ‘thick’ through ‘thin’ and back to ‘thick’ forms of mentation. Perhaps the umbrella condition ‘schizophrenia’ represents a failure to make the transition back to the ‘thick’ mode leading to an aberrant, chaotic and invariably horrific worldview which makes everyday functioning extremely difficult. However, temporary thinning could represent a benign or even adaptive characteristic of human mentation which underpins creativity and may even provide a mechanism for esoteric and mystical knowledge with less elimination of the perceptual array.

2) ... across Society

In addition to purely intrapersonal qualities, Hartmann (ibid. p75) also suggests that certain cultural factors – the interpersonal dimension of the trialectic - can affect the ‘boundary thickness’ of the individual. Thus, his ‘Boundary Questionnaire’ identified people born in the 1960’s as relatively ‘thinner’ than those born in the 1950’s. This also relates back to the observations made by Musgrove (1977 - see Chapter 5) that people living at the societal margins tend to develop what could be seen as ‘thin’ or schizotypic personalities. This potentially carries a positive message since alternative lifestyles and cultural diversity – alterity – could be celebrated for their potential contribution to
societal creativity although there could be a shadow side since there is an overrepresentation of Black and Minority Ethnic groups in mental health care. Similarly, Lifton’s suggestion that contemporary societal processes associated with globalisation may be giving rise to a ‘protean self’ (Lifton 1993 - see also Chapter 5) could be seen as another formulation of the ‘thinning’ theme. Once again, this could be a cause for celebration as it could be indicative of a general global movement towards a more adequate, that is multiperspectival, worldview. There is, however, an attendant shadow possibility since such global proteanism could prove excessively disorientating for some leading either to utter bewilderment or a ‘hardening’ backlash where people retreat into rigid and monolithic fundamentalist and exclusionary worldviews. Massey’s (1995) distinction between ‘geographies of exclusion’ and ‘geographies of inclusion’ could be seen to represent both an explanation for, and expression of, boundaries (thick/impermeable and thin/permeable respectively) operating within the socio-cultural sphere.

3) ... of Place

So much for the intrapersonal and interpersonal contributions to ‘boundary thickness’ but what of the transpersonal pole or moment? According to the relational ontology presented in Chapter 6, this ‘more-than-human’ dimension should be seen as always and already ‘thin’ in that it represents the dynamic and creative ‘self-arising’, the mysterious immanent-and-transcendent or ‘intimate-yet-mysterious’ presence through which being is derived. However, its realisation as such requires a knowing subject who recognises it. Now a key issue is: With what is the cognising subject transacting in order for this epistemological event to happen? According to the enactivist paradigm, it is with the materio-temporal milieu or environment and its associated sensory array. In human terms this can be identified as either ‘place’ or ‘landscape’ understood as integrative concepts (see below) and the further question arises: Might certain types of landscape or place be more efficacious in epistemological ‘thinning’? Here the Celtic/Insular Christian notion of ‘Thin Places’ might prove informative. According to many, Celtic Christianity, and its pagan antecedents were creation-centred: “the whole cosmos is a
theophany — a marvellous revelation of the goodness and wonder and creativity of God” (Bradley 1993 p35). It is perhaps no coincidence that Celtic Christianity developed in the British Isles (hence Insular) at the very margins of the Roman Empire and continental Europe. According to Sheldrake (1995):

Celtic Christians had — and even today, have — a strong sense of living on ‘edges’ or ‘boundary places’ between the material and the other world. The natural landscape was both a concrete reality where people lived and, at the same time, a doorway to another, spiritual world ... This sense of living ‘between place’ enabled Celtic Christians to make connections between the physical and the intangible, the seen and the unseen, this world and a permanently present ‘other world’.

This perspective gives rise to the particular, although not unique, emphasis within the Celtic Christian tradition upon place, landscape and journeying as ‘doorways’ to, or windows upon (threshold metaphors again), the Divine. The whole of creation — manifested particularly as the landscape — provided a potential route to the divine although certain types of places and landscape features — Thin Places — were held to be sacred in that they had particular hierophanic power and the ‘veil’ between the worlds was particularly ‘thin’ and ‘translucent’. Landscape features such as trees, stones, wells, mountains, caves, islands, settlements, trackways, boundaries and temples were all revered as ‘thin places’ through which communion with the divine could be achieved.

However, the hierophanic agency resided neither exclusively in the landscape nor in the mind of the observer. Rather, it was through the transaction between, on the one hand, the place or landscape (as external manifestation of the transpersonal realm) and, on the other, the imaginal or mythopoietic capacities of the observer’s imagination that a hierophany was enacted. Thus, for Bradley the Celtic Christians “excelled at expressing their faith in symbols, metaphors and images, both visual and poetic. They had the ability to invest the ordinary and the commonplace with sacramental significance” (Bradley 1993 p84). Similarly, according to Pennick (2000): “Bardic knowledge utilized a sophisticated system of metaphor, allegory and symbolism, giving access to the
invisible nature of things” (p8). This connection between mental and physical (embodied, geographical) ‘space’ is a particular concern of contemporary transpersonal psychology which stresses the importance of both ‘set’ (subjective intentionality or orientation of consciousness) and setting (spatio-temporal context) in the elicitation of Altered or Alternative States of Consciousness (ASC’s) (Tart 1990). In terms of the personhood trialectic, this is a consequence of the transaction between the intrapersonal and the transpersonal poles. Thus, a ‘thin state of mind’ can allow a greater proportion (or less elimination) of information from the transpersonal domain to be enacted, and a greater degree of realisation of the transcendent or ‘divine’. Alternatively, ‘thin places’, places with particularly strong numinosity, might catalyse a shift in consciousness to transpersonal and/or transrational epistemologies. This represents a powerful argument for the relevance of human-place transactions in the achieving the goals of transformative learning, understood here to include the development of reflexive relationality, participatory and mythopoietic (and even possibly mystical) modes of Being and Knowing.

**Minding the Landscape, Landscaping the Mind**

Chapter 2 presented a brief overview of the importance and complexity of the concept of ‘place’ in contemporary discourses and Chapter 4 focused on the significance of the environmental milieu in terms of ‘shaping’ human mentation. These two themes may be seen to merge in the notion of ‘landscape’. Muir (1999) demonstrates that the notion of landscape is polysemous and multivalent, with a variety of interpretations and approaches to its study. Thus, landscape may be understood to describe the ‘all-at-a-glance’ view or scene from a particular perspective. As such it is a material and objective feature of reality and is associated with those approaches which attempt to objectively study and account for the evolution of the landscape either in terms of the physical (i.e. geomorphology, physical geography, geology) or historico-cultural (landscape history and archaeology) features. From another perspective, landscape “denotes the external world mediated through subjective human experience … Landscape is not merely the world as we see it, it is a construction, a composition of that world” (Cosgrove cited in...
This significantly broadens the possibilities for approaching the study of landscape.

For some, the focus of attention is on how this representation is brought forth in the imagination of the cognising subject through experiential engagement in the landscape (e.g. perception studies, socio-biology, habitat theory, enactivism). Others are likely to stress the socio-cultural and political forces which are implicated in this imaginative act (critical and cultural geography). Still others are concerned with the emotional and aesthetic responses to perceived landscape (humanistic geography, landscape aesthetics, landscape evaluation). Still others are interested in landscapes as artifactual environmental representations, that is “written and visual depictions that reproduce or resemble real or imagined places, regions and landscapes” (Gold and Revill 2004 p11) and such representations, and indeed the material landscape itself, are often seen as ‘discourses’ or texts to be interpreted. Thus, one may consider the iconography – “the identification of conventional, consciously inscribed symbols” (Daniels and Cosgrove 1988 p2) or iconology – deeper, or ‘intrinsic’ meaning (ibid.) – of landscape representations.

As Muir (op. cit.) points out, these approaches represent a spectrum of approaches to the study of landscape, several of which (if not all) are complementary. Some approaches adopt a ‘distant’ and objectifying (dis-)engagement whilst others attempt a more ‘immersive’ or experiential engagement with the various hermeneutic approaches perhaps providing an intermediate type. Unfortunately, little attempt has been made to integrate these approaches and many remain somewhat antagonistic. This thesis would wish to support Muir in his call for an integrative approach to landscape studies. This is understood to demand a consideration of the intrapersonal, interpersonal and transpersonal or more-than-human (including geomorphological and ecological) dimensions; and the capacity to shift iteratively between the distant (reflexive) and immersive (relational) approaches in order to arrive at a reflexive relationality of landscape. Indeed, the suggestion that it might be desirable to apply the pardes model to place, landscape, environment and geography might provide a rationale for achieving this. Thus, literal interpretation of the landscape might be associated with more ‘distant’ or objective approaches such as geomorphology or landscape history and architecture;
symbolic approaches being associated with the hermeneutic and cultural approaches of landscape iconography; and more 'mystical' interpretations being associated with 'religious geographies' or topomystica (Chamberlain 2001) which are the concern of more 'immersive' and 'spiritual' aspects of humanistic geography, ecophenomenology and ecosophiology.

Ludic, Lucid and Liminal Geographies

The enactivist paradigm demonstrates that the emplaced imagination’s dialogic engagement with the landscape is an existential given. However, the developmental and stage-based epistemology presented particularly in Chapter 5 means that this dialogic engagement can be based on different ‘logics’ – surrational or experiential/emotional, formal, and post-formal (which integrates all others). Carr (2004b) discusses the need for an holistic phenomenological approach to ‘place-based learning which “values and nurtures bonding between the individual and the planet through intellectual, sensory, emotional, and spiritual channels” (p89). Similarly, Sewall (1995) argues for the development of ‘Ecological Perception’ which demands the following skills:

1. learning to attend
2. perceiving the relations
3. perceptual flexibility
4. reperceiving depth
5. the Imaginal Self.

These perspectives provide an insight into what might need to happen in order for the environment or landscape to be re-enchanted. This thesis supports these views but understands the holistic phenomenological engagement and ecological perception called for by these authors to be associated with the post-formal/mythopoietic epistemology. Consequently, the remainder of this chapter will consider some approaches which could be considered as applying precisely this post-formal thinking or reflexive relationality. This is desirable because this post-formal epistemology is considered to be: creative and playful and therefore personally rewarding (thereby providing a counterpoint to the
banality of accumulative consumption); potentially providing new insights which could prove individually and collectively adaptive; more adequate than other, 'lower', epistemologies at revealing or 'enlightening' the relational holistic ontology which is understood to underpin reality; and 'thins' the boundaries between rigid dichotomies such as self-other/world, thinking-feeling etc. The mythopoietic geographical imagination is, respectively, ludic, lucid and liminal.

Another powerful benefit of 'landscape' is that it is an integrative and relational concept. Thus, Leopolds' (1989) notion of the 'Land Community' suggests that the proper way to think of the ecological integration of biological (flora and fauna as well as human) and physico-chemical (soil, nutrients, landshape etc.) dimensions within the landscape is as a place-based 'fellowship' or commonwealth. Furthermore, the landscape concept implies the integration of both natural/physical and cultural/built features. Indeed, very few, if any, landscapes do not bear the mark of human habitation or cultural influence. Similarly, no human settlement can be considered to be purely artifactual, nor to exist outside of the biosphere. However, for the purposes of exposition, examples of the application of the mythopoietic imagination to the landscape in terms of a natural/rural/countryside/wilderness vis-à-vis a cultural/urban emphasis will be presented separately partly because this reflects a general tendency for landscape commentators to focus exclusively on one or the other. However, it must constantly be borne in mind that the approach advocated in this thesis would be to integrate both to give rise to an holistic phenomenology of the landscape and which encourages people to be 'amphibious' in terms of operating both in the 'natural' and the 'urban' environment, which is not to deny a possible preference for one 'habitat' over the other.

Nature, Wilderness and the Physical Landscape

As noted in Chapter 2, one strand of environmental psychology focuses on individual-nature transactions and a number of authors have commented on the spiritual benefits of Wilderness experiences (Greenaway 1995; Harper 1995; Kaplan and Talbot 1983). This perspective tends also to be expressed within the field of experiential.
adventurous and outdoor learning (Hopkins and Putnam 1993). Thus, according to van der Post (1982):

Those of us who have experienced being exposed to wilderness, who have taken people into the wild areas and lived with them there, have witnessed a change in them ... Somehow they emerge from this wilderness transformed as if they were coming from a highly sacred atmosphere. Indeed, wilderness is the original cathedral, the original temple, the original church of life in which they have been converted and healed, and from which they emerge transformed in a positive manner.

(p69)

Similarly, Stringer and McAvoy (1992) concluded that wilderness adventure trips and programmes enrich the lives of participants physically, mentally and spiritually. Many of these authors focus on moral development and suggest that experience of wilderness are most efficacious in terms of developing Geopiety (Knowles 1992). Yaffey (1993) identified a correspondence between outdoor activities and environmental experiences and the existential values they nurture.

Meeker (1981) identified a correspondence between wisdom and wilderness which he explains in terms of the phylogenetic evolution of humanity within wilderness which gave rise to:

a multileveled brain linked to our bodily functions and to our natural environments [and which] is a good instrument for comprehending the world in its wilderness complexity. We are capable of perceiving a many-dimensional world, of feeling deeply about it, of relating to one another and to other species in a large variety of ways. We are also capable of analyzing our experiences and thoughts, and of bringing unlikely aspects of our awareness into imaginative new combinations. Apparently, we are well designed for wholeness and equipped for wisdom.
He suggests that the reason why so many religious ascetics have sought to withdraw into wilderness is precisely because of its 'transhuman otherness' and, ultimately, “wilderness is nature's way of being wise, and wisdom is the mind's way of being natural”.

Other authors have also looked to indigenous traditions for an insight into the connection between wilderness, spirituality and the development of wisdom. Thus, Basso (1996) discusses how, to the Western Apache, wisdom is a distributive feature which resides in the landscape or ‘Sits in Place’. Consequently, “[a]s Apache men and women set about drinking from places – as they acquire knowledge of their natural surroundings, commit it to permanent memory, and apply it productively to the workings of their minds – they show by their actions that their surroundings live in them” (p86). Basso identifies wisdom demonstrated by the Apache as a heightened mental capacity for prescient thinking in which deeper meaning is discerned in the landscape and associated place-based narratives. This is produced and sustained by three mental conditions: smoothness of mind, resilience of mind and steadiness of mind which he later goes on describe in Western terms as “keen and unhurried reasoning, resistance to fear and anxiety, and suppression of emotions born of hostility and pride” (p85). Significantly in terms of this thesis, “[b]ecause none of these conditions is given at birth, each must be cultivated in a conscientious manner by acquiring bodies of knowledge and applying them critically to the working of one's mind” (p73). Devereux (1996) and Cumes (1998) have attempted to develop wilderness-based educational programmes based on indigenous cultures which directly draws on this almost universal indigenous concept of places are ‘repositories’ of wisdom. Raffan (1993) identified four types of knowledge invoked and celebrated by the land as teacher in indigenous cultures which could provide direction for the development of sensitive wilderness programmes. These are:

1. Toponymic component – to do with place names and the naming of places
2. Narrative component – creation stories and travel tales
3. Experiential link – i.e. personal experience of the land itself. Of particular importance was the experience of land gained when forced to be entirely dependent on it for survival
4. **Numinous** attachment – a spiritual bond, a sense of the divine presence, being awe-inspired in the presence of Nature.

(adapted from *ibid.*)

In addition to these indigenous and premodern inspired approaches, many workers find inspiration in Western sources. Thus many draw on the literature (and the metaphysical thinking which underpins it) associated particularly with the English Romantic movement (Spretnak 1991, 1997) and the New England Transcendentalists (Geldard 2001; Robinson 2004). Similarly, an engagement (as either student or creator) with the ‘visual arts’ of the landscape, whether in terms of drawings and paintings or actual landscape design, provides insights into alternative modes of environmental representation and transaction or ‘dialogue’. Thus, the Classical, Medieval, Renaissance, Enlightenment, Romantic, Imperial and post-modern/-colonial periods are all associated with different aesthetics, representations and manipulations of the landscape (Gold and Revill 2004), and a study of each will reveal both the ‘insights’ and ‘blind spots’ of each period.

Since the Age of Encounter (from 1492 on), non-Western aesthetics have also been significant shapers of landscape appreciation in environmental discourse. Notably, Far Eastern (Chinese and Japanese) literature and painting reflecting the Daoist and Buddhist worldviews have proved influential. Rather than environmental mimesis, lyric poems and the ‘poetic paintings’ of landscape inspired by them (the former often integrated into the latter as text) are intended to convey a reflection on the human condition. This was often framed allegorically in terms of the ‘lyric journey’ through the landscape “… an underlying ideal narrative, or myth: the myth of living in seclusion in nature, of strolling through the mountains in search of poetic sensations, of pausing to experience certain sights and sounds and to savor [sic] the feelings they arouse, and of returning to the security of one’s home” (Cahill 1996 p4). These textual and visual images are often remarkable for their minimalism, with the meaning being conveyed as much by what is not represented as what is, so that ambiguous poetic symbolism and the use of blank space on the canvas are devices which symbolically reflect the Buddhist notion of Emptiness or *sunyata* which is better understood as the ‘immeasurable
plenitude' from which all emerges, and which invite the audience to 'enter', or imaginatively participate, in the work (Coleman 1998). It would seem appropriate to end this section with a literary example of this genre which could be seen as emblematic of this thesis:

A Mountain range, when viewed from the front, a peak from the rear,
A changed scene each from high or low, from far or near.
The genuine looks of Lushan it is hard to map,
For you are standing right on this tall mountain's lap.

Su Shih (1036-1102) [(trans. Soong 1999)]

**Architectural, Urban and Cultural Landscapes**

Turning now to the more overtly human-impacted landscape – the built environment and cultural landscapes – the application of the mythopoietic imagination may also be discerned across cultures and eras. At the scale of individual buildings, Bachelard's (1964) seminal "The Poetics of Space" has inspired a whole movement in humanistic geography, architecture and the arts concerned with the phenomenology of intimate places and could be seen as a paragon of mythopoietic thinking about domestic spaces or 'the home' place. However, the connection between buildings and individual and collective phenomenology has long been manipulated by architects to invoke certain emotions such as awe and reverence. Thus, pre-modern religious buildings of worship, whether associated with Ancient Near East (Egyptian, Greek, Roman, Sumerian, Babylonian, Semitic and Persian civilisations), Christianity (Whone 1990), Islam (Akkach 2005), Buddhism (Govinda 1976), and pre-Colombian traditions in the Americas were designed as psycho-cosmic models, to elicit feelings of awe and wonder, and to put visitors in mind of (or 'in the mind of') the 'divine'. Often these buildings and more secular ones (e.g. castles and palaces) have been designed to be imposing in order to project power, status and authority and an expression of the prevailing societal order into both the landscape and the minds of people.

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28 I am indebted to Professor Julian C. Wong of the Geography Department of the National Taiwan Normal University for introducing me to this verse during a truly inspirational study visit to Taiwan in 2005. In many respects he embodies the Chinese ideal of the scholar-poet.
With the advent of Modernity, these architectural devices have been applied more knowingly and, due to technical advances, sometimes on a grander scale, for example in the great Baroque churches and palaces and the great Sky-Scrapers of today. Many bemoan, however, the proliferation of disenchanted ‘non-places’ (Augé 1995) – globally homogenous secular functionalist buildings such as airports and malls devoid of any local distinctiveness and, if they are intended to elicit any response at all, it is a shallow and pernicious encouragement to consumerism. It is in reaction to this trend that the ‘Critical Regionalism’ movement has been instigated in architecture which can be traced back to the work of Geddes and Mumford who saw civil architecture, properly designed, as being morally and spiritually didactic and edifying, both individually and culturally (Luccarelli 1995; Tzonis 2003; Welter 2002). The phenomenological and symbolic importance of height and ascent has been explored in previous chapters and this is perhaps best illustrated in terms of the tower which has been a universal religious (e.g. ziggurat, steeple, minaret, stupa and pagoda) and secular (e.g. castle, folly, Sky-Scraper) cultural symbol of authority and aspiration. Ziolkowski (1998) discusses the tower also as a highly personal symbol of shelter, refuge and outlook associated with anti-Modernists such as Yeats, Jeffers, Rilke and Jung who all chose to live in towers as retreats from the Modernist ‘Wasteland’. The cultural-symbolic importance of towers is perhaps no better encapsulated in the contemporary global world than in the destruction of the Twin Towers (symbols of global capitalism and, for some, American hegemony) and the debates about what form the 9-11 monument to occupy the site of Ground Zero should take (symbol of global loss, solidarity and resilience).

Shifting the scale to that of cultural landscapes opens up the possibility of sensual, imaginal and iconological explorations of such emotionally and imaginatively charged sites as cemeteries, landscaped parks and indeed whole cities. Worpole (2003) provides an overview of the emotional and symbolic dimensions of places of burial and memorial. Investigations of the English Landscape Garden movement of the seventeenth to nineteenth centuries (Hunt and Willis 1988) and the Masonic-inspired symbolism in architecture and landscaping (Curl 1991) also provide a wealth of insight into the connection between landscape and the imagination. Zardini et al. (Zardini 2005) have presented a ‘sensorial urbanism’ “that takes into consideration the full spectrum of
perceptual phenomena that make up the sensorial dimension beyond the regime of the visual” (p19 [emphasis in original]) and which could be related back to the sensuous geographies (aural, olfactory etc.) advocated by Rodaway (see Chapter 4).

Coverley (2006) has presented an historical overview of the development of psychogeography as an urban-orientated radical artistic/political strategy which, in terms of this thesis, involves the mythopoietic re-enchantment of Modern urban life. The term is most strongly associated with the Paris-inspired Situationists (most notably Debord, who coined the term) and, more recently, the London-inspired Sinclair, Ackroyd and Kieller. However, Coverley adopts a more temporally expansive definition of the movement by tracing it to ‘visionary geographers’ of the eighteenth to twentieth centuries. Clearly, the cities of London (the inspiration for Defoe, Blake, de Quincy and Stevenson as well as the contemporary authors identified above) and Paris (Baudelaire and the surrealists Breton and Aragon and the Situationists that followed them) have been major inspirations for this movement which is characterised by a countercultural emphasis on the imaginative (re)mythologising of the urban landscape and experience, and attention to the subaltern aspects of city life. Pile’s (2005) recent ‘Real Cities’ represents what can be thought of as a scholarly application of the mythopoietic imagination in the study of urban geography which is inspired, in part, by psychogeography. He discusses the ‘phantasmagorias’ of city life by which he means the imaginative-fantastic-emotional ‘structures of feeling’ associated with the urban ‘uncanny’. He uses mythic/symbolic devices of the dreams, vampires, ghosts and magic in his studies of New York, London, New Orleans and Singapore to draw out the intangible qualities of these cities. Finally, the term psychogeographical might also be applied to describe imaginative, magic realist, counterfactual, adventurous and science fiction genres such as is found in written, cinematic and graphic novel forms which could be fruitful sources of inspiration for developing the mythopoietic (psycho)geographical imagination, albeit not restricted to merely the urban environment (e.g. Alsford 2000; Kitchin and Kneale 2002).
Wandering and Wonder-ing – travel and pilgrimage

The real voyage of discovery consists not in seeking new landscapes, but in having new eyes

Marcel Proust

To be educated is not to arrive, it is to travel with a different view

R.S. Peters

Before closing this chapter, another important theme which has been alluded to on several occasions previously will briefly be addressed, namely that of travel. The discussion so far has stressed the need to enter into an intimate relationship with a place. However, Plumwood (2002) reveals that to be ‘place bound’, that is developing (either intentionally or unintentionally) a “stationary lifestyle of monogamous relationship to just one place, organised around singular ideals of attachment and fidelity” (p233), can be limiting and may lead to the development of a monolithic and xenophobic ‘sense of place’. This provides a note of caution against overly romantic views of indigenous cultures since, according to Zimmerman (1994):

Tribal peoples do not regard their world-founding myths and rituals as one of many countless narratives, but instead the “Truth”. As totalizing, foundationalist thinkers, they are notoriously intolerant of strangers coming from the chaotic domain outside the one, true world. … Tribal peoples often regard nonmembers not just as different, but as less than human – as fearsome demons.

(p307)

A similar critique is often levelled at the bioregional movement since there is no guarantee that a bioregional community will not develop socially oppressive or ‘ecofascist’ systems of governance. However, many spokespeople for the movement argue that, given its ecological and biospheric perspective, bioregionalism is more likely to lead to a global outlook which supports both ecological and social justice. Hence, Carr
(2004b) argues for a structurally aware bioregionalism informed by critical civil society theory which is similar to Thomashow’s (1999) call for a ‘cosmopolitan bioregionalism’. This awareness of place within the wider local-Global nexus is similar to that advocated by critical geographers and Massey’s Global Sense of Place represents a useful formulation of the goal to be aimed for. However, the question arises as to how one can become structurally aware and/or dissolve a sedimented, monological and monolithic worldview. This is the very stuff of Transformative education, whether understood in the horizontal or vertical sense (see Chapter 1) and the final chapter will provide an indicative overview of suitable approaches. Here, stress will be placed on the benefits of travel which, as the adage goes, ‘broadens the mind’.

De Botton’s popular philosophical book ‘The Art of Travel’ (De Botton 2002) is full of exemplars, drawn principally from the artistic avant garde, of how travel can expand the imagination or how imagination can enhance travel (even if only around one’s room). Psychogeographers also employ strategies for imaginative and actual journeys such as the ‘drift’ or dérive (Coverley 2006; Sadler 1999) which represents a kind of purposeful aimlessness intended to lead the psychogeographer into unexpected places and encounters. A recent faux ‘travel guide’ has been created by Lonely Planet which is full of such playful – ludic – ideas for ‘Experimental Travel’ (Antony and Henry 2005). Depth Psychologists and Mythologists are likely to focus on the allegorical and mythic connections between travelling and personal development in which case one is likely to talk of travel as pilgrimage. Biallas (2002) offers a typology:

We are traditional pilgrims when we undertake a journey to a specific sacred center or shrine. We are spiritual pilgrims when we seek to develop and strengthen our spiritual lives by finding the sacred within ourselves, perhaps without ever leaving home. Finally, and most appropriately for our present interests, we are travel pilgrims when we seek to bolster our spiritual growth by finding the sacred in our travel experiences. As travel pilgrims we don’t leave home necessarily to visit some specific religious shrine, but rather to energize and transform our lives through our experiences of the sacred in other people and in the world of nature

(xi)
Biallis likens us all to Parsifal, the Arthurian grail-quester who moves from foolishness to wisdom and ultimately discovers that “the Grail is the joy and happiness that comes from being of service to others” (pix). Edwards (1995) also refers to Parzifal (sic), pointing out that the name itself derives from the Old French per-ce-val or ‘through-the-middle’ which provides an allusion to the liminal nature of pilgrimage as a ‘rite-of-passage’ from immaturity to maturity or enlightenment. In addition to its effects on the intrapersonal dimension of personhood, pilgrimage is also understood to affect the interpersonal dimension through the development of communitas – “spontaneous, immediate, and concrete relatedness typical of bonds formed between people in the middle, liminal stage of a rite of passage” (Bowie 2006 p153). Thus, a special relationship is often forged between members of a pilgrimage group, or between individual pilgrims and the people they meet in the everyday circumstances of their journey. The mythopoietic understanding of travel as forging both a new self and a new sense of community belonging can be extended to encompass the transpersonal dimension or more-than-human realm. Thus, for Plumwood, “the orientation of journeying, as a project of multiple place-encounter, is dialogic rather than monological, as a communicative project to explore the more-than-human as a source of wonder and wisdom in a revelatory framework of mutual discovery” (Plumwood 2002 p233). In this sense, the communitas which is being forged is the ‘more-than-human’ or Land Community. This is seen to be an important goal of the Transformative GEE being championed in this thesis.

Finally, this thesis has often drawn on Celtic/Insular Christianity to exemplify some of the themes discussed and it is therefore seems fitting to end this Chapter with a brief mention of the significance of pilgrimage and its relationship to other aspects of this tradition. According to Bradley (Bradley 1993) what makes Celtic Christianity distinctive is the ‘three P’s’: presence – a deep awareness of, and involvement in, the concrete particulars of life (as such, this ‘p’ could equally stand for place in terms of ‘sense of place’, ‘place attachment’ and ‘place-based praxis’); poetry (which could be thought to refer to the exercise of the mythopoietic imagination); and pilgrimage. Bradley discusses how Celtic Christians were inspired by the Old Testament Exile narratives and
the Desert Fathers and perhaps also pre-Christian legends to deliberately seek out desolate, isolated and barren places (which, in the British context, often meant islands and rocky promontories) in order to undertake *perigrinatio* or the search for the ‘place of one’s resurrection’. This represents a kind of a self-imposed exile precisely from those places to which one had become intimately attached. This perplexing tension between place attachment and journeying can be better understood in terms of a dialectic involving two types of liminal encounter since, according to Sheldrake (1995):

both are associated in different ways with the experience of ‘transition’. In the full sense implied etymologically by the Latin verb *transire*, ‘to go over’, journeys between places are self-evidently transitions and movements. But places themselves are not static realities either. All places are transit points, passageways between worlds. Both the pilgrimage journey and the sacred place encapsulate here-and-now experience of *transitus* – conclusive ‘passing over’ to the other world that is ultimately brought about by death.

(p8)
Chapter 8: Learning to Mind the World Wisely

The highest form of education is that which is not confined to imparting knowledge but which brings our life into harmony with all existence

Rabindranath Tagore

The alliance of environmental and social justice agendas, local through to global

The previous chapters have been concerned with championing a non-anthropocentric postmodern spiritual worldview which can be characterised as ‘integrative’, ‘holistic’, ‘systemic’, ‘connective’ and ‘ecological’. Such a perspective is seen to represent the most adequate ontological (and indeed metaphysical) account of reality. Furthermore, the conceptual, phenomenological, normative and ethical considerations which flow from such ‘radical interconnectedness’ (Selby 2002) are considered to be precisely those needed to address the complex of crises identified at the outset of this thesis namely: environmental degradation; social injustices and intercultural conflict; and individual and collective ‘spiritual malaise’. This is so because such a worldview is thought to present a relational perspective from which to critique the “conditions for direct and indirect violence, rampant global competitiveness (with consequent destruction of the biosphere and ethnosphere), and ethnic, racial and religious strife” (Selby 2007 p166) which are a consequence of the hegemonic dualistic worldview. As such, it provides the basis of ‘wisdom’ or what Spariosu (2004) refers to as Global Intelligence – the “ability to understand, respond to, and work towards what is in the best interest of and will benefit all human beings and all other life on our planet” (p6). An ‘emplaced imagination’ exhibiting ‘reflexive relationality’ will be characterised by expansive conceptions of justice, moral relevance and compassionate identification towards both the human and ‘more-than-human’ realms. Such a mode of ‘being-in-the-world’ will also be more spiritually fulfilling, being Reality-centred. For these reasons, it is considered to be the most adequate perspective in terms of radical or ‘transformative’ (in the ideological sense) interpretations of both sustainable development and global citizenship.
Different ‘orders’ of learning and teaching (and consequently learners and teachers)

The foregoing chapters have also emphasised an important developmental dimension. The realisation of ‘Global Intelligence’ or wisdom demands an ‘epistemic shift’ “from linear, binary forms, which favor [sic.] disciplinary and compartmentalized modes of knowledge, to nonlinear, holistic forms, which favour transdisciplinary, integrative modes” (ibid p2). This represents the crux of this thesis since “[t]he changes towards an ecological paradigm … at individual, group or social level, depend on learning” (Sterling 2007 p70 [emphasis added]). This learning process will be of relevance to ‘strong’ or transformative interpretations of Education for both Sustainable Development and Global Citizenship, or ESDGC, since:

Such a shift involves our understanding of ourselves and our self-location; our relationships with other humans and with the natural world; our understanding of relations of power in interlocking structures of class, race and gender; our body-awareness, our visions of alternative approaches to living; and our sense of possibilities for social justice and peace and personal joy.

(Morell and O'Connor 2002 pxvii)

Consequently, ESDGC is understood here as a meta-orientation directed towards the development of Global Intelligence through facilitating such an epistemic shift at individual and collective levels. The focus of this final chapter is a consideration of educational implications of this process.

At a general level, all forms of education may be seen as transformative if they involve “a shift of consciousness that dramatically and permanently alters our way of being in the world” (ibid.). From a Piagetian perspective such learning occurs whenever a qualitatively different and ever more adequate cognitive schema is constructed. From a Vygotskian perspective this occurs whenever an individual is extended into their Zone of Proximal Development (ZPD). However, since the ZPD may lie beyond the learner’s comfort zone, entry into it is facilitated by coaching, coaxing or initiation into this realm of experience and/or knowing by an ‘expert’ – a person who already possesses an intimate knowledge of the mode of being and knowing associated with this level of
development. Thus we derive the paradigmatic ‘educational’ relationship (whether formal or informal) between an initiate/novice/pupil on the one hand and the initiated/guide/teacher on the other which is found almost universally throughout human culture and which is generally, although not necessarily, predicated on an intergenerational relationship.

Learning may now be understood as a socially-facilitated process by which an epistemological frame is either constructed and consolidated or, more importantly, is transcended leading to a new, more adequate, frame. However, Chapter 5 made the case that there are a number of different, ever more adequate ‘orders’ of consciousness or epistemological ‘frames’ through which we relate to reality. The crucial point is that not all teachers will be able to facilitate all types of learning since the learning shift from one level to another generally requires a teacher or guide who has successfully undergone this level of learning/epistemological shift themself. Sterling discusses three orders of learning:

First order change and learning takes place within accepted boundaries; it is adaptive learning that leaves basic values unexamined and unchanged ... By contrast, second order change and learning involves critically reflective learning, when we examine the assumptions that influence first order learning ... At a deeper level still, when third order learning happens we are able to see things differently. It is creative, and involves a deep awareness of alternative world-views and ways of doing things.

(Sterling 2001 p15)

This notion also relates to ‘multiple loop’ learning in which:

[s]ingle-loop learning refers to learning concerned with changing skills, practices and actions. Double-loop learning facilitates the examination of underlying assumptions and models driving our actions and behaviour patters. Triple-loop learning allows us to question and change values and norms that are the foundation of our operating assumptions and actions.

(Keen, Brown, and Dyball 2005a p16)
Transformative ESDGC requires all three orders, or loops, of learning. Thus, learners will need to engage in first order/loop learning with the support of ‘first order/loop’ teaching/teachers in order to be apprenticed to the skills and practices prevalent in society generally or within specific sustainability-relevant professions or academic disciplines specifically. Traditional (western) pedagogy across all educational phases and sectors has functioned reasonably well at achieving this level of transmission learning. However, if learning were to end here it would merely result in a continuation of the same values, attitudes and practices which have led to the prevailing conditions of ecocultural unsustainability. Consequently, second order/loop learning is necessary to critique the prevailing situation. The practice of ‘deconstruction’ associated with postmodern discourse and applied in educational situations by radical/critical educators who have achieved ‘second order’ learning themselves represent key pedagogical attempts to conscientize (Freire 1970) learners, that is raise into their consciousness hidden assumptions informing the prevailing situation/worldview.

However, as has been repeatedly stated, critique is not enough and the opportunity must be taken to transform those attitudes and values which are found wanting. This process – third order learning (understood here in terms of postmodern reconstruction) – will entail the development of a whole new worldview which is personally/collectively authentic, fluid, polysemous and multidimensional and consequently more adequate in terms of the achievement of ecocultural sustainability. Such learning will require ‘third order’ teaching and teachers or what has been referred to here as ‘transformative education’ and ‘transformative’ or ‘vanguard’ educators (Lister 1987) respectively. Whilst the term vanguard could be seen as elitist, it does convey the fact that such educators represent the ‘leading edge’ of societal transformation needed in the twenty-first century. Unfortunately, they are relatively few in number and what is required is for “sufficient members of society to have experienced some form of transformative, epistemic [third order] change in order to facilitate and stimulate second order learning amongst a greater numbers” (Sterling 2007 p73).

This three-fold learning typology can be related to the epistemological development schemas presented in Chapter 5. Thus, first order learning/teaching will be associated with the process leading up to Kegan’s Level 3 (Figure 5.1) or a
monological/syllogistic/dualistic/'Modern' rationality (Figures 5.2a-d to 5.3a); second order with Kegan's Level 4 – a postmodern deconstructive perspective; and third order with the process leading to the development of Kegan's level 5 characterised by a more holistic, integral and multidimensional rationality (Figure 5.3b). Actually, some would extend this learning typology to talk of 'fourth order' learning often associated with an ecospiritual dimension (see Markos and McWhinney quoted in Chapter 1). This distinction is helpful for the present purposes because it implies that learning can support the development of a still deeper, potentially transrational and spiritually-attuned epistemological level (Figure 5.3c).

Such learning and/teaching would be associated with the development of a 'strong postmodern spirituality' attuned to the 'Being'/‘Becoming’ dimension of reality or the 'implicate order' expounded in Chapter 6. Such a level would be characterised by a more than merely conceptual mode of 'being-and-knowing' with emotional, embodied or intuitive ways of understanding being legitimate and “the product of extensive study, spiritual practice, divine inspiration, or even serendipity, rather than conscious reasoning” (Glasser 2007 p46). Such learning could be seen to be associated with the development and exercise of the mythopoietic imagination giving rise to a participatory or co-creative 'reflexive relationality' and even the capacity to 'reach into the holomovement' (Selby 2007). Such is the understanding of transformative learning ultimately advocated in this thesis. It represents an initiation into authentic, mature and fully human existence – wisdom – which represents a necessary motivation towards the achievement of the Good Life both individually and collectively, and represents a move away from merely self-serving behaviour towards the performance of service in support of the Greater Good.

Emmons (2003) discusses this in terms of ‘generativity’ which refers to "a concern for guiding and promoting the next generation" (p132) and which may be exhibited “in a variety of contexts, including work and professional activities, volunteerism, neighborhood [sic.] and community activism, religious and political organizations, and involvement in environmental causes” (p133). This represents an attitude to the world which can be thought of as a ‘pragmatic spirituality’ (ibid.) and, in the terms of this thesis, represents an expression of ‘relational reflexivity’ associated with third and fourth order learning. The relevance of generativity for the praxis of social and
environmental justice, whether enacted within the local or Global civil society, is hopefully self-evident. Emmons also stresses that generativity is a particularly strong motivation for becoming involved in parenting, mentoring and teaching, suggesting that such people often feel compelled to become involved in nurturing others. These themes – activism and teaching – come together in Giroux’s understanding of teachers as ‘transformative intellectuals’ (Giroux 1989, 2005) and the notion of ‘teaching as activism’ as exemplified by those educators working in the field(s) of environmental and social justice (Tripp and Muzzin 2005).

Thus, the ideal level of learning in terms of ‘strong’ ESDGC at both individual and collective levels as understood in this thesis is certainly 3 (postmodern reconstruction towards a relational worldview and generativity) and, ideally, 4 (strong postmodern spirituality giving rise to a participatory worldview). Consequently, society requires ‘teachers’ (whether professionally recognised as such or otherwise) to undertake level 3 and 4 learning themselves thereby becoming facilitators of the requisite 1st, 2nd, 3rd and even 4th order ESDGC learning in others. Given that first and even second order processes are relatively well documented, the latter part of this chapter will focus on these higher levels of development specifically. Before doing this, however, it is worth making some qualifying remarks about the discussion so far.

The notion of different orders of learning/teaching shouldn’t be too tightly tied chronologically either in terms of particular ages or linear sequencing. Thus, some people might never progress beyond first order learning throughout their lives whilst others will have progressed, perhaps with little support, to third and even fourth order learning at quite an early age. Secondly, whilst transformative learning might more generally be associated with post-adolescent and adult learning, the pre-pubescent/middle childhood years might represent a life phases which is particularly conducive to transformative learning as it represents a thixotropic transition period between fluid and sedimented worldview. Thirdly, rather than a simple linear developmental sequence, it is likely that transformative learning will proceed in a more complex, spiral or skipping fashion involving a number of iterations between the various orders. Finally, ‘spiritual’ experiences need not be associated exclusively with ‘fourth’ order learning.
Here ‘Significant Life Experience’ (SLE) research (e.g. Chawla 1999) is relevant. SLE research is generally concerned with ascertaining the kind of extraordinary experiences, often of a ‘spiritual’ or transpersonal nature, that produce the kind of people who are committed to promoting social and environmental justice. SLEs are often inextricably connected to particular places, a characteristic which should be obvious given the emplaced nature of human existence stressed in the foregoing chapters but which is worth restating since the significance of place in the elicitation of an SLE is crucial. Indeed, many place-based SLEs might be understood as ‘Extrovertive Mystical Experiences’ (EMEs) as discussed in Chapter 7. A very powerful example is presented by Selby (2002) in his evocative recollection of the significance of his early childhood experiences exploring ‘Green Lane’ outside Lincoln in the 1950s. The Bwlch, the Brombil, Baby Witch’s Wood and Shaky Bridges (the latter discussed further below) are all places associated with early SLEs in my own environmental autobiography.

One of the purposes and assumptions of SLE research is that by identifying the nature of such experiences, we can plan to replicate them as intentional (formal or informal) learning experiences. An implicit assumption, which is supported here, is that such learning experiences will be possible in childhood. Indeed, it would appear that childhood represents a particularly ‘spiritual’ life phase (Hay and Nye 1998; Hoffman 1992). A second implicit assumption, that such learning is most efficacious in childhood, is more questionable, however. Such early significant ‘moments’ are likely to represent passing ‘traits’ rather than permanent ‘states’ that might be all too easily relinquished in the face of more banal life-experiences associated with subsequent life-phases. Besides, the relatively weak agency associated with this life phase means that children’s capacity to effect the requisite societal changes, even if motivated to do so by a superior sensitivity to the ‘more-than-human’ dimension, is limited. This thesis therefore argues that the elicitation of SLE in adulthood will represent a powerful experiential and transferable learning process through which a more stable capacity to have such experiences will be engendered in the (fourth order adult) learner who will crucially be possessed of a ‘childlike’ (although not childish) capacity for empathy and ‘wonder’ coupled with adult maturity and socio-political acumen.
Such learning will be of great import for the individual themselves, for whom such experiences of ‘radical interconnectedness’ will be a more stable feature of their mode of ‘being-in-the-world’ and inform their ethics, behaviour and systems of meaning. They will also be better equipped than most to retrospectively identify the very real significance of such early childhood experiences. Thus, whilst in no way questioning the significance of Selby’s experiences in Green Lane at the time, it is as a ‘transformed adult’ that the true significance in lifespan terms probably became most apparent. Also, the development ‘place attachment’ should be seen as a lifelong process involving SLEs and even EMEs at various life stages. By way of example, ‘Shaky Bridges’, a small footbridge across the River Sow in Staffordshire and its rural environs, was a regular childhood haunt of mine associated with childhood SLEs. However, this place has taken on additional ‘significance’ since then due to enhanced engagements with the place associated with subsequent learning. For example, increased understanding of the geomorphology and ecology of the place as a consequence of my personal induction into mainstream geographical and environmental disciplines (first order learning) has greatly intensified my personal connection and attachment to the place. More transformatively significant, however, have been the therapeutic effects of the place during a time of personal crisis in young adulthood (no doubt partly efficacious because of childhood associations but also due to its characteristic naturalness and timelessness); and the effect of mythopoietic affordances of the place such as the discovery that shrub-covered hillock overlooking the stream is locally called Mount Sinai, hinting at an almost religious significance in my own personal narrative or ‘ecobiography’.

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29 Biblical Mount Sinai in the Judaeo-Christian tradition being where Moses encountered the Burning Bush and, as Mount Horeb (an alternative appellation), where Elijah received divine succour from the ‘bread of heaven’ delivered by ravens whilst in the wilderness.
Similarly, St David’s Peninsula in Pembrokeshire has become highly significant to me specifically in adulthood thanks to the attachment I have developed to the place through several visits with my mother which we have referred to (with ever decreasing whimsy) as ‘pilgrimages’. Such visits have involved sharing and growing in our mutual understanding of each other and our shared humanity or ‘more-than-humanness’. In addition to its spectacular scenery and wildlife (which stimulate the traditional environmental geographer in me), this place also has a number of personally significant mythopoietical affordances such as its connection to Celtic Christianity (real and imagined) and, more personally still, the fact that the River Alun runs through the Cathedral precinct and flows out into the sea at Porth Clais providing a highly personal geographical metaphor for my journey through life and understanding. Similar trajectories of signification could be traced in other autobiographically significant places and related to different ‘orders’ of learning therein.

Undergoing such place-based ‘fourth order’ learning will also have important implications for others since whilst SLEs may, on occasion, be spontaneous and completely private (in which case the place itself could be considered the ‘teacher’), many childhood SLEs are associated with an environmental mentor, usually a significant
adult, who facilitates the ‘initiatory’ experience(s) which ‘take place’ literally in the external environment and metaphorically in the existential space of the learner’s ZPD. It is a contention of this thesis that this ‘educator’ status – the capability to draw out these experiences in others – is the outcome of a process of transformational lifelong learning which has advanced the person in question across significant existential learning thresholds or ‘Zones of Existential/Epistemic Development’ which has given rise to postformal and even mythopoietic levels of ‘being and knowing’. Those who have developed an integral worldview and experienced transpersonal dimensions on a more than fleeting basis will be better ‘qualified’ to facilitate them in others (i.e. become third order integral teachers or mentors and even fourth order mystagogues). Such a person has the insight to perceive the relational nature of reality and the skill, sensitivity and imaginative charisma born of their mythopoietic imagination to introduce others, over time, to this understanding. Consequently, a consideration how people come to be such ‘wise elders’ capable of sensitively supporting the development of integral worldviews and catalysing SLE/EMEs in others is crucial in terms of the development of ‘fourth order educators’. Actually, the term ‘elder’ should not be seen purely in generational terms since the roles of ‘fourth order’ teacher and learner on the St David’s pilgrimages discussed above have been shared between, indeed more often than not reversed in terms of the typical, parent-child relationship.

**Frameworks**

With these considerations in mind, it is now appropriate to first consider suitably integrative frameworks or ‘maps of the territory’ which might be used for educational planning purposes to engender such intellectual and experiential ‘third’ and even ‘fourth’ order learning. It should be remembered from Chapter 3 that the integral ambitions of this thesis extend to the integration of science, religion and art although space precludes a comprehensive treatment of all possible aspects and formulations here. Fortunately, a great deal of relevant material has been developed and the reader is referred again to the burgeoning literature associated with the emerging ‘transformative learning’ paradigm,
notably articles in the *Journal of Transformative Education*, O'Sullivan's (1999) personal vision, and recent edited anthologies (O'Sullivan, Morrell, and O'Connor 2002; O'Sullivan and Taylor 2004). Consequently, the emphasis in the remainder of this chapter will be focused on the potential contribution to 'transformational learning' of an expansive Geographical and Environmental Education (GEE) in which landscape, place, and/or the environment represent important holistic and multiscalar conceptual categories. Once again, a crucial qualification must be made. The intention of what follows is not to provide a prescriptive account of a particular GEE journey or curriculum that must be undertaken by all learners. Space, but more importantly the diversity and contingencies of each learner/learning situation and the vastness of the territory to be explored, prohibit this. Rather, the 'map' and discussion which follow are intended to suggest possible journeys. Two integrative frameworks – place and the personhood trialectic – have been presented in this thesis and are briefly recapitulated below in specifically educational terms.

**Place**

According to Pinar (1991) "[p]lace as a concept is largely absent in the curriculum literature […] which] has tended towards the abstract" (p165). This reflects the adoption of the hegemonic universalising principles of scientific discourse within education. However, postmodern and post-structural and socially critical critiques of universality and the hegemonic status of science have informed recent thinking in curriculum studies giving rise to alternative 'situated' accounts of, or perspectives on, curriculum. Pinar (*ibid.*) identifies three: autobiographical (see the discussion of *currere* below); historico-political; and geographical or 'place-based'. In many respects these represents three moments of an inextricable curriculum trialectic which corresponds reasonably well to the personhood trialectic developed in this thesis. Whether one starts from a consideration of the autobiographical/phenomenological experience of learners and/or educators (intrapersonal); or from a consideration of wider socio-political structural forces (interpersonal); or from the particular contingencies of the place in which learning
is ‘taking place’ (transpersonal) a consideration of the other themes or concerns will inevitably arise.

Chapter 2 outlined the significance of place in contemporary postmodern discourses and these debates have influenced educational thinking. Terms such as ‘place-based education’ and ‘pedagogies of place’ have now entered educational discourse and this thesis can, in many respects, be seen to be both inspired by, and contributing to, this discourse. However, according to Gruenewald (2003a) there has been an unfortunate tendency for two mutually compatible, yet still divergent, traditions to have emerged. On the one hand there those working broadly within what Sterling and Huckle (1996) would term ‘liberal/holistic’ approaches which emphasise the holistic potential of the concept in terms of integrating various false dichotomies such as self-other, inner-outer, intellectual-affective, human-‘more-than-human’ etc. but which can be criticised for tending to adopt an exclusively ecological and rural emphasis and for being socially and politically naïve. On the other hand are those working from a ‘critical pedagogy’ approach emphasising socio-political power relations and structural forces but which can be criticised for an implicit anthropocentrism and often urban bias. Gruenewald’s (op. cit) call for a merging of these traditions to give rise to a ‘critical pedagogy of place’ is seen to provide an important corrective to both positions and is entirely endorsed in this thesis since it represents a perspective which can accommodate second (critical), third (holistic) and fourth (transpersonal) dimensions of learning.

**Personhood**

Similarly, the ‘personhood trialectic’ (Figure 6.1) is also intended to provide an holistic orientating framework, the implication being that integral education should approach learning through all three moments, and the transactions that pertain between them, in order to engender intra-, inter- and trans-personal development in an iterative fashion. The trialectic presents a number of potential ‘routes into’ transformative learning but here the intention is for it to be used to ensure that all three ‘facets’ of place, landscape and/or environment are attended to: “toward environmental materiality, toward social perception or construction, and toward individual affect or bond” (Buell 2005 p63).
Multiple Loop and Polyphasic GEE

Furthermore, each dimension of place and/or the trialectic can be considered from the perspective of first, second, third and fourth order epistemological frames and/or learning. In Chapter 7 it was suggested that something akin to the Medieval the pardes framework could be applied to contemporary place-based learning so that one should come to 'know' the world through a combination of literal (e.g. objective scientific), hermeneutic, allegorical and even mystical modes of enquiry – a truly polyphasic approach. However, the extreme learning challenge to achieve a level of development that can authentically accommodate these diverse, and sometimes oppositional, traditions must be acknowledged. This demands multiple-loop learning. First order/loop learning of a sophisticated degree is needed in terms of the 'troublesome knowledge' and 'threshold concepts' associated with each perspective. Second order learning processes will be required to undertake a critique of each through deconstruction and hermeneutics. Third order learning will be required to arrive at a personally authentic and suitably integrative worldview through searching for 'critical correspondence' between the traditions. Finally, fourth order experiential transpersonal learning through the exercise of 'reflexive relationality' and the mythopoietic emplaced imagination will be desirable. 'First order' learning can be associated with traditional forms of 'Western' GEE. Whilst acknowledging its significance within integral GEE, little attention will be paid to it here given its mainstream acceptance. Whilst more marginal, second order GEE is seen to be relatively well served by socially critical formulations of GEE as advocated by, for example Huckle (1985; Huckle 1997, 2001), Fien (1995) and Morgan (2000a; 2000b; 2000c; 2001a; 2001b; 2002; Morgan and Lambert 2005) and little benefit is thought to accrue from rehearsing these debates so advocacy of this socially/culturally critical position should be, once again, taken as read. Consequently, third and fourth order GEE learning represent the focus of the remainder of this chapter (and particular contribution of this thesis to transformative learning debates).
Third Order GEE Learning – Achieving Integralism through Multiple Epistemological Lenses

‘Place’ and/or the personhood trialectic provide suitable bases for considering the scope necessary for a truly integrative GEE. However, another consideration is the variety of epistemological lenses through which to explore the various scales, moments and articulations. As a consequence of the general principle of epistemological pluralism, IMP and polyphasic enquiry, an integrative and transformative GEE will be best served by pedagogical pluralism (Scott and Oulton 1999). The goal is to develop an individual’s and community’s capacity for critical, creative and caring thinking (Lipman 2003) in order to learn to live ‘wisely’, that is work to achieve the Good Life both individually and collectively, both in terms of the human and wider land communities. This cannot be achieved through any one educational approach in isolation and hence the project must be informed by a variety of disciplinary traditions and pedagogical approaches. In terms of GEE, Mulligan and Hill’s (2001) identification of at least three legitimate approaches to the study of ‘ecology’ is a starting point. Once again, these are: scientific; Arcadian/romantic; and indigenous. Similarly, the variety of ‘geographical’ traditions identified by Holt-Jensen (1999) represents another candidate list for integration. Once again, these are: scientific; humanistic; radical; cultural; and postmodern/post-structuralist. It will be a challenge indeed, but a rewarding one, for third order learners to become acquainted with, if not expert in, all these diverse (and sometimes antagonistic) GEE approaches.

From the more applied perspective of urban planning theory and sustainability-relevant professions, Sandercock (1998) argues that sustainable and multicultural cities demand an approach to planning which enables community empowerment and which should be informed by ‘critical Enlightenment’ epistemologies such as Friedmann’s ‘Mutual Learning’; Schön’s ‘Reflective Practitioner’ and Forester’s ‘Talking and Listening’ as well as post-Enlightenment epistemologies associated with Critical Theory (feminist, postmodern, postcolonial) and Indigenous knowledges. He argues in favour of an ‘epistemology of multiplicity’ which, whilst not discarding scientific and technical ways of knowing, acknowledges different ‘ways of knowing’ including through: dialogue...
(particularly oral traditions such as story telling); experience; engaging with local knowledge; learning to read symbolic and non-verbal evidence (such as music, painting, poetry and theatre); contemplative or appreciative knowledge; and doing or action planning. Similarly, the emerging applied field of ‘Social Learning in Environmental Management’ (Keen, Brown, and Dyball 2005b) seeks to draw on a variety of different approaches to knowing (and consequently being) in the achievement of community empowerment for ecological and social justice including non-Western and non-scientific ones. A truly integrative GEE should attempt to accommodate all of these various ecological, geographical, applied or action-orientated traditions since the best possibility of a transformative GEE exists in the tension field created between these divergent, non-exclusive and ultimately complementary approaches.

Social and Mutual Learning through Participation and ‘Critical Correspondence’

Chapter 3 introduced the term ‘critical correspondence’ to describe the dialogic engagement or encounter between two or more already well developed perspectives in a spirit of mutual respect and openness with the ambition of moving, through such an encounter, towards a degree of coherence or congruity (although not identity) between perspectives. Whilst learning encounters can be possible between an individual and artefacts (such as texts and artworks), dialogue is only truly possible between two or more people or groups in communication (whether face-to-face or virtual). Participatory learning is particularly associated with a Freirian approach to Development Education. The goal is conscientization, that is, the raising of awareness amongst a community of learners of the underlying structural issues that affect the material circumstances of their lives, the ultimate goal being to empower learners to assume greater control over these forces (Freire 1970). However, a very powerful corrective to an overly naïve and optimistic view of the participatory approach is presented by Cooke, Kothari et al. (Cooke and Kothari 2001) who question the assumption that participatory approaches are benign per se and point to the potentially neo-Imperialist tendencies inherent within some formulations. Consequently, educators need to be critically aware of these dangers.
The related notion of Social Learning describes the “collective action and reflection that occurs amongst different individuals and groups as they work to improve the management of human and environmental interrelations” (Keen, Brown, and Dyball 2005a p4). Whilst participatory approaches often involve strengthening the ‘bonding social capital’ of a pre-existing community, Social Learning often requires the additional development of ‘bridging social capital’ between diverse and sometimes antagonistic interest groups (Eames 2005). Keen, Brown and Dyball (2005a) have presented four interrelated or braided strands of social learning for sustainable environmental management – reflection, systems orientation, integration, negotiation and participation – which fit in well with the notion of an expanded GEE as championed in this thesis.

The postmodernist and post-structuralist insight into the socially constructed nature of worldviews provides the justification for a critique of Western hegemony and the need for intercultural dialogue through which the respective ‘blind spots’ of each culture can be revealed. However, intercultural dialogue must be handled sensitively to avoid the unintentional imposition of one agenda or over another and anyone working within the field of GEE needs to be extremely sensitive to such cultural nuances (see the discussion which concludes this chapter). Another key issue arises in terms of the potential for disagreement and conflict between perspectives and careful strategies need to be developed in order to reduce the negative implications of such differences of opinion. Brown et al. (Brown et al. 2005) propose using Bohm’s ‘9 rules of dialogue’ (p228) to reduce the potential for negative tension. Selby (Selby 2007) similarly discusses Bohmian dialogue within the context of ‘dialogic social learning for sustainability’ although his interpretation would be more appropriate considered as an example of fourth order social learning and so will be discussed subsequently.

‘Artistic’ GEE - Environmental Humanities

Buell (2005) has coined the term ‘environmental humanities’ (pvi) to refer to those disciplines within the humanities which are particularly focused on environmental issues. His work has been seminal in the emerging field of ‘ecocriticism’ which is concerned particularly with the relationship between literature and the environment. This
field represents a fruitful area for GEE and would benefit greatly from interdisciplinary working with the disciplines of English and cultural studies. In particular, speculative fiction (understood here to include 'other world' genres such as science fiction, cyberpunk, fantasy, horror, supernatural, alternate history, and magic realist) represents a particularly fruitful area for transformative GEE in terms of exercising the mythopoietic imagination as discussed by Buell (ibid. pp56-71), Alsford (2000) and Kitchin and Neale et al. (Kitchin and Kneale 2002).

Whilst the term 'ecocriticism' tends to be reserved for specifically literary enquiry, it would seem appropriate to extend its use to describe environmentally aware criticism of the visual arts (painting, architecture, photography, cinema, television, landscaping and park design). Thus, the manner in which the environment, place and landscape has been represented in these media over time and in different localities should be encouraged in an integral GEE. A number of texts suitable for undergraduates and the general reader exist which provide a good introduction to these themes (e.g. Gold and Revill 2004; Robertson and Richards 2003). Furthermore, GEE learners should be encouraged to express their environmental experiences artistically through a variety of media to support fourth order learning through experiential engagement.

**Local, Traditional, Indigenous Knowledge**

Another key theme which has emerged in recent years has been the recognition of the importance of indigenous knowledge (IK) in terms of ecological and landscape management (e.g. Berkes 1999). Whilst an unproblematic assumption that indigenous-mainstream dialogue is necessarily benign must be challenged (Reid, Tearney, and Dillon 2002), it is increasingly recognised that the West has much to learn from indigenous groups. Some counter-culturalists and anthropologists have attempted to get an insider's experiential understanding of indigenous perspectives either through an engagement with authentic animist practices or the creative development of new rituals inspired by animist cultures both historical and extant (e.g. Cumes 1998; Devereux 1996), although it must be recognised that such an attempt is replete with dangers and may potentially result in a naïve romantic valorisation of primal cultures and, worse still, neo-Imperialist
appropriation (see Harvey 2005; Ivakhiv 2001; Mumm 2002; Wallis 2003 and the discussion which closes this chapter).

**Extended/Holistic 'Scientific' GEE**

According to Fox (1990b), scientific discovery is one legitimate (amongst others) route to a 'transpersonal' identification. Indeed, many proto-scientists (e.g. von Humboldt, Erasmus Darwin) and scientists 'proper' (e.g. Wallace, Leopold, Carson, Margulis, Lovelock) are lauded by many in the critical environmental movement as seminal systemic-holistic thinkers. Consequently, mainstream scientific and geographical enquiry which results in holistic and systemic thinking, particularly that taking place 'in the field', and those focused on ecology and 'Earth Science' (geomorphology, climatology, oceanography etc.) can and indeed should be seen as a legitimate route to knowledge about the world. Thus 'first order' learning at all educational phases in order to be inducted into the scientific method will represent an important dimension of GEE. However, the 'crisis of representation' has undermined the concept of the scientist as objective observer and scientific enquiry should be conceptualised as a particular type of intra-trans-personal transaction, encounter or dialogue (Inkpen 2005). Thus, the personal attitudes and values of the scientists are seen as inextricably implicated in the type of reality 'brought forth'. Furthermore, according to the enactivist paradigm, the very embodied status of the scientist as a sensorial being is an essential dimension of their ability to understand the environment (Chapters 2 and 4 and see next section). In addition, the scientist/geographer (whether as novice or expert) must be seen to be a member of a community – the interpersonal dimension – both in professional/academic and wider societal terms. This raises the issue of the socially constructed nature of reality which points to the significance of the interpersonal (or cultural) moment. Recent attention to the 'sociology of science' and the 'development of geographical ideas' can be seen as recent responses of these disciplines to cultural studies and critical theory (see below) and an informed GEE must be cognisant of these critical perspectives. This represents 'second order' or 'critical' learning.
Finally, at the level of the individual, the ‘scientific method’ quite simply generates significant phenomenological and existential blind spots as recounted by Harding in his evocative account of the studies he undertook into muntjac deer in Rushbeds Wood in Oxfordshire. Between periods of exhaustive and exhausting analytical survey, he would take a rest:

During these meditative moments there was a profoundly healing sense of Rushbeds Wood as an integrated living intelligence, a sense that extended beyond the wood itself to include the living qualities of a wider world of atmosphere, the oceans and the whole body of the turning world. Rushbeds Wood in these moments seemed to be quite clearly and obviously alive, to have its unique personality and communicative power. These periods of communion were intensely joyful and relaxing, and contrasted markedly with the stressful effort to reduce the wood to quantitative measurements in my multiplying field notebooks. I noticed with interest that the joyful sense of union would fade into the background of my consciousness as soon as data collection began. Gathering numbers was mind-numbing; being and breathing with Rushbed Wood was liberating.

(Harding 2006 pp17-18)

To address these shortcomings, the scientific method requires augmentation to become ‘Holistic Science’ which “weaves together the empirical and the archetypal aspects of the mind so that they work together as equal partners in a quest that aims not at a complete understanding and mastery of nature, but rather strives for genuine participation with nature” (ibid. p29). Non-reductionistic ‘systems thinking’ demanded by holistic science is a departure from mainstream scientific reductionism but shouldn’t require too great an intellectual leap for traditionally trained scientists. More challenging is the emphasis placed on embodied engagement and ‘intuition’ involving emotional, intuitive, mythopoietic and transpersonal engagement, or indeed dialogue, with the natural environment which will require what might be thought of as ‘fourth order’ learning or styles of enquiry.
Towards ‘Fourth order’ enquiry: embodied learning, immersive/experiential and transpersonal approaches

Harding’s observations along with the prior discussions surrounding the enactivist paradigm (Chapter 4), Spretnak’s call for an acknowledgement of ‘bodymind’ or the knowing body (Chapter 1), Abrams’ (1997) insistence on the ‘spell of the sensuous’ and Rodaway’s call for a ‘sensuous geography’ (Chapter 4) represent powerful arguments in favour of acknowledging the embodied nature of human existence. O’Loughlin (2006) has presented an overtly educational rationale for such a perspective, arguing strongly in favour of multimodal and intimate embodied engagements with the environment and place. Experiential environmental programmes such as Earth Education (Van Matre 1990) and Flow Learning (Cornell 1987) provide a range of powerful activities which can engender such multisensory engagements with the ‘more-than-human’ world. Although often seen as being designed for young learners, I can personally attest to the transformative power that such activities hold also for adults (including myself and Trainee Teachers).

However, more specifically relevant for adult learners are emerging approaches such as the ‘new geography’ (Harrison, Pile, and Thrift 2004), Goethian science (Seamon and Zajonc 1998), ecophenomenological (Brown and Toadvine 2003; Seamon and Mugerauer 2000), and transpersonal (Braud and Anderson 1998; Hart, Nelson, and Puhakka 2000) methods of ‘enquiry’ or dialogue which are providing fruitful resources for such ‘fourth order’ enquiry/learning. Taken together, the cited works sketch out the characteristic and practices of expanded or fourth order GEE which seek to mythopoetically integrate the ‘real-and-ideal’. They also present exemplars of generic and actual features and sites, both natural and cultural and everything between, at a range of scales too numerous to mention. A few vignettes will suffice to illustrate the potential. Violich (2000) attempted an ecophenomenological reading of four coastal towns along the Dalmatian Coast: Pučišće, Hvar, Bol and Korčula. He characterised each in terms of intuitive meanings derived from the particular manner in which the land and water meet. Thus, for Violich Pučišće may be characterised by the metaphorical or device of an ‘arena’ in contrast to the ‘ladder’ of Bol, the ‘open arms’ of Hvar and the ‘urban ship’ of
Korčula. Whether or not one agrees with Violich’s reading of these coastal towns is not
the point. He has exercised a transrational or intuitive mode of enquiry to creatively
‘break through’ the perceptual confinements’ dictated by dominant discourse in order to
arrive at a personally authentic ‘alternative’ reading in which the mental and physical
environments are intertwined.

Brenneman (2000) also employed ecophenomenological approaches in his
investigation of the relationship between sacredness and landscape features, particularly
holy wells in Counties Kerry, Clare, Donegal and Roscommon in the Republic of Ireland.
He draws an intuitive distinction between pre-Christian/Celtic and post-Christian readings
of the ‘sacred landscape’ based on the source of noumenal power. According to
Brenneman, the Celtic perspective was based on a cosmology in which sacred power is
chthonic, that is radiates upwards from the underworld with certain sites such as wells
and springs representing access points to this otherworld. Consequently, the noumenal
was associated with ‘loric’ space characterised by a “power that was implosive ... and
was connected exclusively to that place” (p142). The post-Christian cosmology, in
contrast, was based on a form of power that was derived from ‘above’, ‘explosive’ and
universalising in effect, extending outwards to encompass all within its reach. The
significance of this distinction is that whilst the centre of ritual might remain the same, it
has, in the Christian era, become “a well stripped of its indigenous power of place and
now dependent upon the extrinsic power of the sacred” (p156). However, Brenneman
suggests that, with the right intentionality, “in the Holy Wells of Ireland, one may dwell
within their placehood whilst simultaneously manifesting the Christian sense of scared
space. Sacred and loric power remain joined through place, yet each retains its essential
nature” (p157). Once again, Brenneman’s thesis is impossible to validate scientifically
yet it provides an imaginative engagement with the landscape. Furthermore, it provides a
potentially rich perspective through which the creative tension between the universal
(sacred) and indigenous/contingent (loric) nature of the noumenal implied by
panentheism can be mythopoietically engaged with through site-specific symbols.

Buttimer (2000) also considers the symbolic power of water which has been used
variously as a metaphor “for adventure and journey, for an element which lubricates,
emancipates, renews and recreates human existence through time” (p260) which chime
well with the multiple meanings I have, myself, come to associate with rivers generally and two specific rivers in Wales to which I have become personally attached experientially and symbolically, one in Pembrokeshire (the aforementioned River Alun), the other in the Vale of Glamorgan (also known by the same name). Whilst this might appear self-indulgent, the use of personal narratives and personal mythologizing represent important and legitimate existential and transpersonal, that is ‘fourth order’, practices (Rowan 1993, 2001).

**Autobiographical, phenomenological and social psychoanalytical approaches**

The insight that the ‘scientist’ is not a purely objective viewer of reality but is involved in a co-creative ‘enaction’ of reality may be placed alongside Pinar’s discussion of situated approaches to curriculum thinking (see above) which mentions the significance of autobiographical reflection. Most significant in this respect has been Pinar’s own thinking on *currere*. This is an approach to learning which emphasises critical reflection and affective engagement on the part of the learner in terms of their experience of learning and is structured in four phases: regression (consideration of the past); progression (contemplation of the future); analysis or critical reflection; and synthesis. Kincheloe (1998) discusses *currere* specifically in terms of post-formal learning understood here as third and fourth order learning. Doerr (2004) adapted the *currere* approach in the design of a four-month ecological education program termed ‘Environmental Autobiography’ (EA) which she undertook with different groups of eighteen year olds over several four month periods in the grounds of University School in Cleveland, Ohio. Recent work in humanistic, existential and transpersonal psychology also suggests a whole variety of methods for personally ‘exploring the horizons of consciousnesses’ and can be used to explore the phenomenological dimension of dialogic transactions between the intrapersonal and inter- and trans-personal dimensions of the personhood trialectic (see the transpersonal enquiry anthologies cited above).

Mention has already been made of phenomenological approaches which overtly stress human-environment transactions such as ecophenomenology (see above), architectural and environmental phenomenology (Seamon 2000), ecopsychology (Roszak
Roszak, Gomes, and Kanner 1995), and depth psychology and mythology (Campbell 2004; Cousineau 2001; Progoff 1977; Stevens 2001). Some of this thinking is concerned with the ‘mythic’ dimension of human experience which is, according to Armstrong (2005), needed “to see beyond our immediate requirements, and enable us to experience a transcendent value that challenges our solipsistic selfishness. We need myths that help us to venerate the earth as sacred once again, instead of merely using it as a resource” (p143). Armstrong goes on to suggest that contemporary Western society can re-engage with the mythic dimension through art, music, and literature. A particularly powerful attempt to ‘remythologise’ the contemporary world from an ecocentric or even anthropokosmic perspective is the Universe Story of Swimme and Berry (1994) which is increasingly used within environmental education discourses.

Great stress has been placed in this thesis on the ‘spiritual’ dimension of trialectical encounters (see especially Chapter 6) and many of the above perspectives adopt an overtly ‘spiritual’ stance that is supportive of the approach taken in this thesis and provide a contemporary warrant for a re-evaluation of the contribution of so called ‘wisdom traditions’. Indeed, many environmentalists are engaged precisely in such dialogue (e.g. Barnhill and Gottleib 2001; Cooper and Palmer 1998; Marshall 2005; McDonald 2003; Tucker 2003; Tucker and Grim 1994) and an educational engagement between modern, postmodern and premodern perspectives is to be encouraged. Selby’s (2002) consideration of the goal of realising ‘radical interconnectedness’ in global and environmental education could be placed within these debates. The interdisciplinary dialogue between GEE and religious studies will be most beneficial in this respect and efforts at interfaith dialogue and ‘deep religious pluralism’ (2005) are to be strongly encouraged. Gates (2005) presents autobiographical account of her own experiences of undertaking a Buddhist-inspired exploration into the ‘topography of spirit and place’ in her home locality of Berkeley, California which provides an exemplar for others to follow in terms of a personally transformative exploration of social and ecological justice and spiritual fulfilment that is locally grounded.
Fourth order ‘social learning’

Selby’s interpretation of Bohmian dialogue in the context of ‘social learning’ is concerned less with prosaically arriving at concrete consensus (third order), but rather with collectively “bringing attentiveness to bear on thought processes rather than on the thoughts themselves … [in order to] elevate thought to the level of ‘participatory thought’ in which discrete boundaries are sensed as porous, objects enjoy an underlying deep relationship or ‘radical interconnectedness’” (Selby 2007 pp170-171). This represents an ‘interpersonal space’ where creativity and interpersonal intuition has free reign and in which the collectivity metaphorically or even literally invoke, or rather ‘enter into’, the holomovement. The processes by which a communitas may be emerge through collective and dialogic processes, such as might occur amongst a group of pilgrims (Bowie 2006) or amongst a group or congregation in ‘communion’, would also characterisation as a form of ‘fourth order social learning’.

Outdoor and Adventurous activities

Mortlock (1984) and Hopkins and Putnam (1993) have argued strongly that ‘personal growth’ can be greatly facilitated through adventurous outdoor activities such as expeditioning, camping, explorations, kayaking, climbing, abseiling etc. As discussed in Chapter 7, many people believe that intimate engagement with nature and wilderness outdoors can elicit ‘peak’, ‘transpersonal, ‘extrovertive mystical’ experiences in these settings. Many EAO educational programmes specifically aimed at youth have been designed but increasingly more adult-orientated programmes are being developed ranging from the now ubiquitous ‘team building’ courses aimed at the business sector to approaches aimed particularly at personal and even spiritual growth through the development of ‘bush craft’ (Mears 2003), and engaging with the landscape in ways inspired by indigenous cultures (Cumes 1998; Devereux 1996) although such approaches are not without their dangers both physically and mentally to those undertaking them, and socio-culturally for the cultures from which such activities have been ‘borrowed’ (or appropriated). Hopkins and Putnam (op. cit.) have presented an holistic model of
adventure education (see Figure 8.3) which can be seen to address the three moments of the ‘personhood trialectic’ presented in Chapter 6.

Figure 8.3
An holistic model of adventure education (reproduced from Hopkins & Putnam 1993 p226)

Bioregional Survey/Mapping

An educational focus is a strong theme in bioregional thinking and Traina and Darley-Hill (1995) have produced a key text outlining core principles, approaches and suggested activities through which an individual and a community can come to gain a deeper understanding of, and emotional and spiritual attachment to, the whole locality and so these will not be repeated here. A key device is that of bioregional mapping as a participatory tool for local empowerment which attempts to integrate scientific, indigenous, performative, and artistic techniques to generate an holistic representation of the home locality or bioregion (Aberley 1993; Harrington 1999). The production of such a ‘map’ supports the development of a place-based and intentional communitas and contributes to the spiritual development of participants as they come to understand in an holistic fashion their ‘home place’. Bioregional mapping as a tool for community empowerment is probably best applied at the neighbourhood or parish scale although larger regional mapping projects are also popular with exemplars such as the ‘Green Apple’ map (New York), ‘Wild Onion’ map (Chicago), ‘Oak Ridges’ map (Greater
Toronto), and Salmonopolis (Haida Gwaii, Queen Charlotte Islands, British Coumbia) (Carr 2004b)(Carr op. cit.). Bioregionalism is not without its critics and some have even go so far as to suggest the approach is intrinsically parochial and potentially ecofascist (Hay 2002). However, as stated previously, this thesis argues, along with others(Carr 2004b; Thomashow 1999), for a bioregionalism that is globally/structurally informed. In particular, the approaches advocated by Thomashow (2002), whether undertaken individually or collectively by a 'bioregional community of enquiry', represent a powerful vehicle for 'bringing the biosphere home'.

‘Alternative Travel’, Experimental Travel & Pilgrimage

The adage ‘travel broadens the mind’ indicates its great educational potential which is one of the most powerful arguments for undertaking a ‘gap year’, sabbatical and/or a study tour. Yet not all forms of, or motivations for, travel will be equally transformative. Biallass (2002) distinguishes between tourism, travelling and pilgrimage. The tourist seeks to ‘vacate’, to take a break from responsibility and pleasure the senses. The traveller, in contrast seeks adventure, to expand their horizons; and the pilgrim seeks not recreation but re-creation, that is transformation. Thus, it is as a traveller and/or pilgrim that the transformational – fourth order learning – potential of journeying to other places has most potency. Biallass goes on to talk of 'alternative travel' “which involves leaving home, either to study cultures or the environment, or to do volunteer work in cultures or the environment” (p239 [emphases in original]). This is travel with a deeper purpose and which is undertaken as a traveller or pilgrim rather than merely as a tourist. It involves interactions which are ‘participatory, humane, and sustainable’ (ibid.) and involves a motivation to both self-improvement and service. He identifies ecotourism, socially responsible tourism, environmental tourism, community-based tourism, and citizen diplomacy tourism amongst such alternative forms of travel.

Biallass also identifies a range of transformative sites or destinations which could be seen as ‘thin places’ (see Chapter 7) where it is possible to, in the words of a repeating formula he uses throughout his book, “clear and expand our perceptions, induce wisdom and understanding, and encourage the cultivation of a global consciousness”. Such
transformative places include natural features (such as oceans, rivers, mountains, islands, beaches, forests and trees) and urban and cultural features (such as gardens and parks, markets and cinemas, museums, monuments, and cemeteries). Psychogeography can be seen as a more urban and 'ludic' (playful, mischievous and carnivalesque) approach to people-place relations. The psychogeographer is often seen to be an urban explorer, engaged in dérive or purposeful aimlessness. Whilst some might consider it to be frivolous, psychogeography actually often has a strong countercultural and critical purpose since it is represents an exercise in anti-consumerist re-enchantment of the city and involves engagements with the marginal and subaltern dimensions of urban life (Coverley 2006). The psychogeography tradition demonstrates a strong mythopoietic and even 'spiritual' aspect beginning with the visionary geography of Blake (ibid.) and up to the imaginative and evocative literature of Sinclair and Ackroyd making it relevant to the transformative rationale of integral GEE. A range of resources exist which provide inspiration of personal and collective psychogeographical experimentation and 'experimental travel' (e.g. Antony and Henry 2005; Coverley 2006; Sadler 1999).

A powerful vehicle for higher order learning is consequently considered to be 'third/fourth order educational study tours'. This chapter will conclude with a case study which should suffice to highlight briefly the possibilities, but also challenges, for engendering the desired conditions and outcomes through such programmes. The 'Through Other Eyes' (TOE) project is seeking to develop a set of online resources for teacher education which will permit a sensitive engagement with a number of different indigenous/non-Western perspectives. Part of the development process involved a small number of educationalists from Brazil, Egypt and the UK, the author included, working collaboratively with locals during an intensive study visit to Peru in October 2006. This study tour integrated a number of themes outlined previously (participatory learning and the development of a 'community of enquiry'; critical correspondence; and alternative travel). Of particular relevance were the attempts made, through third and fourth order practices and reflection, to contribute to both the transformative learning of individual participants and the development of a communitas. Great stress was laid on trying to engage sensitively with Andean spirituality and ritual. Participants, with the support of local guides and a locally recognised paqo (loosely translated as shaman), visited several
sites in the *Valle Sagrado* (Sacred Valley) including Cuzco, Sacsayhuamán, Pisac Market and Temple, Ollantaytambo and Machu Picchu. Through participation in the study group and associated background reading I learned about aspects of Andean spirituality which resonate mythopoietically such as: the dual significance of *Inti* (the Sun God) and *Pachamama* (Mother Earth); a belief in three ‘orders’ of existence symbolised by the Incan 3-stepped cross and the animal triumvirate – condor (upper), puma (middle) and snake (lower); the significance of the sacred geography manifested in settlement/temple sites and plans, *Huacas* or sacred sites, and *Apus* or sacred mountain peaks where the Gods reside; Andean pilgrimage; and ‘key teachings’ or principles, which are (according to Williams 2005): *Munay* (the way of love and beauty), *Yachay* (the way of knowledge – to learn, know, and remember), *Llanka’y* (the way of action or ‘right livelihood’), *Kawsay* (the way of the web of life), and *Ayni* (the way of reciprocity). We also had a stimulating lecture and discussion led by a local *mestizo* author and academic who had undertaken an intuitive reading of Incan architecture to present a cogent argument that patterns both in street plans and brickwork were used creatively to convey important mythological and spiritual matters. A particularly memorable event of mythopoietic significance occurred overlooking *Sacsayhuamán* when, at the precise instant that our guides completed a duet on Pan pipes, a peal of thunder rumbled across the landscape as if the *Apus* (mountain spirit guardians) were indicating their approval of our endeavours.

The study tour group met again (without Peruvian and Egyptian colleagues) in March 2007 in a retreat centre in Derby. This meeting was ostensibly to discuss the ongoing development of the TOE materials but also to reconnect as a *communitas* through spiritual exercises at the Nine Ladies standing stones circle on Stanton Moor in the Peak District which included passing references to (allegedly) traditional Celtic practice associated with the area.

My continuing involvement with TOE has been important in terms of my own personal transformative learning journey and I am consequently a strong advocate of such initiatives. However, there were some aspects which have proved troubling which are important to reflect upon as a caution for other similar initiatives. One problematic aspect is the relationships between the host community and ‘visitors’. It was clear in the early stages that the local guides expected us to be ‘normal’ tourists, expecting expensive
banquets and relatively superficial engagement with the local sites and community. It took some time and negotiation for the specific needs of our ‘fourth order’ learning community to be understood and catered for. There were also a small number of uncomfortable situations where locals had financial expectations of the group. This also highlighted the fact that this group, however well intentioned, was contributing to the processes by which the Andean socioeconomy was being mutated towards the tourist industry, with all the ensuing negative environmental and cultural impacts. There were also troubling issues within the local community which related to identity politics and power geometries. On one occasion, a Park Guide of distinctly Ameroeuropean appearance and manner used his authority in a rather unpleasant manner to prevent Pedro, our paqo, from leading a ceremony which was deemed to be inappropriate in a tourist site. This raised all kinds of questions regarding the tensions between Western and Traditional access, and relationships, to the local landscape.

There were also problems which arose as a consequence of the rationale of the study tour. A key aim for the leaders was that participants should be personally challenged through learning about, and engaging with, another culture without judging it through pre-existing cultural lenses, but instead accepting and valuing it in its own right. These are laudable goals. However, this was sometimes manifested as an expectation that all participants should accept aspects of the local culture unproblematically which required a suspension of the crucial critical aspect of intercultural dialogue advocated in this thesis. For example, one day we were directed to have a ‘consultation’ with a local maestra or ‘medicine woman’ who utilises coca leaves for divination. I found this to be a somewhat meaningless exercise, not least because neither of us could communicate directly. During the supposedly ‘safe open space’ that was created during the evening to reflect on the days events, I expressed my misgivings about the exercise and even went as far to as to suggest that it had been an example in charlatanism rather than authentic spirituality. The reaction from the leaders was unexpectedly hostile and I was personally attacked for demonstrating neo-imperialistic tendencies. The tension was satisfactorily worked through and actually was an important collective learning experience. However, this situation did raise two important issues. The first concerns the potential mismatch between the rhetoric and practice of creating ‘safe open space for dialogue’ amongst
participants. Even with stated and agreed principles such as Bohm’s rules of dialogue or, in this case, those associated with ‘Open Spaces for Dialogue and Enquiry’ methodology (Andreotti no date) which ostensibly informed the TOE process, human foibles, emotions and passions can result in a breakdown of this supposed ‘safety’ and asymmetrical power relations (between ‘leader’ and ‘participant’) can become apparent.

Secondly, there is a whole raft of issues relating to attempts at symmetrical intercultural encounter, particularly in relation to matters religious/spiritual. The TOE initiative could be characterised as exploring ‘belief beyond boundaries’ (Pearson 2002) in its efforts to facilitate amongst participants (initially the development team/study group participants and subsequently teachers who engage with the free online materials) ‘new’ or transformed perspectives which are, at the very least, sympathetic to other modes of relating to the world through engaging with non-Western/indigenous traditions. In addition to Andean and ‘Celtic’ spiritualities, TOE is drawing on other sources including Aboriginal and Maori. Each been chosen, in part, for its indigenous and ‘ecocentric’ credentials. However, such a project is contestable since it involves engaging with, and constructing, “traditions and practices around which it is difficult to draw boundaries; where they are drawn, they tend to be permeable and fluid rather than fixed” (ibid. p1).

Key tensions which are perennial problems in such interreligious dialogue include: evaluations of authenticity versus inauthenticity (and who has the legitimate power to adjudicate); insidedness versus outsidedness; (trans)rational versus irrational engagement (the latter potentially involving a ‘New Age’ wholesale acceptance of everything ‘indigenous’); genuine dialogue, solidarity and mutual learning versus appropriation and exploitation; and universalising/essentialising/generalising tendencies versus acknowledgements of the diversity and contingent nature of these traditions. These represent key challenges which demand due consideration not only in the TOE initiative but also by those efforts which attempt to engage in ‘critical correspondence’ and employ expanded modes of enquiry drawing on non-Western traditions as advocated in this thesis in order to come to ‘Mind the World Wisely’.
Coda

It is appropriate to make just some very brief final remarks concerning my own personal journey that has been undertaken in the writing of this thesis. This has engaged all three dimensions of my personal trialectic – I have learned much from interacting with the ideas of fellow travellers from the human community, sometimes through dialogue and sometimes through engaging with textual traces in books and journals, sometimes with artistic and cultural artifacts. I have also learned a great deal through dialogue with the more-than-human realm, in both natural and urban settings. Both sets of transactions – interpersonal and transpersonal – have driven my intrapersonal development which has, ultimately, been the main motivation for engaging with the journey in the first place. Thus, the writing of this thesis represents an example of bildung – a personally motivated process aimed at coming to know both the ‘beyond within’ and the ‘beyond without’ just that little bit more intimately. The ‘marriage’ between inner and the outer has become a much less distant prize. I now ‘mind the world’ even more than I did before, and as a consequence of this journey so far, I commit myself more strongly than ever to work for the Greater Good of the Land Community which represents the spiritual home of this particular ‘emplaced imagination’.

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.
Through the unknown, unremembered gate
When the last of earth left to discover
Is that which was the beginning;
At the source of the longest river
The voice of the hidden waterfall
And the children in the apple-tree
Not known, because not looked for
But heard, half-heard, in the stillness
Between two waves of the sea.

T.S. Eliot

Extract from ‘Quartet No.4:
Little Gidding’

Spirit
is Life
It flows thru
the death of me
endlessly
like a river
unafraid
of becoming
the sea

Gregory Corso

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Figure ii: Porthelais, Pembrokeshire
References


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