Catching the Ball:
Constructing the reciprocity of embodiment

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This thesis is presented for the degree of Doctor of Philosophy of Murdoch University
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I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any University.

[Signature]

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Abstract

This interdisciplinary dissertation is a study of the ways in which we sensually embody and experience our world. It is a metaphilosophical account that begins within corporeality; indeed, it is suggested that this is the place where the philosophic urge is argued, elaborated, and reflected upon.

While many studies of embodiment tend to focus upon "the body" as object, cultural artefact, or text for cultural inscription, the approach used in this dissertation is with the incarnation (the making flesh) of interaction in particular socio-physical milieux. The shift is thus from investigation of bodies to bodying, from noun form to transitive verb of incorporealization. This shift is felt necessary in order to better understand the so-called dualisms of traditional Western philosophic thought: mind-body, self-other, self-world, nature-culture, etc., and Tantric inspired Eastern philosophies of self-all relationality. It will be suggested, taking the lead from Leder (1990), that these apparent dualisms are not so much "add-ons" to philosophies of being, but arise in the experiential body itself.

This dissertation endeavours to rethink certain "givens" of everyday life, such as perception of time and space, place, enacted memory, having empathic feelings for others, and so on, from within bodily experience and occidental-oriental philosophies of being. Certain neurological disorders are examined for their way of deconstructing elements required to construct a meaningful incarnated life-world.

The process of embodiment is not only what the body is, but what it does.
My construction of what is necessary for embodiment studies therefore considers bodily praxes (cultural and individual), as well as the sensual, sensate experiences arising in the body.

The image of a ball game is evoked in various ways throughout the dissertation not only because it well describes the dense layers of interaction and an emergent sense of bodiliness, but it also illustrates reciprocity and situatedness.

This thesis is intended to contribute to the health sciences as well as cultural studies. It draws upon the phenomenology of Merleau-Ponty, J. J. Gibson's ecological psychology, neurological studies and case histories, and the Eastern tradition of Tantrism in its Mahayanist Buddhist and Taoist forms.
Hansen (1992) uses the opportunity of the Acknowledgements to his book on Chinese thought to map, Taoist style, a personal reciprocal connection with fellow scholars and scholars of influence; teachers; history, culture, nature and forces of his surrounds; the mountains and plains, rain, and air of his milieu: the causes and changes, natural and supernatural, of his very being. He even spins a tale of reincarnated connection with the Chinese sage, Zhuangzi. Acknowledgements pages in other books are usually less extravagant, though no less reflexive and revealing of special connections. These stand as a backdrop to all theorizing. Thus I too celebrate my relationships.

My special thanks to Dr Michael Booth, of Murdoch University, for his acute mind, gentleness, creativity, direction, and friendship. Without his enormous support, and the use of a quiet house (bathed in the scent of sea air, Morton Bay figs, and pines), in which to work, this project may have floundered. My thanks to the healers that permitted a focus of intent: Indiva, and Dr John Prott. My delight in extraordinary friends with whom I have shared ideas, plans, and much laughter: Graham Bean (cellist, now deceased), Dr Pam Nichols and Elizabeth Lindsay, Steve Rodgers, Estelle Barrett, Charles, Richard and Lew, Miri, Margaret, and Christina, I give thanks. My love to my brother, Dr Antony McCardell, for his love. Thanks also to a little cognitive science discussion group; students I have taught; the staffs of Murdoch University Library and the University of Western Australia Medical Library; and Murdoch University for travel

1 My thanks to the primates, large mammals, the plant kingdom, and the unfathomable natural forces on which they rest. The electromagnetic field coursing through my computer no doubt flows from the Big Bang. (Mysticism is an easy matter these days of black holes and singularity.) (Hansen, 1992: x)

2 It is possible to trace an intellectual “family tree” through Dr Booth that embraces many of the thinkers that have inspired and contributed to this dissertation, e.g. Argyle, Goffman, Kendon, Neisser, Lashley, Bernstein, Leont'ev, etc.
and conference awards permitting a visit to China and Sydney, a scholarship and maintenance funds.

In Taoist style, I also acknowledge with pleasure, the bounding, funny, intelligent and very sweet natures of two dogs, two cats, fish, and a garden of birds and frangipani flowers.
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Bardo
Preparing to throw

An overhead throw comprises a well orchestrated series of co-ordinated movements, starting from the foot, through the lower extremity, pelvis, trunks, shoulder, elbow and wrist. The end result is a whipping motion of the upper extremity and release of the ball at speeds up to 160 km/hr.

There are three phases of an overhead throw: the winding or cocking phase, delivery and follow-through. The wind-up phase signals the preparation of a throw. Here the joints of the shoulder slowly twist around like a spring resulting in maximal stretch of the anterior structures at the glenohumeral joint and internal rotators of the humerus, assisted by the supraspinatus, infraspinatus and teres minor, which also contract to stabilize the head of the humerus. A burst of concentric and isometric contractions from these muscles accelerates the limb towards a posterior, externally rotated position. An eccentric contraction of the subscapularis and internal rotators (pectoralis major and latissimus dorsi) slows the movement of the humerus before the limb reaches a position of full external rotation. The movement results in ‘preloading’ the horizontal adductors and internal rotators. During this phase, muscles around the scapula act as synergists, firing to stabilize the scapula, thereby providing a solid base on which movements of the humerus occur (cf. Welsh and Woodhouse, 1992: 511-512).
Introduction

To be embodied is to inhabit a particular place and time, to have a unique history, physiology, and perceptual perspective. Our bodies mark us off as unmistakably different even as they open us up to interconnection (Leder, 1990: 162).

Nature of this study

This dissertation on a construction of the reciprocity of embodiment is a metaphilosophical account that begins within our corporeality as the place where all philosophy is argued, elaborated, and reflected upon. This starting point stands in contrast to many studies of embodiment that make "the body" an object, rather than engage the subject with - within - its own process. There is no "embodiment", per se, as a once-and-for-all entity, for as Leder's statement above illustrates, there is a complex mix of "givens" and a cumulative effect of interaction, felt, experienced, reflexively elaborated. Leder's observation is actually groundbreaking for, in this short sentence he questions hundreds of years of philosophical accounts that say it is "the body" that marks us off, irrevocably, from all interconnection - convinced, as we, in the West, have been, that the body "contains" us (like a vessel), separates us, divides us from direct contact with our milieux.

To begin from within the experiential body is to reconsider much of what we have come to think of as doctrine (indeed, much philosophical thought has the ear-marks of doctrine and dogma). The current work is not so much a dissertation from within the discipline of philosophy (it does not claim this); rather it tries to rethink what we assume as the "givens" of everyday life, such as time, space and place, and so on, from the starting
point of being here now in this body. There is already a vast literature that
considers these things in abstract disembodied ways. Beginning in the
body means theorizing from the point of view of enacted being.

My work sees naive philosophizing as a reflexive act of the “doing” of
embodiment: a case of self-scrutinization or focal self-awareness, reflective
intersubjectivity, and the impulse for such thinking. I use ‘naive’ in a
similar sense to O’Neill’s use of ‘wild’ in his account of a wild sociology
‘which only gradually comes to self-possession as it unfolds or “brings
into play, beneath what I know, my sensory fields which are my primitive
The kind of philosophizing I explore in this dissertation is ‘wild’ and
‘naive’; it is seen to arise as it unfolds in the course of an exploration of
embodied reciprocal encounter.

This thesis engages the reflexive processes of experiencing a self-world
participation and the way in which we can theorize and construct such
participation. The two processes have two perspectives: the close-to
perspective of the subjective self, and the more distant perspective of the
spectator.

I would like us, here, to visualize having two perspectives of a ball game.
In Gestalt fashion, we can visualize being an almost godlike spectator of
the game seeing the overall sport between players, ball, lie of land, wind,
and beach rosemary, and we can put ourselves at one end of the trajectory
of the ball, standing there waiting to catch it. The overall perspective
allows us to contemplate what is necessary for several factors to interact
with one another, e.g. ball whizzed around by the bias of its stitching, the
push of hot wind, and the peeling back of air pressure thrusting it further.
The subjective perspective activates our sensual imagination: we can almost feel the wind on our face and arms, the giving sand beneath our feet, the smell of the salt air (for this game is played out by the sea), the roar of waves and the beating of our own heart. Of course, it is also possible to put oneself in the position of the ball and capture an imagined sensuosity that a ball might feel if it lived. Both an overall seeing and subjectively subjecting oneself by flight of imagination are valuable in providing insight into various levels of the game. By stepping back and contemplating what is necessary for embodiment studies and stepping bodily into the midst of things, we have insight into the multiple interactions and a source of contemplation upon the philosophic act.

My project situates the embodying process in genuine and particular milieux. The focus of the study is not always on "the body," per se, but examines social and cultural practices that arise and reflect similar ideas about the embodied self. (The concept, the body, I suggest, reifies itself as a lifeless construct; an object separate from the world of which it is part.) Sensate, sensual, experiences particular to certain naive and highly developed philosophies of corporeal being are reflected back into those social and cultural practices. At the same time, there is a study of the process of embodiment at a physiological level in interaction with the physical environment (of things, morphologies, and spaces). Embodiment is thus treated as not so much about "the body" as incorporative (embodifying) processes. The nature of these processes is revealed as being highly complex and consisting of many interrelated parts, many of which are almost completely overlooked in everyday life - and theoretical study. Indeed, many of these processes are obscured by their ordinariness and

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1 A conversation with my cousin about my thesis illustrates this. Her comment was, "But this happens all the time - standing in a bank queue." My reply of "Exactly" was barely comprehended. Why would one want to study the obvious? My reason is that the very thing of ordinariness has largely obscured it from theoretical understanding. There is much here we do not yet know.
they recede into a generalized sense of tacitness. We discover that there is actually very little we (academics and lay people alike) know concerning everyday participatory interaction.

The image of the ball game is again valuable here, demonstrating in readily accessible terms a sense both of familiarity (a sense of “I know this phenomenon”) and sufficient strangeness (a feeling that seems to pervade all ball games: “Who can know where the wind will fling the ball?”) that is also perceived and half perceived in most encounters.

As noted above, the study begins in the midst of things, as Heidegger (1998) puts it, for being embodied means no real sense of “a beginning” nor “an end”; just a sense of being here, now. We may have some teleological sense in the reflection back to a beginning and a contemplation of an end (of life-body, projects, and journeys), but such is a constructed one, constructed by our belief systems, our narratives. A thesis on embodiment and the construction of embodiment studies needs to incorporate the experience of being here now, for it is a process of interaction and in-corporealization that matters to such studies. I identify experience as that process or processes being studied considered as relevant and manifest for a self (cf. Varela and Shear, 1999: internet). Being thus identified as relevant and manifest for a self does not necessarily mean that what is said is exclusively subjective and hence unshareable. Indeed, the fact of our embodiment means that our experience is - to some degree at least - shareable, by the very nature of our relatively common bodily form and movement as well as our mutual participation in social groupings. Our individual bodies are unique,

1Dealing with one's own experience is not, as Varela and Shear (1999: internet) point out, dealing with purely private experience. The subjective is intrinsically open to intersubjective validation, if only we avail ourselves of a method and procedure for doing so.
however, borne from unique physiology and experiences, thus while we are marked out as 'unmistakably different,' we are also opened, by our humanity, 'to interconnection' (Leder, 1990: 162). I explore subjective experience in two main ways: through autobiographical account and reported experiences of other people.

Embodiment is the incarnation of experience (cf. Leder, 1990: 1), but never merely an enfleshment made once and for all. This is an organic process where selves, actively, physiologically, psychologically, socially, politically, culturally and geographically responsive\(^6\), demonstrate that nothing is ever "once and for all". There is a mutuality here, and yet, a distinctive boundedness peculiar to ourselves (we are not amorphous entities, clouds that dissolve into the surrounding atmosphere). There are particularities and there are universalities. There, in corporeality, are experiences of both - and there are experiences of unity and dualism. Thus, we must dispute Grosz's "recipe" for a philosophy of the body. She writes, that we need

an account which refuses reductionism, resists dualism, and remains suspicious of the holism and unity implied by monism - a notion of corporeality, that is, which avoids not only dualism but the very problematic of dualism that makes alternatives to it and criticisms of it possible (Grosz, 1994: 22).

The body, as the phenomenology of Merleau-Ponty and others (as well as neurological research into certain disorders) demonstrates, reduces, abstracts, dual-izes, holifies, monifies, shows presences and absences within its own flesh of experience. Reductive and dualistic thinking is therefore not just the result of (Western) philosophic error, but arises

\(^6\) Grosz writes, by contrast, of 'inscriptions, productions or constitution' (1994: 23). The word 'inscription' is an unfortunate one, to my mind, conferring a view of the body as a passive entity, parchment-like, a skin, on which diagrams are etched.
within our embodied selves.

Extent of this study

In this study, I examine the way we physically, cognitively and sensually engage with such “entities” as time, space, and place, ourselves and one another; ideas which are evoked by the image of a ball game. By this theoretical act, I suggest ways of studying embodiment, methods which have value for those involved in the health sciences and cultural studies. I draw attention to the en-nested nature of our being in the world and suggest that being nested - within the life-world of particular spaces and places - is more than occupying and gaining knowledge about a place; it is also being stimulated into action and reaction. There is a reciprocity of being, here. Our bodies impact, likewise, upon the sites we occupy. Imagine here, walking or playing ball upon a sandstone path. The weight of our body and the carelessness of movement - of feet kicking the edges of rocks - breaks up the pathway as we walk. In this image there is at once a sense of passing through, a making of a path, a treading of a way, and a sense that is at once participatory, re-actionary, and interactionary. This image is useful, also, in providing visual account of an alternate ontology, where transitive process at once illustrates being and non-being (where we are now and where we were), presence and absence, as well as engagement.

The nature of our participation is always reciprocal, even if not always obvious. Such reciprocity extends also to our interactions with one another. To understand this reciprocity we need to engage various interdisciplinary discourses - which is done in this study in order to build up a three-dimensional picture. No one disciplinary discourse is sufficient
to describe being-in-transition, being-in-interaction.

I shall now present some necessary ideas for understanding this work. First there will be a brief review of previous human interaction studies. This will be followed by some dimensions of these studies that have a closer bearing on this current project. An initial outline of the dissertation follows, with a strategy of the chapters.

**Human interaction studies**

It should be said at the outset that any study of human embodiment is inevitably wrought with considerable difficulty. Where should we start? From one’s own perspective or the observation of others, or both? Is this a scientific or a phenomenological project? Are we interested in cognitive, linguistic or physical interaction? Of the latter, are we concerned with deliberate or “unconscious” (autonomic) interaction? Is our study really about body language, gesture, and cultural engagement? Are we, perhaps, planning to observe people in action (in, say, a ball game)? There are many such questions and many approaches. Inevitably the kind of method chosen will reflect a writer’s personal philosophy and this is likely to represent something of their ordinary life world. Most of the current literature on the subject of embodiment takes two main approaches: the body as object (of desire, map, sites of disempowerment, marking, etc.) or, considering embodiment more as I will in this thesis, in terms of interactive engagement. Of the latter, however, most studies have been on intersubjectivity (between humans), and more specifically, on linguistic interchange. A reason for this, perhaps, is the Western philosophical tradition. The products of thought - and language has been
seen as such - are viewed as offering greater insight into understanding human beings than what is designated to do with "the body". These products of thought, of logos (i.e., "thought" and "word"), treated like laboratory samples for scientific analysis, have occupied the primary focus of interest (e.g. the work of Speier, 1972 or Conville, 1991). Such studies conjure a sense of disembodiment, which, in the language of a ball game, is as though there is a ball travelling between two points, without players, without landscape.

The communicative acts of the body, e.g. gesture and other body language have received less focus, because, perhaps, it is thought of ephemeral and superficial interest only. Physical interaction, however, is more than a communicative act operating within a cultural context; it relates beyond that to other domains of social and physical environments, also. This thesis explores such relations on which intersubjectivity, including culture, depend. Such relations in which linguistic interchange occurs will scarcely need discussion in this dissertation. Linguistic work has provided thoughts and background knowledge but it is not the foundation. How we exist together materially and sensually is this foundation. It is more like catching a ball or singing than like giving a speech.

It is true, however, that some studies have investigated bodily engagement within linguistic interaction. These have tended to focus on gestural and visual interaction. These two preoccupations illustrate how Western tradition has disengaged vision and, even gesture, from fully bodily engagement. Levin (1993) notes the ocularcentrism of Western philosophic thought (the notion of the "pure" vision). Gesture, as noted above, has likewise been observed as occurring within linguistic
intercourse and reflecting social paradigms. The academic interest in
gesture reflects our curiosity about linguistic exchange. Greater and
greater levels of migration of people of diverse cultures has thrown
interest of a sociological kind upon this bodily language, because each
culture brings diversity of meaning upon gestural exchange. A nod is not
assent in India, for example. It is interesting that this disciplinary
crossover between Linguistics and Sociology/Cultural Psychology occurs
precisely here: at the nexus of gesture as language and gesture as special
social intercourse.

Sudnow, at this nexus of Linguistics and Sociology, writes, for instance,
that,

some temporal features of interpersonal settings which seem to constrain, for
members of a society, the production and recognition of relevant
appearances, [show] gestures and moves where an orientation to “glancing”
observation is required as a condition of concerted action (Sudnow, 1972:
258).

Sudnow maintains that,

For a vast number of routinely accomplished social interactions, the ability of
persons to “make out” each other’s actions, features of scenes, categorical
statuses, etc. “at a glance” is crucial (Sudnow, 1972: 258).

The ability to “make out” the actions of others requires us to engage in
metacommunication, as Gregory Bateson (1972) notices. He also points to
bodily involvement in the communicative act, particularly with regard to
the schizophrenic patient and her family where a double bind situation
develops out of a contradiction between what is said and the tone in
which it is said. This work has proved very useful for those working with
psychiatric patients. R. D. Laing and David Cooper developed this thesis of the double-bind in their own psychiatric writings.

Other theoretical approaches have directed attention to the co-ordination of movement between speakers and listeners. Adam Kendon (1990), for instance, notes the previous studies of Condon and Ogston (1966, 1967) who found that the ‘flow of movement in the listener may be rhythmically co-ordinated with the flow of speech in the speaker’ (Kendon, 1990: 92). Condon and Ogston, Kendon reports, using sound film records and analyzing interactions frame by frame, noted that an engaged listener is in synchrony with the movement of the speaker, albeit reduced. When such synchrony is occurring, the boundaries of the movements of the speaker coincide with the boundaries of movements of the listener. Condon and Ogston observed that it was this intersection of boundaries that determined the synchronous nature of the relationship. They found that such a relationship only existed between the speaker and immediate listener (i.e., the one to whom the speaker is actually addressing) and not subsidiary listeners. Kendon’s own work observes what occurs when a listener desires to speak. The listener prepares for his entry, by altering his body posture rapidly in such a way that it looks like an overt expression of “beating time” to the speech of the other. Such time “beating” facilitates, Kendon notes, ‘the precise timing of his own entry as a speaker, much as a musician may begin to move conspicuously with the music, as he readies himself to enter with his part at the right moment’ (Kendon, 1990: 104).

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1 The Russian film-maker, S. M. Eisenstein (1898-1948) built up his images of moving objects frame by frame. *The Battleship Potemkin*, e.g. has a famous scene of a baby in a pram running down a vast stone stairway; an image meticulously produced in this fashion. A. V. Zaporozhets, an actor involved in Eisenstein’s film, developed a particular interest in human movement and became a neurophysiologist. Zaporozhets collaborated with A. N. Leont’ev (cf. their *Rehabilitation of Hand Function*, 1960). Leont’ev and Zaporozhets are key figures in the development of awareness of the interactive, *en-nested* nature of embodiment.
These interactional studies, as well as Bateson’s concept of metacommunication serve as a precursor to the present thesis not so much in terms of their content (for I do not include linguistic or paralinguistic interaction at all), but in their awareness of the importance of studying interaction as more than a meeting of minds through speech. There is, in these accounts, a sense of chiasm7 (“crossing”) of mind and body, as Merleau-Ponty (1968) describes it. Other fields of study also contribute to the ideas-base of this current research. The ethnomethodological approach of entwining method and theory, the practice of bodily entering the field that one studies, the sensuous engagement and critique of this engagement as being but one of the many versions of the assemblage of the world (cf. Mehan and Wood, 1983: 114, 149, 227), has deeply influenced this project.8 The works of James J. Gibson and his fellow ecological psychologists, likewise, have contributed to ways of thinking about human interaction in the world, providing also a useful language. Most of all, their deep awareness of the ‘persisting and changing environment’ being concurrent and embedded with the ‘persisting and changing self’ (body/mind and all its parts and activities) (Gibson, 1982: 118) has influenced me. It is this entering into the flesh of the world (as Merleau-Ponty might have put it) and thus into our flesh that is the purpose and method of this study.

Having a body necessarily means embodying life encounters, experiences, exchanges. Being embodied is also being trained to a synergism of socio-

7“Chiasm” in optical physiology describes the bundle of nerve fibres that cross behind the eyes feeding information to opposite hemispheres of the brain.

8Garfinkel (1967a: viii) criticizes the reflexive theorists, for instance, in this way:

...they are not sensuous. They do no alter the everyday experience of either theorist or the theorist’s audience. And, as importantly, there are theories that talk about worlds the theorist has never entered. Ethnomethodology is committed to avoiding such “promiscuous discussions of theory” (quoted by Mehan and Wood, 1983: 212).

Reflexivity should be sensuous.
cultural lifestyles and styles of thinking. Such a training can be pure conditioning that “pre-sets” us to somewhat circular mental and emotional reactions or it can be participated in at a more consciously aware level. The embodiment (enfleshment) of life encounters, experiences and exchanges is expressed in the quality of our engagements. These are shaped by many variables, including the state of our health. The interplay of physiology, experience, and social ideas/thoughts/practices all reflect and react upon one another. This interplay is a crucial concern of this thesis.

Some dimensions of interaction: tacit, focal, and responsive

It is through being aware of our sensuous engagement in particular places and spaces, times, and operating from particular physiological and cultural positions, that we become aware of different levels and dimensions of interaction. Michael Polanyi (1967) identifies two such dimensions, both of which belong to an epistemological realm. He writes of focal and subsidiary or tacit knowledge. Tacit knowledge is, as Polanyi puts it, a sense that ‘we can know more than we can tell’ (Polanyi, 1967: 4). It is that which can be pointed to, even if it remains at a level beyond that which we can fully identify. Polanyi notes, for instance, that we have a sense of knowing a person’s face (1967: 5); a knowledge that includes not only the obvious features: physiognomy of nose, mouth, placement of eyes, shape of head, colour of skin and hair, and so on, but the less tangible ones as well: e.g. a quality of moodiness, fleeting, flickering, or

There is no objective entity designated “culture”; only our interaction in social practices. Reed writes in this regard,

A culture is thus not based on transmission of ideas or habits from one generation to the next; instead, a culture is characterized by a relatively distinct pattern of equilibrium between fields of promoted action and fields of free action. Cultural regulations derive their force from the tension between the range of behaviors that individuals find to be effective versus those that are considered proper within a given culture, and to which individuals must therefore conform, at least up to a point (Reed, 1996: 187-188).
fixed. The identification of obvious features of the face constitute focal knowledge. The ability to know moodiness requires subsidiary or tacit knowledge (Polanyi, 1967). It is this subsidiary knowledge that may be called "tacit". Tacit and focal knowing are epistemological acts. Epistemology, I suggest, is not bound to intellectual knowledge, but includes bodily knowing, such as the skilful use of the body in sport, for instance. Bodily knowledge is a very particular use of the body that signals identifiable cultural and individual meanings both to the onlooker and participator. In this way, body knowing is both epistemology and a readable text. The skills used by a ballet dancer may be identified as using the body knowingly.

We may know something by the ferment of cultural discourse and praxes, while not being able to articulate any of it. Growing up in any culture requires this level of knowing. The unarticulated does not mean unknowing. There are many ways in which we know things. We mostly know at a physical pragmatic level, which can be a tacit knowing about cultural ideals which is already apparent at a tacit level from the feel of a Wedgwood porcelain cup. The design of a modern office, with its steel pipeline furniture, geometric shapes, clear lines, and monochromatic colour scheme provides tacit knowledge about ideas of efficiency and rational thought. The wearing of high heel shoes provides a tacit knowledge of what constitutes ideal womanhood. High heels cause the hips to be thrust forward and to minimize the length and speed of steps possible. The message is: "don’t run, be ladylike." Cultural artefacts may be semiotically "read" in a bodily way as much as any other text is read intellectually. Thus linguistic inspired discourse is valid for cultural artefacts, as is the idea of tacit knowing.
Not all bodily interaction belongs to the epistemological realm, however. In contrast to those, such as Wu (1997), Johnson (1995), and Campbell (1991), who suggest a bodily epistemology by their reference terms of “body knowing,” “body thinking,” and “body consciousness” in relation to all bodily interaction and body participation, I reject such an assumption. These terms assert some level of material awareness that contradicts what else we might say of consciousness (as awareness, awake-ness, witnessing, etc.). Taken to an extreme, as may be found in the work of biosemioticians (e.g. Hoffmeyer, 1997 and Sharov, 1998), where the body “knowing” is taken to a cellular level and considered in terms of communication, these ideas do little to illuminate the subject of bodily interaction\(^9\) and the process of embodiment.

Bodily interaction does not necessarily depend upon “knowing” or “consciousness” or “communication”. Reciprocity may be merely reactive and responsive. Thus I refer to aspects of bodily interaction and participation as showing “bodily responsivity”. Such responsivity is not epistemological nor communicative, although it influences the way we appreciate, know and share things. Before I elucidate what I mean precisely by “bodily responsivity,” I wish first to consider knowledge as more than a cognitive act. This is important to establish here in order to point to the body as an entity that cannot be readily confined to simple categories. My argument is also a critique of mind-body division, a core of the configuration of Western thinking.

\(^9\)Biosemiotics is ‘an interdisciplinary science that studies communication and signification in living systems’ (Sharov, 1998, internet). Sharov continues,

Communication is the essential characteristic of life. An organism is a message to future generations that specifies how to survive and reproduce. Any autocatalytic system transfers information (i.e. initial conditions) to its progeny so that daughter systems will eventually reach the same state as their parent. A sign (defined in a broadest sense) is an object that is a part of some self-reproducing system. A sign is always useful for the system and its value can be determined by its contribution to the reproductive value of the entire system (Sharov, 1998: internet).
Much has been made in recent times of the socio-cultural situatedness of knowers, as postmodernist critique illustrates. A frequently used parable is told. Five blind people are confronted by an elephant and each feels a different aspect of the animal and tells a different reality: an elephant is a large wrinkled leg, an elephant is a long hairy trunk, an elephant is a hanging belly, etc. What is overlooked by such an account, however, is that the individual perceptions of the elephant are not confined to that which the people touch but to the whole sense of being in the presence of a very large beast with a strong smell, a snorting, a warm body, a gentle or impatient nudging, for instance. The five people would perceive the bodily presence of the elephant and the elephant would perceive their bodily presence in touch, smell, perception of movement, etc., and the tacit knowing of “elephantness” or “humanness” (plus memories of similar encounters, cultural conditioning, preconceptions, etc.). (The body includes behaviour as well.) Knowing the nature of elephant is thus much more than having a particularized sense of a part of a total experience and calling that part “reality”. As Gendlin, puts it:

We act in every situation, not just on the basis of colors and smells (not even all five senses crossed so each is in the others), nor just by motions in geometric space. Rather, we act from the bodily sense of each situation. Without the bodily sense of the situation we would not know where we are, nor what we are doing (Gendlin, 1992, internet).

Having a ‘bodily sense of the situation’ of elephantness moves our discussion from individualized exclusivist perceptions to shared and reciprocal perceptions (between selves and self and elephant). It opens to us something of the complexity that is interaction. It points us to the curiosity of bodily perception and “knowing”. It also indicates more. We
do not require merely focal nor subsidiary knowledge of an intellectual kind in order to get around and make sense of things. Note here, that "making sense" need not mean "making meaning". The physical body itself negotiates much of its participation. While many have argued against the relevance of this level of participation ("it is only biological"), I shall assert that, on the contrary, it is because we are able to bodily negotiate particulars in our environment, that we can make sense and can have sense of agency. Here is where the implicit effects of the autonomic nervous system crosses over into a sense of meaningful selfhood. Here again, note that having a "meaningful sense of selfhood" is not the same as "making meaning" from all bodily encounter. To give an elucidating example of what is meant here: James Purdon Martin (1967), in his work with people with Parkinson's Disease, identified that particular visual and proprioceptive triggers were required to initiate movement in patients "frozen" in akinesia paradoxa (a symptom of an unmedicated Parkinsonian state). The re-establishment of movement, he found, also served to re-establish cognition and a sense of being motivated and having initiative. In other words, without movement, a sense of being a person with a will, is not possible. The initiation of movement by visual and proprioceptive triggers (e.g. a set of stairs) is the initiation of movement via the autonomic nervous system. In other words, autonomicity precedes conscious decision making. This, then, is an example of a third level of participation and it describes bodily responsivity (that cannot be called "body knowing", "consciousness" nor "thinking").

I am suggesting there are three main levels of embodied interaction: bodily responsivity, tacit knowing and focal knowing (where only the last two belong to an epistemological and therefore social-cultural realm). All
three levels are entwined. This clearly makes the study of embodiment difficult, but not impossible. A method for studying embodiment is needed that recognizes both bodily responsivity and an epistemology of body and cultural meanings in order that we have, in the first instance, a sense of taxonomy and, then, a perspective on the how of interrelationships.

Introducing a method for studying embodiment
At the heart of engagement and this dissertation is a chiasm ("crossing") of mind and body (individual and cultural) expressed in terms of the particular experiences of certain people. To explore this chiasm I use a dual method-procedure ("procedure" is the practical arm of "method") that embraces some of the philosophic ideas and the insights gained from the praxes of Tantric Buddhism and Western philosophy following Merleau-Ponty’s phenomenology of perception. The dissertation may be thought of as a series of experiments using and critiquing both this method-procedure and the philosophic ideas that gave rise to it. It positions itself as a discourse on the embodied, embedded, self in responsive, reflexive, and reciprocal relationship-participation with elements, patterns and rhythms of identifiable milieux; a self that recognizes itself as being in the midst of things.

Tantric practice, as Cleary (1998: 6-7) reminds us, uses ‘the materials of everyday life, including both the inner resources of the mind and body as well as the outer resources of the intellectual, cultural, and material environment.’ Tantric theory, on the other hand, situates the self-in-relation with the cosmos. Merleau-Ponty’s phenomenology of perception

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9 Method, as Woolgar (1988: 20) notes, ‘is a knowledge community’s sanctioned procedure for accomplishing adequate connections between representation and object: a guide (or set of guidelines) for generating an image which is faithful to the represented reality.’
in its praxis and philosophy starts at the point of the perceiving-experiencing body, but, in the rigorous tradition of Western philosophy, he allows us to think about this domain with the same scrutiny as any other objective fact. In doing this, Merleau-Ponty identifies the body, as Abram (1988: 103) notes, ‘as the conscious subject of experience.’ Leder, following this strategy, elaborates on the body in such a way that extends our understanding beyond the body’s surface, the “skin” of experience into the body’s recesses. The phenomenological move allows us to discover the body as a site for philosophizing and a philosophizing site (thus making the study of embodiment also a study of metaphilosophy). While it is true that the Tantric praxis-theory is not unique in its explication of selves as always en-nested in relation with the cosmos (for this is a fundamental point for ecological psychology), the structure of Tantric philosophy is possibly unique. Tantrism situates the self (body, mind, energy) as an integral part of a threefold system (self, heaven, and earthly affairs). Such a structure at once declares its strength and its weakness. There is no room in it for exploring the experiencing self, and thus embodiment, in any way except as part of this threefold system (at least as far as I know). Merleau-Pontyian phenomenology of perception, or Gibsonian ecological psychology, on the other hand, does not situate itself as relational, per se, but, by virtue of its capacity for self consideration, it does allow for exploration beyond its own perceptual boundaries. This grasping beyond allows it to be relational in process. There is a quality of difference between Tantric relationality and Merleau-Pontyian phenomenology of perception, or ecological psychological relationality. On the one hand, the relationality is inbuilt; for instance, the self embodies the activities of the earth and the heavens (Tantrism). Here there is an entwined threefold relationality, but no particular reference to
the embodied self as individual. On the other hand, the relationality is understood as being part of an outreach, beyond the perimeter of the individual self, or organism (Merleau-Pontyian phenomenology of perception, and ecological psychology). What is neglected, here, is the fundamental of self-cosmos relationality. By combining the insights of both philosophical traditions, we have a means for understanding our incarnation of encounters. The image I used earlier of a ball game where we might have two perspectives: of the overall state of play, and the subjective experience of a single player is relevant here. What is required to see both standpoints is the ability to switch one’s vision from a focussed perspective to one that takes in the field. The gaze of the first is, however, no more acute than the latter; merely different in emphasis. With a Merleau-Pontyian phenomenology of perception we have a unique sense of being here in a place, a place ready to catch the ball. With Tantrism we sense our place within the whole scheme of things. Both perspectives are readily experienced in ordinary life, but, in terms of philosophy, the perspective of a subjective self is more Western in orientation (or occidentation), while the perspective of the interrelational whole is philosophically more Tantric.

The explication of this argument and this apparent dual-method proposal for the study of embodiment will be further elaborated throughout this dissertation. What is theorized academically is not necessarily what is enacted in everyday life. Indeed, the so-called lack of relationality in Western philosophic thought is not borne out in ordinary experience (we can stand back and see our place in the whole of a ball game). Herein lies the curious disjunction of theory and practice. For instance, we move in our milieux by making relational connections. This is essential for making
meaning. Such a task lies deeply within our physiology, and is thus not merely a matter of the mind. When, by neurological disorder, our capacity for making sense of our relationship in the world comes apart (when we "unknow" the world), we get a sense of how our physiology makes it possible to recognize interrelations. A graphic example of what might happen should only isolated elements be present to us is illustrated by a case of the neurologist, Dr Oliver Sacks. Sacks writes of a musician who had developed visual agnosia (literally, a not "knowing") - through a brain abnormality - which is essentially the disengagement of the relational from meaning construction. He saw details, components, of his environment, but could not make sense of them. When given a glove to examine he noted:

'A continuous surface,' he announced ..., 'infolded on itself. It appears to have' - he hesitated - 'five outpouchings, if this is the word.'
'Yes,' [Sacks] said cautiously. 'You have given me a description. Now tell me what it is.
'A container of some sort?'
'Yes,' ... 'and what would it contain?'
'It would contain its contents!' said Dr P., with a laugh. There are many possibilities. It could be a change-purse, for example, for coins of five sizes. It could...'
[Sacks] interrupted the barmy flow. 'Does it not look familiar? Do you think it might contain, might fit, a part of your body?'
No light of recognition dawned on his face (Sacks, 1985: 13).

In some senses this patient of Sacks might be said to represent in exaggeration the idealized Western "everyman" - a somewhat ridiculous, albeit tragic, figure who cannot move around his world with sensibility, except by bit-by-bit analysis of the parts of experience. Western biomedical science, a formalized praxis of Western philosophic thought, for instance, depends upon just this isolation of particulars. It is a method
of analysis most useful for identifying parts. What it lacks, however, is a theorization of interrelationships - even while it takes for granted some sense of relati-onality. Sacks' patient did have a way, though: he hummed melody that worked to unite his visual perception.

When the examination was over, Mrs P. called us to the table, where there was coffee and a delicious spread of little cakes. Hungryly, hummingly, Dr. P. started on the cakes. Swiftly, fluently, unthinkingly, melodiously, he pulled the plates towards him, and took this and that, in a great gurgling stream, an edible song of food, until, suddenly, there came an interruption: a loud, peremptory rat-tat-tat at the door. Startled, taken aback, arrested, by the interruption, Dr P. stopped eating, and sat frozen, motionless, at the table, with an indifferent, blind, bewilderment on his face. He saw, but no longer saw, the table; no longer perceived it as a table laden with cakes. His wife poured him some coffee: the smell titillated his nose, and brought him back to reality. The melody of eating resumed (Sacks, 1985: 15).

These extracts from Sacks illustrate beautifully how the doing of interaction is at once prompted neurologically and from the physical environment. Dr. P., of himself, without melody, could not initiate understanding and meaning, but by the aid of a stream of melody he could participate, understand, and move responsively around his milieux. The example of Dr. P. illustrates also the entwinement of levels of knowing and bodily responsivity. In this dissertation, I shall explore this further.

Relationality is integral to everyday experience, even if it is not always acknowledged by our Western philosophic tradition. Relationality is a core idea, and complexly presented, for Tantric thought. Tantrism, however, lacks what is central to Western thought: the ability to step

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8 It is interesting to note a current shift is underway in biomedical research and therapy. In chronic bacterial infections where antibiotics no longer work the therapy is shifting from bombardment of individual cells to changing the nature of the bodily surface, preventing the build up of biofilm. Biofilm is a community of organisms where a sort of 'house' is built over the residing bacteria, or other organisms. Popularly called 'slime', this biofilm bears no relation to how individual cells live in petri dishes.
outside itself for self reflection. The Western impulse for separating, isolating, objectifying parts of things and ideas is valuable, as I shall later show. By gathering the two traditions together, we have, I suggest, a powerful tool for proceeding within a study of embodiment.

I shall now present the layout and strategy of the chapters of this dissertation.

Strategy of the chapters of this dissertation
In this work there are two main parts, and six chapters overall. Part One explores the thesis theme by focusing on particular neurological conditions that intensify or neglect specific domains of experience, e.g. time, spaces and places, and relationships with other selves in order to highlight (by extraction) normal interaction. These neurological conditions may be identified simply as "relational disorders". While there are obvious flaws to this designation, it is useful only as long as it is realized that "relationality" as used here does not only indicate social and/or psychological relationships, but physical and environmental as well. The relational disorders explored are: Asperger's Syndrome, Tourette's Syndrome, Parkinson's Disease, and Alzheimer's Disease. These are explored, primarily, within Western philosophic thought. Part Two of the dissertation, takes a different direction. Instead of using relational disorders to deconstruct ordinary interaction, cultural praxes are employed to more fully identify underlying philosophies. These underlying philosophies impact on self-world experiences and, by the process of embodiment, the experiences of the body itself. In Part Two I explore theories of particularity, relationality and being through two Eastern cultural practices. This part of the dissertation takes a more
distinctly philosophic turn. It should be noted, however, that some of the ideas developed here have been introduced earlier in Part One.

A third direction employed in this dissertation draws on the title of *Catching the Ball*. Here my aim is to capture some of the sense of the dense field and complexity that is encounter. I use different aspects of a ball game, inserted in one page splices throughout this dissertation. These splices, I call *bardos*. *Bardo* is a Tibetan word meaning "thrown between" (Sogyal, 1992) and, in the context of Tantric Tibetan Buddhist tradition, refers, literally, to the span between one moment (or lifetime) of consciousness and the next. As the reader would have noticed, I prefaced this introduction with such a piece. The style of these pieces try, in the main, to illustrate - through scientific language - that the relational is actually implicit in scientific and, thus, Western thought, even though we are accustomed not to think so.

The six chapters are to be understood as a whole, even while Parts I and II take different approaches. Chapter one, 'Chiasm of the heart - towards a mutuality of personhood (setting up a strategy for studying embodiment)' proposes a way for re-embodifying ontological relationality as a shared reality. I suggest that felt gentleness and calm by way of hugging allows us to express empathy for others. I do this in the last instant by evoking

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8 Underneath Heidegger's philosophy on Being is also an apparent imagery of a ball game (this is most clearly seen in his essay 'On the Essence of Ground', 1929). There are many examples, e.g. Human Da-Sein - 'a being that finds itself situated in the midst of beings, comporting itself toward beings' (Heidegger, translated by McNeill, 1998: 121). World 'is brought before Dasein through Dasein itself. This bringing world before itself is the originary projection of the possibilities of Dasein, insofar as, in the midst of beings, it is to be able to comport itself toward such beings' (ibid.: 122- 123).

And again,

Yet just as it does not explicitly grasp that which has been projected, this projection of world also always casts the projected world over beings. This prior casting-over [Überwurf] first makes it possible for beings as such to manifest themselves. This occurrence of a projective casting-over, in which the being of Dasein is temporalized, is being-in-the-world (Heidegger, 1998: 123).

9 Tibetan Buddhism is from the Mahayana tradition of Buddhism.
the personal experiences of an Asperger's Syndrome\textsuperscript{9} sufferer, by first critiquing mind-body dualistic accounts of empathy.

Chapter two, 'Tourette's Syndrome and the Sensuous Impulse' is concerned with the way in which Western society denies some fundamental elements of embodiment, e.g. touch, as part of our capacity to engage the world. Attitudes to touch are reflected in medical diagnosis which reflexively impact on treatment of those who iteratively touch.

The focus of Chapter three, 'The shapes we sculpt in space-place' is an attempt to re-embody time and space. It does this by showing the interrelationship of neurological functioning and experiential determination of temporality and space to move.

Chapter four, 'Is it necessary to know the date in order to brew tea? (The en-nested nature of memory)' is a study of enacted memory and, again, a concern is to show that the medical diagnosis of competence must take account of the situatedness of bodied selves as they engage in particulars of a milieu. It takes the activity of making tea and shows how the "doing" of this task is a sequence of bodily movements embedded in particular spaces and places, the memory of which is one of the last to disintegrate in those with Alzheimer's Disease.

Part Two begins with a brief introduction signalling a change of direction. There are two chapters in Part Two and each describes a different cultural praxis that illustrates ways of thinking about participative engagement in the things of the world.

\textsuperscript{9} Asperger's Syndrome is a high functioning form of Autism.
Chapter five, ‘Flowers in a clearing’ elaborates a Zen Buddhist way of understanding being. This is an account of embodiment through a cultural practice situating the self in the world. The Zen practice of *ikebana* is the Zen art of flower arranging. Here the study of embodiment is not primarily a study of the body, but of engagements in space. The concern for a study of embodiment is how we engage the world and make meaning of this engagement - and, ultimately, how we philosophize our engagement - within our very being. Part One’s concern is, literally, the identification of experience in the flesh and blood of a person, in their physiology. I use certain “relational disorders” that people can have to illustrate by absence what is required for smooth interaction between the self and others and the self and elements of the physical world. In Part Two I move from this level of incarnation, as it were, to emphasize culture and the subjective experience. This move is to be understood in the context of corporealization, enfleshment.

Chapter six, ‘Embodying bardo’ explores the nature of the bardo, that dense space between this moment and the next according to Tibetan Buddhism. Because we are always in the midst of things, the bardo is always here now. This realm is inherently subjective and a “place” where thoughts and feelings arise. I examine the bardo by way of my attendance at an Australian music and artistic performance of the *Bardo*i-*thos-grol* (‘The Tibetan Book of the Dead’).

Finally, in the conclusion to this dissertation, I sum up the main themes, strategies, outcomes of my research, and other possible uses for the methods I employ.
Part One

Chapter one

Chiasm of the heart - towards a mutuality of personhood

(setting up a strategy for studying embodiment)

Just as I am in perceptual chiasm with my friend, so there is a “chiasm of the heart” that joins us affectively. To become aware of and deepen this concernful linkage is to realize ontological relatedness; my friend and I belong to one flesh and blood (Leder: 1990: 162).

Understanding the participative mutuality of persons with one another and with their world is an old problem for mainstream Western thought. The basic difficulty according to this tradition is how we bridge the supposed gap between individual selves and selves and their world. It is a difficulty that primarily arises out of the ancient mind-body problem (the so-called “hard problem”: “How states of consciousness arise in material brains?”, or as Köhler (1959: 727) puts it, ‘Why are the objects of the phenomenal world perceived as before us, outside of ourselves, even though today everybody knows that they depend upon processes inside of us, in the central nervous system?’). This is a pseudo problem (Madison, 1988: 156), for there is no neat division between mind and body; they are inseparably entwined. Likewise human beings and nature cannot be parted, nor nature and culture separated, nor can animate and inanimate entities, or any other supposed opposites exist on their own - which is not to say each member of a pair is the same substance as the other. They are phenomenologically different, with their own set of ‘meaningful gestalts,’ as Leder observes (1990: 64). The visualization of the möbius strip is useful in this regard, as Elizabeth Grosz (1994: xii) points out. The möbius strip is a topological mathematical figure: a loop with

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56 Merleau-Ponty (1962: 349) puts it similarly, ‘The existence of other people is a difficulty and an outrage for objective thought.’
a single twist, such that Surface A become Surface B when followed around; inside becomes outside, outside inside (see below).

Other images are also useful: the Chinese Tao (yin and yang where passive yin contains active yang), the mythological figures of Tibetan Buddhism, Mahakala (god) and Lha Mo (goddess) are entwined in sexual embrace; even an image of an ear where inner becomes outer in a smooth fashion. While this may suggest a blurring of boundedness, I propose another view: that seeing a single surface as two apparent surfaces allows us to focus better upon differences while permitting - at the same time - a recognition of union. In other words, we, through this mòbic image, can hold apparently contradictory concepts almost simultaneously in our mind and that, to do so, facilitates a better understanding of the complexities involved in such gestalts.
The question still remains how experience and consciousness\textsuperscript{7} happens. I will not, however, attempt to answer this, nor shall I recapitulate the vast literature already on the mind-body problem.\textsuperscript{16} I shall, at least in this chapter, restrict my focus to the project of discussing re-embodying our relationality with ourselves, one another and our physical environment. I believe such a task is needed because Western thought still, curiously and inconsistently, labours under various prejudices regarding the body and, thus fails to fully appreciate what a thesis of embodiment actually means for how we understand the discourses of many disciplines.

The task of re-embodying relationality is, however, not just recognizing and valuing the body (re-vivifying it)\textsuperscript{19}; it is understanding that being embodied means having a unique history, situated relationships with particular milieu, physiology and perceptual perspective. Our embodiment defines us as simultaneously separate and yet a part of others in a culture, with other species, and with a physical world. Being embodied is being co-emergent with all these multilayered dimensions by virtue of ongoing relational encounters. This perspective is thus

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\textsuperscript{7} "Consciousness" is a variously defined and described word. Edelman (1999: 4) suggests that only a descriptive definition is safe. He thus lists some of its properties: Consciousness is 'a form of awareness and is a process and not a thing.' (p. 4-5) He suggests it is personal 'a property possessed by individuals or selves' (p. 5). Edelman notes, following William James that consciousness 'is changing, continuous, deals mainly with objects independent of itself, and is selective in time, not exhausting all aspects of the objects with which it deals.' [I shall dispute elements of this also.] Consciousness, Edelman further notes, 'is bound up to some degree with volition and decision'; it thus relates, according to him, 'to intentionality' (p.6) Consciousness, he further suggests, 'is not... a copy of experience, not is it essential for much of behaviour - some learning, many conceptual processes, and even inference can proceed to a large extent without it.' (p. 6) Consciousness seen this way is an epiphenomenon and product of cognizing parts of the brain. There are numerous other explanations for and of consciousness. I take the pragmatic approach that is inherent in Tantric Buddhist thought that consciousness is as embodiment is - which, of course, does not answer any questions subtle, or otherwise. The reason for not untangling the nature of consciousness is that, for this dissertation, such an exercise would take me too far away from the exercise at hand: that is, to examine the relationality of embodied beings at a social and physical level.

\textsuperscript{9} People in all ages have grappled with this supposed problem. Descartes' solution (and that of Plato and his followers, Manichaeism, and certain strands of Christianity) was to argue for the hypothesis of dualism. Dualism asserts that the universe contains two kinds of stuff: vital mind-spirit stuff and dead physical matter and that these exist semi-independently of one another. Theoretically, according to this model, it would be possible to have minds without bodies and bodies without minds. The fundamental difficulty with such an idea is how the two communicate. (cf. Humphrey, 1992: 4) This solution of dualism has been argued endlessly. Some thinkers have sided with a monistic solution (there is only one stuff, of which both mind and body are ultimately made). In its extreme form, a physicalist monism argues that all that arises in behaviour is the workings of the physical brain. An opposite monism would put all down to a universal energy.

\textsuperscript{16} Such programmes often end up producing peculiarly disembodied accounts of bodies.
ecological, as defined by J. J. Gibson and followers, though it goes beyond the discipline of ecological psychology in which Gibson worked. The philosophy of embodiment, as I shall present it, is not doctrinally philosophy in the disciplinary sense, either. What I am aiming for in this proposal for a study of embodiment is an interdisciplinary exploration of experiential embodied relational participation.

Studying the perpetual act of embodying the world necessarily changes our emphasis upon subjects and objects, this and that, self and others, and all other apparent dichotomies. Varela (in Varela and Dupuy, 1992), identifies the shift in thinking he deems necessary for this change in emphasis, thus: from ‘task specific’ to ‘creative’, from ‘problem solving’, to ‘problem definition’, from ‘abstract, symbolic’, to ‘history, body bound’, from ‘universal’, to ‘context sensitive’, from ‘centralized’ to ‘distributed’, from ‘sequential, hierarchical’ to ‘parallel’, from ‘world pre-given’ to ‘world brought forth’, from ‘representation’ to ‘effective action’, from ‘implementation by design’ to ‘implementation by evolutionary strategies,’ and from ‘abstract’ to ‘embodied’. I shall concur with most of these perceived necessary epistemological shifts, but I shall also argue that certain of them are not dichotomies at all. They are, instead, parts of the experiential body; that is, they are not intellectual abstractions at all.

Though my focus is not on the body, per se, any project that attempts to reintroduce the nature of embodying experience must also speak of the flesh or carnality of the body, or at least human practices (in which corporeality speaks). As Leder (1990) and Abram (1997) have shown, the very way we experience this carnality of corporeality is reflected in the way we philosophize about it, and vice versa; for beliefs, theories, folk
psychologies, etc., reinforce and de-emphasize self-perceptual experiences, which then feed into the generation of theories, beliefs, philosophies, etc. Realizing the reflexivity of bodily experience upon theorizing, and theorizing upon bodily experience allows us to reflect upon the ways in which, for example, in mainstream Western philosophy, the carnality of the body (including its sensuousness) "dropped out" of consideration as part of descriptions of the self and lost its apparent relevance as a subjectively felt identity.

Experientially, at a perceptual level, bodily experiences drop in and out of conscious awareness. These experiences readily give rise to theories for a dualism, as they did for Descartes, for instance. The rise of science in the seventeenth century, under the influence of Cartesian\textsuperscript{30} thought, identified the body with all matter (thus becoming part of scientific description itself). In this way the body, like the ochred sand, thereby acquired objecthood. It should be noted here, however, that prior to the seventeenth century and under the strong influence of the doctrines of Augustine (who followed Manichaeism before converting to Christianity, cf. \textit{Confessions}, translated by Pine-Coffin, 1961) and the scholastic theologian, Thomas Aquinas, in mainstream Christianity, the body was viewed as something to be tamed (if not explicitly thought of as evil). In this regime of thought, therefore, the body had already acquired cultural objecthood.

Already having acquired cultural objecthood, the body was treated as any other physical object (cf. Leder, 1990: 5). In Cartesian terms, the body

\textsuperscript{30} Descartes' epistemology 'might be termed a motivated misreading. That is, his conclusions are motivated by lived experience, albeit as misread into a reified ontology' (Leder, 1990: 132).

The body draws his philosophical attention particularly at times of perceptual error, injury, madness, disease, fatigue, excessive passion, and pain. For it is at such times that the body opacifies, clearly exhibiting its role in experience. This skew of attention then encourages a dualist reading. For when dysfunctioning, the body seems most Other to the self, a force opposed to the understanding and will (p.132).
became part of *res extensa* and thus, essentially, no different to any other object. Yet, as Merleau-Ponty notes, 'The body is our general medium for having a world’ (1962: 146). Our body is our means of knowing the world and that it is in our body-in-mutual-relation-with-the-world that we exist at all.

Phenomenology allows us into the recognition of our subtle entwining that is embodiment because, as Varela (1996) says, it turns 'the movement of thinking from its habitual content-oriented direction backwards towards the arising of thoughts themselves' (p. 337) in their felt immediacy of encounter. The very act of examining felt immediacy is to enter into an examination of the process of something. Whitehead observes this when he says,

The comprehension of this notion requires an analysis of the interweaving of data, form, transition, and issue. There is a rhythm of process whereby creation produces natural pulsation, each pulsation forming a natural unit of historic fact. ... The Newtonian description of matter abstracts matter from time. It conceives matter "at an instant." So does Descartes' description. If process be fundamental such abstraction is erroneous (Whitehead, 1968: 88 - 89).

While there are problems with this strategy (as much as for any other), it opens our awareness to the complexity of other horizons and allows us to recognize that these other horizons are as much in ecological process as our own. The strategy of an ecological phenomenology is also a reflexive one: the observed and the observer mutually interact.

Reflecting on subject and objecthood, we come to realize that the definition of self and other is not confined to the boundary of our bodies. Perception of self is not just that which is "inner" and perception of the
other is, likewise, not bound to the "outer" realm. The way we use tools is relevant in this regard (cf. Polanyi, 1967). A stick readily becomes an extension of our hand when we employ it in a task such as endeavouring to remove a stone that is in our pathway. The stick enters our subjecthood to a certain degree while we are using it. Similarly, a car becomes an extension of our own body; we protect it as much as we look after ourselves (at least while we are driving it). Of course, while we have grasp of a stick or are seated in a car, a sharp insult on the tool reverberates into our own body, so tool and bodyself are not merely united at the level of perception of selfhood, but actually impact physically on one another.

Perception of objecthood is also found in the recesses of our bodies. Those organs, which do not normally have sensation (e.g. pain), have a certain objecthood. Though I might speak of "my adrenals, my heart, my brain" I do not experience their existence in the same way as I experience my hands upon the computer keys. I do not experience my hands at the keyboard all the time, either. While I am in deep thought, my hands "disappear"; recede from conscious awareness. My body can become entirely "absent" when I am 'caught up in a multitude of involvements with other people, with nature, with a sacred domain' (Leder, 1990: 5).

The category of selfhood as that which experiences subjectivity is thus not a safe category, for subjectivity is neither bounded in this body of mine, nor experienced evenly within it. My body can be present and it can be absent. Is it, therefore, not unreasonable to ask, "May I also experience you as sometimes subject and sometimes object?"

At the end of this chapter I shall examine an idea expressed by Temple
Grandin that the sensations of physical comfort allow one to experience and express kindness and empathy for the other. Her proposition emerges from her personal experimentation, and supported by the research conducted by others. Grandin suffers from Asperger’s Syndrome (AS) which she identifies as a disorder of hypo- and hyper-sensitivities to proprioceptive, vestibular and tactile sensory inputs and, more generally, various forms of inner and outer touching. It is a disorder that inhibits relationships between both self and social, and self and physical environments. AS sufferers are clumsy in the physical and social domains, which allows us insight into the possible commonality of both spheres.

Before I begin my argument, I shall position it by presenting traditional Western views of empathy and then a Tantric inspired Chinese body-centred view for contrast. Following this I will return to the subject of the embodiment-environment entwining and introduce the concept of affordances, in order to better argue that a participative mutuality leading to an empathic response is possible.

Traditional views of empathy

The word empathy is a relatively recent concoction combining two Greek roots, pathetos referring to “suffering” and the prefix em referring to “in”. As such, the whole word means “in-suffering” and, in this way, it is not dissimilar to the word sympathy, meaning “with-suffering”, depending on how we see the words “in” and “with”.

We in the West tend to view the idea of suffering with someone in two ways: We share the same suffering, or we understand, but do not share, this same suffering. The idea of “with-suffering”, suffering with, is a
threat to our belief in individual, atomistic selves because it suggests more than merely understanding another’s suffering. It means actually experiencing the suffering of another person. Thus, “I have empathy for you,” could mean “I know in myself your suffering.” Similarly, “in-suffering” suggests the same thing: “in me, I know your suffering”, “your suffering is my suffering.” Such an interpretation is, however, at odds with theories about sympathy and empathy that are, for the most part, mentalist in attitude.

The first entry of the *Macquarie Dictionary* for “empathy” is ‘mental entering into the feeling or spirit of a person or thing’ and the next is ‘appreciative perception or understanding’ (1981: 589). Neither interpretations suggests any possibility of a perceptual-sensate participation. I should note here, however, that there is a considerable literature on the importance of touch in psychosocial health (cf. Montagu, 1978). Yet, curiously, such insights have not been reconnected to the ability for empathic or sympathetic response, as an enduring reality throughout life.²¹ It is as though we Westerners still want empathy and sympathy to belong to higher mentalist realms (heights of which only some achieve), while, at the same time recognizing that touch feeds our deepest needs. In this split (this between), lies Western resistance to a mind-body connection.

Before proceeding further, it is necessary to return to the word *empathy* to acknowledge where the word actually comes from. *Empathy* was coined by Titchener (1909) to serve as a translation to the German word

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²¹ The connection is made only as it is relevant to the developing child, at least in academic literature - which sits apart from popularist literature.
Einfühlung, which was appropriated by Lipps (1903, 1905, cf. 1914) to be applied in a psychological context. Einfühlung was originally used in the study of aesthetics to describe the way in which observers are able to project themselves into a work of art or a thing or beauty (cf. Davis, 1994: 5). In this way there are indications that the way I shall use empathy is justified. The idea of the aesthetic, after all, in its original sense directs us to sense perception (sensation, perception, and feeling).

Unfortunately, as with the shift in the field of aesthetics to an elitist value-driven critical study of the beautiful, so the word empathy has moved from the realm of sense-perception to a moral cognitive one. No longer concerned with our participation in another’s suffering in a very direct somatic way, the term has come to mean anything from an imagined feeling with the other person to a communicated but parallel-felt distress.

Lipps and Titchener thought of empathy as occurring through an ‘inner imitation, or inner Nachahmung’ (Davis, 1994: 5), a covert motor mimicry (albeit weaker) of the other’s emotional state. Witnessing emotional pain, according to this idea, tightens our own muscles so we feel some of the tension experienced by the other. This theory fits Aristotle’s catharsis idea where watching actors perform deeds (perhaps those outside reasonable bounds of an orderly society) we experience relief from our own tensions because during the performance we live and release the experience in our imaginations as it is enacted upon the stage. Lipps’ and Titchener’s original idea of a motor mimicry was soon displaced by a more popular

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8Recent scholarship indicates that it was not Theodore von Lipps who used the term Einfühlung in this way. Edith Stein, a student and later assistant of Husserl, wrote her doctoral dissertation on ‘The Problem of Empathy’ and later helped Lipps prepare his doctoral dissertation on just that subject. Stein’s insights are also to be found in Husserl’s Ideen II, especially the chapter on ‘Constitution of Soul-Reality in Empathy,’ according to Sawicki (1997: 160). Stein did a “cut and paste” job on the notes of Husserl in preparing his work for publication, so it is possible that she incorporated some of her own work in the making of this book. We need to understand that because of her gender and Jewishness Stein’s own work was barely recognized officially at the time and place (Germany, pre-World War I).
one that saw empathy as only possible by an imaginative leap across the chasm of atomistic selves. Their later theory considered the observer as a ‘wilful agent’ who deliberately made ‘an effort to step outside the self and “into” the experience of others’ (Davis, 1994: 5). Empathy was seen as an act of deliberate striving.

I wish to note here that the original concept of empathy as Einfühlung was greatly influenced by explanations concerning sympathy. The word “sympathy” has a very similar set of meanings to “empathy”: being simultaneously affected with the same feeling as another; sharing in emotion, sensation, condition with another; being compassionate towards another. Indeed its etymology seems to reinforce this. Sumpatheo means to ‘suffer with, sympathize’ (Kittel and Friedrich, 1985: 798) and is a combination of two words: sum = ‘with’ and patheo = ‘suffer’; thus ‘with-suffer’ - which in this dictionary definition form seems not so far from empathy. The two words, however, come from different traditions - even though, today they are often confused. As noted above, the idea of empathy emerged from the study of aesthetics. Sympathy has always connoted a sense of “fellow-feeling”. How this “fellow-feeling” occurs has been a source of argument.

In the eighteenth century, Adam Smith, moral philosopher and economist, felt that we are able to experience a “fellow-feeling” (sympathy) with another because such a thing is integral to the capacities of human imagination. (The ability to imagine another’s condition, emotion, situation is also Aristotelian.) “Fellow-feelings” can take many forms, such as pity for the sorrows of others, anguish for their pain, or joy over their good fortune. In this way we might experience compatible emotions we
observe in others. Such participation, however, was not thought of as bodily.

A nineteenth/early twentieth century theory (influenced by Darwinian ideas) suggested we are able to share another’s feeling condition, that is, be sympathetic, because we are able to draw on our own experiences as members of the same social group (cf. Spencer, 1870). Building on this theory, McDougall (1908/1926) proposed that we are “hard-wired” to share emotional responses; that we are instinctually geared that way. Such a “hard-wiring” theory, albeit bodied, takes no account of situations and their effect on manipulating the intensity of the shared affect. In other words, both these ideas are not ones that take account of the human organism in emergent relationship with her socio-physical world. It takes no account, for instance, of peer pressure to conform.

Early twentieth century ideas combined sympathy with empathy such that the latter continued the traditional ideas of the former, thus blurring them together. Köhler (1959), for instance, believed empathy was a case of the understanding of the feelings of others, by an act of remembering similar occasions in our life. This idea is similar to Spencer’s. G. H. Mead (1964) saw it as occurring when we take on the role of other persons as a means of understanding how they view the world; an idea that continues Smith’s (and Aristotle’s). This “putting ourselves in another’s shoes” was thought by Mead to be merely an imaginative leap. Piaget (1931/ 1971 edition) viewed the individual as gradually developing greater powers of objectively rational thought and in this way permitting an understanding of how other people might view the world by role-playing the situations of others. Piaget’s idea requires a cognitive leap that illustrates better how
disembodied Western thought has become. This is recapitulated by Vetlesen (1994). Vetlesen sees empathy as a problem that is only explainable by means of a moral emotion that turns on an attentiveness for the well being of the other person. Empathy, he thinks, is ‘irreducibly other-regarding or -directed’ (my concurrent perception of myself is not possible in this view).

Empathy allows me to develop an appreciation of how the other experiences his or her situation, empathy facilitates the first reaching out toward and gaining access to the other’s experience, but empathy does not imply that I become “contaminated” the other’s emotional state, it does not mean that I myself come to feel what the other feels (Vetlesen, 1994: 8).

Common with many of the previously mentioned commentators, the problem of empathy, is for Vetlesen, how a moral turn can bridge the perceived gap between people. That a moral turn does bridge the perceived gap, according to him, is the only explanation possible. His use of the word “contamination” in the above quote is interesting. By this word he imputes a reciprocity of empathic sharing practically with an “infection”, as though to say that sharing another’s emotional state means inevitably both the loss of self and the burden of another’s dis-ease. Both these ideas are mirrored reflections of the Western preoccupation with individuality, separateness and a strict demarcation between mind and body (where emotions are thought of as emanations from the sensuous self).

For Vetlesen, empathy is limited to that which, in the immediate tense, occurs between two people. For him, sympathy, unlike empathy, is the higher, moral, ‘altruistic emotion’ comparable to compassion since, as he says, ‘they are not reducible to, or at the mercy of, the agent’s private
desires and affections' (Vetlesen, 1994: 79). Sympathy is the more noble, for it is not dependent upon love; allowing us to direct a caring response to those 'whom we do not love' (p.148). According to him, we might learn from the particular, the immediate, the concrete encounters how to be caring to those we meet, but we must learn a sympathetic response that is not bound by the conditions we encounter in our small circle of loved ones. Love is too concerned, so Vetlesen claims, with family and friends; it does not have the capacity to move beyond the 'small-scale and face-to-face setting' (Vetlesen, 1994: 212). It cannot transcend its limitation of particulars. Sympathy is an abstracted emotion, he thinks, and, as such does have the capacity to move beyond the here-and-now.

Rogerian Psychology comes close to providing an alternate response, though, finally, it does not, I suggest, do so. In a revealing 1957 dialogue with Martin Buber and moderated by Maurice Friedman, Carl Rogers speaks of coming to understand his client's experience as it appears to that person: 'I really am able to sense with a good deal of clarity the way his experience seems to him, really uh viewing it from within him ...' (Anderson and Cissna, 1997: 30), a statement revealing an empathic ability to listen indeed. Rogers, however, then continues, thus: 'and yet without uh losing my own personhood or separateness' (ibid.). It is as if the act of close listening must be countered by a withdrawal into an independent self so as not to be absorbed into the client's pathology. This is even though Rogers has admitted that he enters the client-therapist relationship 'as a subjective person, not as a scrutinizer, not as a scientist... I feel too, that uh when I am most effective, then somehow I am relatively whole in that relationship, or the word that has meaning to me is ... "transparent"' (Anderson and Cissna, 1997: 29).
In the course of the Buber-Rogers dialogue, it becomes clear that Rogers is resistant to admitting a full empathic response (whether because he ultimately does not think such a response is possible, or he is subtly persuaded by Buber against admitting it\(^a\)), even though he speaks of ‘moments’ of transparent dialogue (Anderson and Cissna, 1997: 30) and ‘a real... experiential meeting of persons, in which ... each of us is changed’ (p. 30).

If I am right in suggesting that what is finally revealed in the Buber-Rogers dialogue is a fear that a whole, non-judgemental meeting of persons in a participatory empathy would mean loss of self, then, perhaps I am also justified in suggesting that this is an irrational fear. This fear response is an ancient one emerging from religious ideas from antiquity, e.g. that of Gnosticism, where matter is felt to be degraded and, by contact, degrading.\(^b\) This idea rejects a co-inherence with the apparent transcendentalism of the spirit and mind. There is here a lack of awareness that we live in ‘transactional exchange’ with our environment (cf. Beck, 1976: 143) and with one another. If we contend only that participatory relationships can occur as a “leap” of the imaginative mind and ignore

\(^a\) "Rogers certainly has a desire to please Buber. Buber is the elderly learned patriarch in this dialogue and there is a quality of deference shown by Rogers to him. Buber, interestingly, resists, for instance, the attempts by Rogers to attribute to Buber beliefs that have their root in the writings of Buber. Buber says, at one point, 'I'm, I'm not, I'm not, eh, so to say, "Martin Buber" eh, as, how do you say, with uh-uh the sign, brackets? Yes-no?' (Anderson and Cissna, 1997: 43) and, 'Yes, you see, I'm not a quoted man the eh thinks so and so and so on' (p. 44). Rogers may have felt, thus, that the point of contact, i.e., a mutual belief in the intensity of the I and Thou relationship was no longer the point of possible meeting any more. Certainly, Buber is resistant to concurring with Rogers that in the client-therapist situation there can be a genuine meeting of persons. Buber, for instance, insists that the relationship is always unequal and the therapist is always in a position of power:

Buber: ... You see, I, eh, of course, am entirely with you as far as your experience goes. I cannot be with you as far as I have to look on the whole situation, your experience and his. You see, you give him something in order to make him equal to you. You supplement his need in his relation to you. You make him uh - of a certain - may I say so personally, out of a certain fullness you give him what he wants in order to be able to be, just, just for this moment, so to speak, on the same eh plane with you. But even that is eh - very - it is a tangent. It is a tangent that may not last but one moment. It is not the situation of an hour; it is situation of minutes. And these minutes are made possible by you. Not at all by him (p. 63).

\(^b\) An interesting contrast to this view is expressed by the Buddhist symbol of the lotus flower. The lotus grows in murky water - is fed by this murkiness - yet emerges from it, magnificent, pristine and vigorous.

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any bodily participation then we uphold a tradition of thought that separates out body and mind. We also can deny that knowledge of bodily participation can have a benefit for Western theoretical thinking.

Chinese and Tantric thinking, in general, proceeds in another way. The Western trained Chinese philosopher-historian Wu (1997) connects the knowing and experiencing of the self with the knowing and experiencing of another. The way of Chinese Body Thinking, named as such by Wu, is a tradition of thought based on Taoism and Confucianism which sees embodiment as not an isolated, atomistic self disconnected from the world but as always connected, even when it is unaware of this connection. The möbius strip that is the relational between Thou and me twists and turns so that the very fact of our relationship joins us in a single expression of inward-giving and outward expressing empathic participation. As Wu describes this participation in terms of love, he says,

Love so becomes one with the beloved other that the otherness of the other is lost. ... there is no gratitude, no appreciation, no dedication. One cannot dedicate one’s book to oneself, nor can one thank one’s hand. One merely moves one’s hand to write (Wu, 1997: 131).

The beloved other is as I am. This does not imply that I am the other, rather it asserts a truth of relation much as Leder (1990: 162) describes it. Through love, empathy and compassion ‘we actualize a "oneness"... a coiling circuit of connection’ (Leder: 162). Herein lies a dimension in mutuality that I will develop throughout this dissertation. It is sufficient to say here that those Westerners whose ideas demonstrate such ecological awareness did not acquire them by a sort of parallel philosophical development, but an unceasing cross cultural sharing of ideas. We ‘live in a sea of influences’ as Buckley (1996, internet) has put it. Such cultural
mutuality is, however, not all always admitted. The existential phenomenologist, Heidegger, for instance, was very much interested and influenced by Zen Buddhism and Taoism (Buddhism and Taoism shared a common ancestry in Tantrism), but he never acknowledged these sources. These Eastern influences infiltrated Western philosophy via Heidegger and others like him (although such influences are not new, but are there from the first sea and land journey across continents) and such ideas may be found in process theology and philosophy - without a direct declaration of these sources. Process thought lies at the heart of current situated interactive emergent concepts (which is being used extensively in artificial intelligence research and other cognitive science interests), and the phenomenology of the body as expressed by Merleau-Ponty. While this is true, it is also true to say that without the our own Western philosophical tradition of the objective “gaze”, the tradition of a separation of self in relation to another, we would have no way of integrating these two apparent contrary sets of ideas.

I should note here that the two philosophies: of separateness (and, thus dualism) and relationality are more than mere ideas, but instead, arise out of our bodily experiences of ourselves in relation with the world. This concept lies at the heart of this dissertation.
Embodiment-environment entwining

... my experience of the world is not fragmented; I do not commonly experience the visible appearance of the world as in any way separable from its audible aspect, or from the myriad textures that offer themselves to my touch (Abram, 1997: 127).

Chiasm I - the world
I - the other --
chiasm my body - the things, realized by the doubling up of my body into inside and outside - and the doubling up of the things (their inside and their outside)

It is because there are these 2 doublings-up that are possible: the insertion of the world between the two leaves of my body the insertion of my body between the 2 leaves of each thing and of the world
This is not anthropologism: by studying the 2 leaves we ought to find the structure of being -- (Merleau-Ponty, 1968: 264).

Our experience of the world is via our embodied enaction with the things of the world. Embodiment is ‘having a body with various sensorimotor capacities’, capacities that are ‘themselves embedded in a more encompassing biological, psychological, and cultural context’ (Varela, Thompson and Rosch, 1993: 173). Being embodied also means inhabiting a particular time and space (a here-now milieu), having a ‘unique history, physiology, and perceptive perspective’ (Leder, 1990: 162) that marks us off as individual even, as Leder says ‘as they open us to interconnection’ (Leder, 1990: 162). Sensorimotor processes, the flesh and blood of the body, perception, action, and culture are inseparable from cognition having evolved together. Embodiment, as I use it, is not merely having a body; a view that curiously disembodies the body from the brain and culture. There are no bodies that are not encultured, nor enbrained (or at least have a central nervous system) and that are not emergent with their environment. When I speak of embodiment, I am thus speaking of
animate entities embodying their world. Being embodied we are situating ourselves in a time and a place and with a physiology, a history, and sets of relationships very particular to ourselves.

Our active participation in our world ‘incarnates and shapes what we experience’ (Varela, 1996: 337). This is made possible via a meld of global arrayed sensorimotor capacities present at every point in abundance and redundancy as we actively engage in our immediate environment. The environment and the self in engagement, at the point of encounter, as Merleau-Ponty puts it ‘constitute a new whole’ (1963: 13), but never in a static sense. Thus perception ‘is not simply embedded within and constrained by the surrounding world; it also contributes to the enactment of this surrounding world’ (Varela, Thompson and Rosch, 1993: 174). As such, encounters between embodied enactment and environment change the nature of both. There cannot be thus a human-nature dichotomy. Our human environment is not a wholly constructed environment (we breathe the same air as the creatures in the forest and this same air allows us speech), nor is it ‘a found environment’; our interaction with our selected environment has transformed it (Reed, 1996: 125). Such a transformation has not excluded the ecological realm. Our interaction (much of it a cruelly detrimental kind) continues to have effect, at all levels, on our environment and ourselves.

**Culture-nature chiasm**

The entwining gathers together culture and nature. There is no pregiven entity called “nature” (a thing outside ourselves), nor a fully developed body (present, and unchanged throughout life), for while we embody our interactions with the world (i.e., alive), we are “nature-ly” emergent in our
socio-physical environment. The subtlety of this relationship is readily overlooked. Susan Oyama, considering the nature-nurture relationship (which is an implicit part of the culture-nature entwinement argument), considers the traditional ‘compromise,’ as she calls it, of talking of "complementarities" an unsatisfactory solution. The interrelationship is much denser than this. She notes (Oyama, 1985, quoted by Oyama, 1992, 230) that ‘Nature’ is an ‘emergent phenotype’ (i.e., an observable set of characteristics), ‘constructed in development through the interactions of a highly ramified organism - environment system.’ Embodiment is an emergent phenomenon; inherently, natural; there is no reality outside this given, as Guenther (1977: 86) says. It is ‘not one thing among other things, but is everything.’ There can be nothing, therefore, that we can do that goes outside nature. There is no world that is pregiven and nor one to which we must “adapt” (cf. Varela, Thompson and Rosch, 1993: 202); we are in our world, and this world in us.

Any imagined dichotomy between culture and nature breaks down when we think through any cultural expressions. The learning of expressive sharing, otherwise called language, for instance, is a culture-nature chiasm. All creatures engage in such sharing, and not just within species. A bird’s warning of a predator’s presence is listened to and obeyed by all animals within the local vicinity. ‘Language as a bodily phenomenon accrues to all expressive bodies, not just to the human’ (Abram, 1997: 80). Expressive sharing sets in place a place for culture.

Culture is thus not merely a transmission of ideas and habits, but regularized intersecting fields of participation in which we all share to a greater or lesser extent. The degree of regularization impacts on the
setting of boundaries around certain expressive representations. Regularization of expressiveness manipulates perception. Tools are needed, therefore, that allow us to observe what we take for granted. The ethnomethodological technique of close scrutiny permits us to observe just this, as Goode (1994, 29-30), notes. Observing himself as he observed his subjects in his ethnomethodological work with severely handicapped children (a reflexivity fundamental to ethnomethodological work), he 'started to see [his] world [as] a collection of perceptual biological mechanisms accompanied by rules for their use' (1994: 29).

My eyes and ears, once I had been socialized to use them “correctly”, provided me with a relatively coherent gestalt of experience, experience based upon these seeing-hearing beliefs and practices. These were the gifts of my family and their forefathers and allowed me to produce a stock of practical knowledge about my life world. But this body of knowledge had taken on a sui generis character, an existence of its own that I had to take into account. I had had no control over this learning how to see and hear reality since the activities I had been taught were the same activities by which the knowledge was “validated” (Goode, 1994: 29-30).

Other techniques, such as meditation and self-analysis, are also valuable in opening our awareness to the particulars of what we take for granted in ourselves, our physical domain and our culture.

There is an entwinement of nature and culture, where the one merges with the other. When we engage in craft work, working at a computer, food consumption, playing ball - even walking, we do it bodily and according to our cultural upbringing. English and Anglo-Australian women of the middle classes, for instance, do not engage a swinging arm nor hip movements during walking; restricting movement mostly to their
knees. A belly-dancer friend of mine, noting how so little of the body is engaged by such women, compares this form of de-sensualized socialization to the shocking practice of clitoridectomy and the surgical removal of other sexual parts in some Muslim and other cultures. By not engaging the arms, for instance, balance is compromised. Combined lack of balance with the wearing of high heeled shoes and ankle injuries are likely, leading to loss of proprioceptivity and an increase in the likelihood of on-going balance disorders, and an increase in restricted movement - thus fulfilling the social “obligations” of middle-class English and Anglo-Australian women (delicate, sexually inhibited, minimalized engagement outside family life, etc.). One needs to remember, however, that if these de-sensualized practices are commonly accepted, it must be because there is a cultural agreement to the fact. There is another dimension to this: “tacit acceptance” may be another way of saying “this dimension of sensual engagement is not an issue for us”. Both Leder and Abram note that similarly diminished levels of engagement are mirrored by our very capacity for sense perception. In other words, diminished bodily engagement, e.g. swinging the hips, reflects not only a cultural inhibition but a woman’s very capacity to experience hip movement. The lack of sensory experience “feeds forward” (using systems theory jargon) into cultural norms and ideals. There is here a back and forth process occurring where each element supports all other elements.

Female lack of physical engagement is noted also in the throwing of balls. Many young girls and grown women throw balls using a very limited capacity of their upper body. The throw is a sort of hand flap. They do not twist their torso sagittally, like boys; a movement that generates

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* One might compare such restricted movement to women who more fully engage their hips, for instance. The simple engagement of hips in a culture of sexual repression would be to attract a label of sexual promiscuity.
powerful force causing the ball to travel long distances:

They do not reach back, twist, move backward, step, and lean forward.
Rather, the girls tend to remain relatively immobile except for their arms,
and even the arm is not extended as far as it could be (Young, 1989: 55).

... the whole body is not put into fluid and directed motion .... the woman’s
motion tends not to reach, extend, lean, stretch, and follow through in the
direction of her intention (Young, 1989: 56).

The ball, lacking initial force, drops plaintively (if I may use this word)
short of the target. Catching the ball is likewise pitiful. Girls ‘tend to wait
for and then react to its approach rather than going forth to meet it’
(Young, 1989: 57). Such “girlish” play is not because girls are naturally
weak, but, in our Western society, restricted body use demonstrates
appropriate femininity.8 Jumping, running, twisting, dashing, leaping to
meet missiles with countermotion, are alien to our cultural depiction of
femininity. Feminine bodily existence is often lived as a thing, an artefact
of expectation. An “I cannot” may.... set limits to the “I can” as Young
puts it (1989: 60). These two examples describe well Leder’s comment that:
‘The human body shapes social practices, and social practices shape our
use and understanding of the body’ (p. 152).

The nature-culture chiasm can be approached differently again. We might,
with Heidegger, speak of the ‘relatedness to wood’ in the craft of
woodwork.

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8 This thesis is disputed by Dr John Prott (a Western Australian general practitioner with a
special interest in sports medicine). Dr Prott notes that his own daughters did not engage a sagittal
twist when throwing a ball until they were taught to do so. Small boys, he observed, engage this
twist from the start. He suggests that this discrepancy has more to do with the different centres of
gravity and upper body development (which is not the same for small boys and girls) than social
pressures. As children develop, however, the discrepancies in body gravity and strength evens out.
In other words, social pressure to conform may well be there from the beginning, but it is
supported by body capacities at the start. When a girl develops upper body strength, she may
choose to throw in the same way as boys, or not - as the case may be.
If he is to become a true cabinetmaker, he makes himself answer and respond above all to the different kinds of wood and to the shapes slumbering within wood.... In fact, this relatedness to wood is what maintains the whole craft (Heidegger, quoted in Leder, 1990: 166).

A potter may similarly feel her sensual relatedness to clay, or the sculptor, a relatedness to stone, or a surgeon, the relatedness to bone, organs, vessels and blood, etc. Such nature-culture relatedness is important to understand embodiment.

Corporeality is fleshly relationality with self, self and others, and the physical world. The chiasm of culture and nature is more than a socio-physical knotting together as one might make a string macramé; it is literally an ongoing enfleshment of the interaction. Each interaction and each enaction fills out our perception, our capacity to engage, and understanding of the world.

Our participation in the socio-physical domain is dependent upon all that we are corporeally; this, and our relationship with the elements of that socio-physical domain. The nature of this participation incorporates our sense of relatedness with what we embody (enflesh). In order to examine this further, I will, as noted in the beginning consider empathy as emerging primarily from bodily sensation and secondly from a mutual body participatory experience as suggested by a sufferer from Asperger's Syndrome. To better understand the body's "fit" with the socio-physical world, I suggest we consider using James J. Gibson's ecological psychological term of affordances. The notion of the indexical expression, proposed by the ethnomethodologists, Garfinkel and Sacks, may be useful.

* During a course in acupotomy (a sort of bone "pecking" used to stimulate the course of blood flow in bones) I attended in Nanjing, China, we practiced on de-skinned corpses in order to develop a sense of relatedness to joints and organs. It was a matter of developing a feeling for the edges of bony surfaces, e.g. the ridge of the cranium of the skull or the patella in the knee, or the gaps in metacarpal joints, etc.
here as well. As far as the latter is concerned, I am encouraged to extend this idea following the work of Goode (1994) in the sociological domain. The term *indexical expression* may be described ‘as the essentially situated, or occasional, character and interpretation of expression’ (Goode, 1994: 101); i.e., it is usually associated with linguistic expression (oral and non-oral communication). The idea, I suggest, behind the term may also be used to describe the recognizable features of any interaction, including those outside the area usually denoted as communicative. Both Goode and Abram suggest that this is probably reasonable: ‘Do humans have a “biological lexicon” that forms the grounds for their participation in the world, including expressivity and understanding?’ (Goode, 1994: 98) Abram, in turn, notes that the languages of human beings ‘are informed not only by the structures of the human body and the human community, but by the evocative shapes and patterns of the more-than-human terrain. Experientially considered,’ he continues, ‘language is no more the special property of the human organism than it is an expression of the animate earth that enfolds us’ (Abram, 1997: 90). To use the term ‘indexical expression’ for this level of interaction, though, would be confusing. I propose, therefore, following a suggestion from Booth (private conversation, 2001), that we use the term *impulsors* to describe elements in the socio-physical (and possibly psychological) environment that “cause” the body to interact with them. It can be seen that *impulsors* bear a relation to *indices* in that they point to, i.e., indicate, and impel bodily responsiveness and reactivity. The term *impulsor*, unlike *indice* (that retains a logocentric sense), is both sensuous and simultaneously implies an autonomic bodily response. There is thus, in the term *impulsor*, not only a recognition of its autonomicity, but a sense of actual sensuous engagement. A fuller discussion of this appears in chapter three. I shall
suggest, in chapter six, that it may be possible to consider psychological
arisings as responding to *impulsors* as well.

It is well to understand what James Gibson means by the term *affordances.*
Ecological psychology, upon which this dissertation draws inspiration,
has developed this concept to a considerable degree. I shall, here,
elaborate on this concept.

**Affordances**
James Gibson, in his development of an ecological psychology, sees the
nature of reciprocity as a dynamic binding of animate beings with their
environment. His concept of *affordances* are what this environment (its
surfaces, objects, substances and events) provides us; they are the
resources at the scale of behaviour, that are "measured" and understood
relative to us (cf. Lombardo, 1987: 346 and Reed, 1996: 38). All creatures
possess multiple social *affordances* for one another (cf. Gibson, 1966: 22;
Lombardo, 1987: 348). Dogs sniffing each other in greeting affords them
mutual recognition, hormonal information, information about previous
places, previous encounters, and so on. Social *affordances* thus meld with
biological *affordances.* Skills also provide *affordances,* as Reed (1996) notes,
'what characterizes ... everyday skills are specific *affordances* functioning as
elements in systems of combination, recombination, and transformation.'
(Reed, 1996: 123) Human made objects, including tools, and other artefacts
of culture, such as language and similar sign systems provide us

Affordances are specific to specific animals (species as well as individuals): holes big enough for water rats do not afford the same safe opportunity for elephants. A hole big enough for a small nimble water rat does not afford a safe opportunity for a large arthritic water rat. A ladder may provide an affordance for a youthful, fit yachtsman, but it does not do so for a person with multiple sclerosis. A self revolving door provides affordances for well co-ordinated people able to judge space-time dimensions relatively accurately. For a person with psychosis, where time and space collapse, the self revolving door creates profound problems. A hug from a beloved gentle relative may provide affordance for our own gentle response, but a hug from an angry, aggressive relative does not provide affordance. In these examples, affordances have a psychophysical quality.

‘Affordances exist at a level of organization commensurate with animate ways of life’ (behaviour which is reciprocally related to physiology).

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Reed (1996: 120) identifies some of the basic properties of affordances in the human environment, thus:

<table>
<thead>
<tr>
<th>Properties</th>
<th>Affordances Potentially Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes:</td>
<td></td>
</tr>
<tr>
<td>Durability</td>
<td>Pounding, chopping</td>
</tr>
<tr>
<td>Massiveness</td>
<td>Crushing, breaking, chopping</td>
</tr>
<tr>
<td>Flakiness</td>
<td>Shaping, chipping, sharpening, saw-toothing</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Scratching, indenting, holing, cutting</td>
</tr>
<tr>
<td>Pigmented</td>
<td>Decorating surfaces</td>
</tr>
<tr>
<td>Absorption</td>
<td>Sponging, washing</td>
</tr>
<tr>
<td>Rigidity</td>
<td>Digging, poking, hitting, reaching, throwing</td>
</tr>
</tbody>
</table>

Shape:
- Long + malleable
- Long + rigid
- Concave
- Edges

Surfaces:
- Smooth-rough
- Flexible-rigid
- Naked-furry

Rub, polish, smooth
Mold, separate, crack, shatter
Keep dry, make warm
'Though the structural and compositional support for an affordance may be complex, it exists at a finer level of organization' (Lombardo, 1987: 347). I shall develop my thesis around this latter point. I shall, for instance, elaborate on the specific patternings of visual and proprioceptive stimuli needed for "unleashing" movement in akinetic Parkinsonian patients identified in part by Purdon Martin (1967) in chapter three.

'Affordances are potential ways in which an environmental feature relates to an animal' (Lombardo, 1987: 347). Furthermore, 'animate ways of life are capabilities requiring affordances for their "actualization"' (ibid.). The relationship is one of "fit". (The study of ergonomics utilizes this insight, designing furniture and machinery that "fit" the physical requirements of the user.) The creature-environment relationship is, however, not a passive one, i.e., a given environment with particular characteristics may not always be responded to in the same way. Herein, by the way, lies Varela, Thompson and Rosch's departure from Gibson's approach. As they note, 'perceptually guided action consists in "picking up" or "attending to" invariances in the ambient light that directly specify their environment' (Varela, Thompson and Rosch, 1993: 203). Gibson thought, by contrast, that 'Invariance comes from reality, not the other way round' (Varela, Thompson and Rosch, 1993: 203), thus asserting a primacy of environment, rather than environment-creature chiasm. The relationship of creature with environment, for Varela, Thompson and Rosch and for me, is emergent enactment where physiological capabilities are as important as particularities of environment.

Nicholai Bernstein, too, observes this point, building his biomechanical
theory around it. His thesis on dexterity is a case in point. Arguing against the prevailing idea that dexterity refers to an individual’s harmony in movement, he notes instead that it is ‘a very complex psychophysical phenomenon’ (Bernstein in Latash and Turvey, 1996: 20). Dexterity lies ‘in finding a motor solution for any situation and in any condition’ (p. 21), but the demand for ‘dexterity is not in the movements themselves, but in the surrounding conditions’ (p. 23). These conditions change, thus movement must also alter intelligently.

There is no movement that would not place high demands on dexterity, given appropriate conditions. The conditions increase the complexity of a motor task or demand the emergence of an absolutely new motor task requiring motor wits. Walking on the floor does not require dexterity whereas walking on a rope does because it is much harder to walk on a rope successfully...... In all cases in which motor initiative or adjustment is required, there is a certain turning of the movements to an emergent task... (Bernstein/Latash and Turvey, 1996: 23).

The differential selection of sensory information is dependent upon the nature of the activity the organism is engaged with. As Macy puts it, ‘Each mode of attention has its own special capacity for detecting information but these specialities reflect the nature of the embodiment of world structure as well as the nature of the detecting system’ (1991: 50).

Learning a skill such as tightrope walking, for instance, requires a melding of psycho-bodily modes: good bodily co-ordination, finely attuned proprioceptivity, a good sense of balance, shoes with sufficient grip, the intelligent selection of affordances of the rope itself (perhaps the places along the rope that affords greatest resistance, e.g. the upper surface of the point of each spiral of cord), the temperature (too cold and

\(^{30}\) In Russian, the word dexterity (ловкост) is a derivative of the root catch (лов) (Bernstein in Latash and Turvey, 1996: 19).
there would be difficulty moving the limbs, also the rope itself would be slippery), awareness of the direction of air current, altitude - the height and location of the rope and tent would have a bearing on the aerodynamics of the rope in relation to the walker and therefore, a bearing on psychological tension). Other considerations, with their own affordances, would be rope tension, location of self relational to other objects and beings, spatial dimension, time appreciation, and so on.

The recognition of affordances thus intersects awareness of embodied action with the immediate opportunities for reciprocity within the environment. The point of intersection, or the crux (as Reed, Montgomery, Palmer and Pittenger, 1995 call it) offers us an experimental method to allow us to study the nature of reciprocity. Reed, in a later account (1996: 185) thinks that the kind of insight that is allowed is psychological (a too narrow assessment, I believe). More than this, however, is that such a method does not confine us to a single understanding of encounter and participation; rather it opens our awareness to the recognition of complexity and diversity of expressions, at the same time providing us with a way in to such a study.

The psychophysical chiasm

'Our bodily continuity with the outside world is reciprocal in nature' says Wu (1997: 146) 'A sensation would be no sensation at all if it were not the sensation of something,' Merleau-Ponty (1962: 217) writes. Our body, through our behaviour, is the junction of the self-world chiasm (the twist in the möbius strip). The relation between our mind and body is not of two separate substances, but a co-emergent arising; an entwinement where the one decides the other. Typically, according to the Western
approach, I would have written "influences the other", as Öhman and Magnusson suggest in the following quote,

The reciprocal interaction between person and situation not only results in overt behaviour, but also engages physiological systems that in turn may influence psychological events (Öhman and Magnusson 1987: 5).

But to use the term "influence" would be to undermine what I am attempting to show in this thesis: that the "relationship" "between" mind and body is much more co-inherent than that, as we know experientially. Willingness to enter into hugging, for instance, is more than accepting the social presence of the other in an intimate way, we must also feel that the sensation is safe for our own psychophysical integrity. This is a common enough example many of us can identify with. That such an interplay can be doubted at a theoretical level is therefore odd. Yet, as I have shown with theorizing empathy, much self-world interplay is not explained in terms of embodiment, but in terms of acts (or flights) of the imagination, or whatever. There are many similar instances.

Cognitizing the body is similarly common - which is not to say that such information is without its uses. This process is one where facets of the body are objectified and charted. It should be noted that charting the body is integral to both the presentation of clear-cut anatomical information in the Western scientific tradition and the mythologization of the body in non-Western traditions (as I shall show in chapter six, with specific regard to Tibetan Buddhist ideas). Nevertheless, the purpose of any charted account of the body is ultimately for its re-incorporation, its re-embodiment. Anatomical information puts what has been found in corpses, onto function Magnetic Resonance and PET scans, under
microscopes, revealed during surgical operations, recorded in textbooks and atlases, back into the life of our bodies, when that knowledge is reapplied to us, for our benefit. It is also true that the hidden recesses of our bodies, while only known by such means, remain part of our living selves. We are not merely external flesh, not merely surface sensorimotor perceptual impulse; we are inner and outer flesh, in sinew, muscle, neuron, cell, plasma, corpuscle, amino acids, progesterone, testosterone, dopamine, and so on - and male and female. A phenomenologist of the body cannot afford to leave such accounts out, nor to demonize these hidden recesses and their scientific account. The charting of the body mythologically also serves to connect us to knowledge, albeit of another kind. Both Western and non-Western bodily charting is ultimately to allow us to see ourselves more clearly (according to prevailing ideas).

The psychophysical chiasm, because it is incorporative of the social and physical world, is as much of microscopic concern as discussion of physiological health. If someone is sick, their interaction with the world is compromised in every way. As Mattingly and Fleming (1994) put it,

Phenomenologically speaking, sickness and disease are not merely a matter of malfunctioning parts but involve the breakdown of the patient's social modes of operating in the world, the ground of experience, that which gives a life-world. The disabled patient is one who suffers a reduction of this ground of being-in-the world.... (Mattingly and Fleming, 1994: 71).

All that we are (assuming that all is in good working order) permits our enactment in the world. Enaction is not mere interaction (cf. Reed, 1996: 88), for unlike the latter, enactment is an active process. Enactive failure, through neurological disorder, for instance, impacts upon everything that

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81 Discernment about male and female differences must be reflected in any phenomenology of the body. There are varieties of bodies, after all. The feminist criticism that Merleau-Ponty 'did not suggest the bodies he wrote about were male should be noted and corrected.
we react and respond to. In short, if we cannot participate we are denied
the ability to participate in comfort, and mutually fulfilling experiences.
This relationship is graphically demonstrated in the disorder known as
Asperger’s Syndrome.

Asperger’s Syndrome

Asperger’s Syndrome (or Disorder, as it is defined in the United States of
America) prevents normal interaction with the world at all levels thus
allowing us insight into the relationship of bodily perceptions and
sensitivities to so-called “cognitive” states and attitudes, such as empathy.

Described by Hans Asperger’s in 1944 but not translated from the
German into English until the early 1970, Asperger’s Syndrome, as a
diagnosis, has only just become recognized as a neurological disorder and
included in the Diagnostic and Statistical Manual of Mental Disorders (see
footnote). Asperger’s syndrome (AS), a neurobiological disorder, is
thought to be a high functioning form of Autism. Some sufferers have
superior level intelligence - which means they are able to describe their

panoply of conditions in great detail. Through them we have unique

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*A The American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders,
Fourth Edition (DSM-IV), entry 299.80 defines Asperger’s Disorder in this way:

(A) Qualitative impairment in social interaction, as manifested by at least two of the following:
1. marked impairment in the use of multiple nonverbal behaviours such as eye-to-eye gaze,
facial expression, body posture, and gestures to regulate social interaction.
2. failure to develop peer relationships appropriate to developmental level.
3. a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people
(e.g. by a lack of showing, bringing, or pointing out objects of interest to other people)
4. lack of social or emotional reciprocity.

(B) Restricted repetitive and stereotyped patterns of behaviour, interests, and activities, as
manifested by at least one of the following:
1. encompassing preoccupation with one or more stereotyped and restricted patterns of interest
that is abnormal either in intensity or focus
2. apparently inflexible adherence to specific, non-functional routines or rituals
3. stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping
or twisting, or complex whole-body movements)
4. persistent preoccupation with parts of objects.

(C) The disturbance causes clinically significant impairment in social, occupational, or other
important areas of functioning.

(D) There is no clinically significant delay in language (e.g. single words used by age 2 years,
communicative phrases used by age 3 years).

(E) There is no clinically significant delay in cognitive development or in the development of age
appropriate self-help skills, adaptive behaviour (other than in social interaction), and curiosity
about the environment in childhood.

(F) Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia.
insight into the related condition of Autism. Temple Grandin, PhD, is a case in point. She is an associate professor in animal behaviour at Colorado State University. Grandin was first diagnosed as having classical Autism, but through the patient efforts of a teacher, she learnt to communicate and thus reach her intellectual potential.

Asperger’s Syndrome is diagnostically characterized by an inability to understand how to interact socially, coupled with clumsy and uncoordinated motor movements limited interests and/or unusual preoccupations, repetitive routines or rituals, easily upset by changes in routines and transitions, speech and language peculiarities, literal in speech and understanding, fixated on a single object or subject matter, and non-verbal communication problems, and unable to carry on a reciprocal “give and take” conversation. (cf. OzAutism, undated and Edelson, 1995)

People with AS may have:

• unusually accurate memory for details
• sleeping or eating problems
• trouble understanding things they have heard or read
• inappropriate body language or facial expression
• unusual speech patterns (repetitive and/or irrelevant remarks)
• stilted, formal manner of speaking
• unusually loud, high or monotonous voice
• tendency to rock, fidget or pace while concentrating

In other words, there appears to be a strong correlation between how the body interrelates with the physical environment of time and space and the movements of other selves and objects and how a person copes in the social, language and emotional sphere.
Until the 1980s Autism was considered the result of being brought up by cold and distant mothers. While this conclusion is wrought with problems (e.g. the phenomenologically felt responses of hyper and hypo sensitivity of an autistic infant to her mother’s touch would create enough confusion that the parent may respond by pushing the child away, even if the initial response is to cuddle the infant), there may still be some truth in it. There does seem to be a correlation between non-interactive parents and autistic children. Maybe, however, the reason is less about a simple relationship between emotional distance and the disorder than a continued mutual gap between shared body mirroring (a bodily self-other reflexivity).

Recent observations using functional Magnetic Resonance Imaging equipment show neurophysiological abnormalities and reduced size of the cerebellum and limbic systems of people with autism (Margaret Bauman, in Grandin: 1995: 85). The core of the cerebellum acts as a sort of sensory volume control. Without this moderating capacity, sensory input is sometimes too much and sometimes too little. Grandin (1996) writes, for instance, ‘My hearing is like having a sound amplifier set on maximum loudness. My ears are like a microphone that picks up and amplifies sound.’ Hatch-Rasmussen observes that Asperger’s Syndrome people may

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*Sensory stimulation of the right kind is essential for a capacity of caring to be developed, but too much sensory stimulation, or too little, causes abnormal behaviour. Caged animals or prisoners in solitary confinement, with little external stimulation (sensory and cognitive), often become self destructive as they seek stimulation. The “touching of the touch”, it would appear, is the thing denied. The desire to experience the “touching of the touch” resolves itself in an explosion of self mutilation (to feel, where the feeling of the other has been denied).

Sensory deprivation in young animals (including human beings) has long term consequences. It impacts on the development of the brain, an organ that continues developing for some time after birth. The brains of baby rats, who have had their whiskers trimmed (whiskers are proprioceptive organs), become overly sensitive, because the capacity for sensing out things before they are more fully encountered has been reduced. Their proprioceptive sensibilities are also reduced. This extreme sensory sensitivity continues even after the whiskers have regrown. As with baby rats, so with baby people. Grandin thinks that the early sensory deprivation caused by dysfunctional primary relationships, as described above, causes the development of secondary abnormalities in autistic children. The combination of these secondary abnormalities with the primary ones (cerebellar and limbic system abnormalities) further alienates the young autistic child. Any therapy, therefore, that reduces the effects of the syndrome allows the child, and the adult, greater health.
have 'fearful reactions to ordinary movement activities,' they may also 'have trouble learning to climb or descend stairs or hills; and they may be apprehensive walking or crawling on an uneven or unstable surface. As a result, they seem fearful in space' (Hatch-Rasmussen: internet). At the other end of the spectrum of fragile sensory sensitivities: they may 'actively seek very intense sensory experiences such as excessive body whirling, jumping and/or spinning' (ibid.). Since people with AS are always limited by their neurogenic abnormalities, it is not possible to overcome these sensitivities once and for all. They must continue using desensitizing techniques all their lives, or take appropriate medication (e.g. Haloperidol).

Asperger's may thus be described as a disorder of hypo- and hypersensitivities to proprioceptive, vestibular and tactile sensory inputs and, more generally, various forms of inner and outer touching. An acknowledgement that the sensitivities of AS impact so deeply upon the individual is disputed by some, e.g. Frith, 1989 and 1991, and other older style specialists in autism who consider it only psychologically. We should not ignore what sufferers have to say about their own condition, however. Temple Grandin, PhD, describes in great depth her sensory difficulties, and there are numerous other examples readily found on the internet.

Grandin found hugging intolerable. She, as she says, 'pulled away when people tried to hug me, because being touched sent an overwhelming tidal wave of stimulation through my body' (Grandin: 1996). Despite the 'overwhelming tidal wave of stimulation,' she 'wanted to feel the comforting feeling of being held, but then when somebody held me, the effect on my nervous system was overwhelming. It was an approach-
avoid situation, but sensory overstimulation caused the avoidance, not anger or fear' (Grandin: 1996).

Grandin's solution to her contradictory impulses: to reject and yet to seek the comfort of hugging was not to go to other people (they could not provide reliable, gauged, bodily pressure), but to a machine she built for this purpose. She invented a human "squeeze machine" based on those designed for cattle and other domestic animals. 'Pressure,' she found, 'reduces touch sensitivity. For instance, gentle pressure on the sides of a piglet will cause it to fall asleep'. Trainers 'have found that massaging horses relaxes them' (Grandin: 1995: 83). She compares the reactions of the autistic child with the wild horse: 'Both will lash out and kick anything that touches them.' Yet wild 'horses can be desensitized and relaxed by pressure' on their bodies (Grandin: 1995: 84):

[A] horse used in [a] demonstration had been sold by a rancher because he was unrideable, and he kicked and reared when people approached. The effect of the pressure device on his nervous system was similar to that of my squeeze machine. Pressure helped this frightened horse to overcome his intense fear of being touched (Grandin: 1995: 84).

Grandin's squeeze machine consists of:

two padded side boards which are hinged at the bottom to form a V shape. The user steps into the machine and lies down on the inside in the V shaped crevicialike space. The inside surfaces of the device are completely lined with thick foam rubber. Deep touch pressure stimulation is applied along both sides of the person's body, with lateral pressure pushing inward onto the body. The V-shaped space supports the body fully from head to toe, so that the users can completely relax. The contoured padding provides an even pressure across the entire lateral aspects of the body without generating specific pressure points. The foam-padded head rest and padded neck opening are covered with soft fake fur. When the neck opening closes
around the neck it ... [is] contained by the embrace of the deep touch pressure squeeze (Grandin, 1992: internet)

Grandin observes that when she used her squeeze machine on herself, not only her nervous system ‘learned to tolerate the soothing pressure’, but she discovered ‘that the comforting feeling made me a kinder and gentler person’ (p.82). This discovery is really part of common experience. We have probably all experienced this cross-over between gentle bodily comfort and feeling gentle towards another. Stroking a piece of beautiful velvet, or the soft fur of an animal, or snuggling up in a big eiderdown provides this experience. This association is well described by the psychological literature on the importance of a soft motherly figure and the normal socialization of monkeys. The rather nasty experiments conducted by Harlow and his associates, are a case in point. Infant monkeys were exposed to two main conditions: a terry towelling covered non-feeding “mother” and a feeding, non-terry towelled “mother”. It was found that the babies preferred the soft terry-towelled, non-feeding version to the no softness, but source of food “mother”. The infants given food, without comfort, became nervous, frightened and isolated little creatures that engaged in stereotypy and self mutilation, whereas the others were (supposedly) more able to interact in a normal way with other monkeys - assuming, of course, they survived their starvation regime.

Before using the machine, Grandin had had difficulty understanding kindness and empathy but, according to her, these became sensible when she herself experienced soothing (1995: 82). This insight was realized when she observed that her cat now responded differently to her. Previously she had had no idea about how to hold the cat gently. ‘He

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8 I have observed that the delicious pressure of several cushions, or a mattress placed on my legs creates a glorious euphoria. I can get this euphoria by digging my feet into the sides and under the cushions of a sofa. Interestingly, this same technique is sought by autistic people to calm them (I am not autistic), but maybe these experiences are more common than we currently think.
used to run away from me because I held him too tightly,' she says. 'After I experienced the soothing feeling of being held, I was able to transfer that good feeling to the cat. As I became gentler, the cat began to stay with me, and this helped me understand the idea of reciprocity and gentleness' (Grandin: 1995: 82).

Grandin must quieten her hypersensitive reactions on a daily basis. Her empathic response must, thus, also be nurtured. The relationship between body pressure and empathy is, for her, so obviously dependent that - unlike this relationship for those of us without AS - each part of the body hugging exercise must be adhered to.

The Grandin account of her achievement of the empathic response through the use of a squeeze machine to quieten her hypersensitivity to bodily pressure and touch, though apparently particularized to sufferers from Asperger's and Autism and related conditions, gives us a clue, I believe, to what may be true for us all. The findings of the Harlow experiments on the baby monkeys have been used to illustrate baby human needs but - except for the considerable literature on the necessity of human touch for psychological health - the connection between what we experience on a daily basis (comfort and gentleness leads to a softer attitude to others) and this literature has not been used to explore the empathic response in adults. Vetlesen's thesis on empathy, for instance, takes no account of this perspective at all. Herein lies a gap between what is considered a moral attitude and what "belongs" to organic accounts. It expresses, rather graphically, the on-going gap between mind and body in the various academic disciplines.
Conclusion

The relationship between body pressure and the empathic response for those of us without Asperger's Syndrome is very often overlooked in mainstream thought, except by the literature of developmental psychology and the literature of the extreme (solitary confinement, sadomasochism and that concerned with pathological states). It must be asked, therefore, what other sensuous, en-nested, relationships we take for granted? I shall explore more of these tacit relationships throughout this dissertation. Such examinations do not require me to go much beyond already available knowledge. My task, as noted already, is to allow several disciplines to "speak together". Núñez (1997) observed in an argument against "hard" problems (e.g. of mind and body), that it is not that problems are hard or easy (or even, ultimately, pseudo problems), but that the right tools should be employed to study them. The right tools may come from apparently unrelated sources. More critical, however, as Núñez says, is that 'the manner in which we ask questions, as well as the language we use to make sense of them, shapes the answers we propose and the difficulties we encounter. Modes of questioning define the task to be accomplished - i.e. what is to be eaten: soup, sushi or something else' (Núñez, 1997: 146).

The problem I have set myself to understand and identify, as far as possible, is what tacits are embodied in everyday participatory life; what is the nature of the dense field that is my experiential bodily encounter with my world. The image of the ball game is useful in allowing us to contemplate complexity within fairly simple frameworks. It shows us the many disciplinary approaches that required to capture some of this complexity. Thus the tools I need to use are chopsticks, sometimes
sculptals and magnetic resonance imaging, sometimes clumsy fingers, and
sometimes reflective observation of self and others.

Thinking through empathy as a responses to bodily pressure in AS may,
perhaps, be too exclusivist, too peculiar, for ordinary purposes - though I
suggest it is not. The strategy at least allows us to resituate our discussion
of human attitude (such as empathy), time and space-place perception,
and enacted memory within a real organic relational framework. This
begins a way to see even those supposedly "higher" attitudes as
something which emerges from sensual engagement in ordinary life. It is
significant that Schleiermacher (1768 - 1834) and later Edith Stein (1891 -
1942) began thinking along these lines. Their arguments hinge upon
understanding thinking as not just thinking about something, but an
organic capacity to think; in other words they situated the activities of
mind in organicity in ways that their contemporaries saw in entirely
transcendental ways.

In thinking through the entwinement of mind and body in terms of the
empathic response, my approach for this chapter began by stating that
understanding the participative mutuality (empathy) of persons with one
another and with their world is an old problem for mainstream Western
thought. Instead of trying to solve the problem by resorting to a leap of
the imagination, I suggested we return to bodily sensations and the link
between them and how they make us feel (a bodily comfort in which
gentleness is felt and is reciprocated in gentleness and empathy towards
the other). Thus, I suggested, empathy is embodied mutual participation
in the other. I argued this case by using the insights of Temple Grandin, a
high-functioning Asperger’s Syndrome sufferer. I suggested, by the way,
that Grandin’s experiences are not so strange, but rather fit within
everyday experiences though to an extreme extent. This use of case
material is a constant throughout Part One of this dissertation.

In this chapter I also introduced the reader to some necessary concepts of
embodiment-in-participation, i.e., a theory of “fit” between the parts of the
participatory unit. This theory is that of *affordances*. I wrote also of
embodied enactment, i.e., agentive selves ‘having a body with various
sensorimotor capacities’, capacities that are ‘themselves embedded in a
more encompassing biological, psychological, and cultural context’
(Varela, Thompson and Rosch, 1993: 173). I noted that being embodied
means inhabiting a situated time and space, with a ‘unique history,
physiology, and perceptive perspective’ (Leder, 1990: 162) that marks us
off as individual even, ‘as they open us to interconnection.’ (Leder, 1990:
162) Such a theory of embodiment effectively closes a theoretical gap
between selves, and self and the physical domain in an entwinement.
Proposed is an interactive emergent model that does not lose track of the
individuality of the person.

As a secondary exercise, I introduced the idea that socio-physical
environmental participation is, at least in part, biologically inter
determined. I wrote of James J. Gibson’s theory of *affordances* to illustrate
this. I also inserted Garfinkel and Harvey Sacks’ (1970) idea of *indexicality,*
but expanded this to describe sensuous autonomic participation. The term
I employed was, following Booth (2001), *impulsor*. An *impulsor* is an
element that the body “identifies” from an immediate milieu that best
affords participation. These two terms (*impulsor* and *affordance*) give us
useful tools for better understanding corporeal participation.
Having a body is being embodied. This 'implies a certain structure, an on-going process or motility as the vehicle of psychic life' (Guenther, 1972: 14). Embodiment 'represents an orientational point as the centre of a particular ('my') milieu which, structured in terms of its own intentions, is actualized by means of its bodily activities, all of which are organized and oriented around the centre' (ibid., 15). There is here a co-inherence of biology, culture, and sense of self (for instance) entwined in situations and milieux. The word co-inherence was coined by Charles Williams (1939) to describe the interactive relationship of the divine persons of the Holy Trinity. Co-inherence refers to this relationship as being a unity with no single progenitor, but where each person or part is identifiably unique yet in a mutually dependent, interactive emergent relationship with the other persons or parts.

A sense of meaningfulness emerges in this mutuality of relationship, an idea that will be explored this dissertation. Being embodied in the world is being situated in a particular time and place, having a unique history, physiology and perceptual perspective. Our embodiment defines us as simultaneously separate from others, and yet open to relationships on all levels of existence. The möbius strip allows us to think through these apparently contradictory ideas more or less simultaneously.

In the next chapter I shall again use the image of the möbius strip, this time graphically. Here I shall explore the relations between the impulse for sensual contact and ticcing, as revealed as dominant symptoms of Tourette’s Syndrome (TS), the enfleshment of experience, and Western society’s profound difficulty with the sensual nature of embodiment. My

*Interactive emergence is a term used by Hendriks-Jansen, 1996.*
aim is to not point to TS as a peculiar display of behaviours, but, as with Asperger’s Syndrome, indicate that in TS, or any other relational disorder, we have a means to better understand ourselves, as beings in bodies.
Chapter two

Tourette's Syndrome and the sensuous impulse

In 'Chiasm of the heart - towards a mutuality of personhood (setting up a strategy for studying embodiment)' I identified firstly, that the so-called "hard problem", "How states of consciousness arise in material brains?", is not actually a problem at all since there is no neat division between mind and body (matter). Secondly, I suggested human beings and nature (or any other supposed dualisms) are not separable, though phenomenologically different, with their own set of 'meaningful gestalts' (Leder, 1990: 64). Thirdly, I suggested we think of the relations between mind and body, human beings and nature, and so forth (subject- and object-hood, etc.) by visualizing a Möbius strip (a mathematical topological figure, a loop with a single twist such that Surface A, when followed around the loop, is Surface B). These three points are repeated throughout this chapter in various forms. My argument, following Leder (1990) and Abram (1997), that the felt separation between mind and body, and so on, is that this emerges from the experiential body itself. Such an experience as separation, for instance, impacts upon how we interact with the world. This is what, at least in part, is what is meant by embodiment.

Being embodied means embodying our world. This is a complexity of reflexive and enactive interactions: physical, social, cultural, historical, etc. In preparing to introduce Grandin's body-centred account of discovering empathy, I did two things. I identified Asperger's Syndrome diagnostically and I wrote of Grandin's phenomenological experience. To reiterate, briefly, these points I shall include them here. The reason for this will be to lay the foundations for the current chapter which is concerned
with the somewhat uneasy entwine ment of diagnostic method and phenomenological experience and the way in which that which is observed impacts upon that which is felt (by way of treatment, assumptions, prejudices, etc.).

Diagnostically, Asperger’s Syndrome is characterized by an inability to understand how to interact socially, coupled with clumsy and uncoordinated motor movements, limited interests and/or unusual preoccupations, repetitive routines or rituals, easily upset by changes in routines and transitions, speech and language peculiarities, literal in speech and understanding, fixated on a single object or subject matter, and non-verbal communication problems, and unable to carry on a reciprocal “give and take” conversation (cf. Edelson, 1995)

Phenomenologically Asperger’s Syndrome feels like a disorder of hypo- and hypersensitivities; a disorder that inhibits close relationships between both self and social, and self and physical environments. This is a description taken from Temple Grandin’s writings on the subject of her own condition which I considered in greater detail than that of AS diagnosis because, for as a self-description, it allows us inside what it feels to have the syndrome as well as how it allows us insight into the wellspring of the empathic response probably true for any of us. I noted, for instance, Grandin’s suggestion that by applying self regulated body pressure, she not only feels calmer, but is able to experience gentle feelings towards others. I employed her insight to re-embody empathy (a self-other participative mutuality usually considered only possible by a cognitive leap).
The disparity between diagnoses and lived experience is for many diseases and syndromes, compounded by the Western anxiety regarding the sensuous participative body from inter-relational discourse - where the body is treated as an "it" somehow discontinuous with our "is-" and "us-ness". In other words, it is virtually removed from the process that is embodiment, yet by this very process of discontinuity it enfleshes itself in us just the same.

In order to retrieve the body as perceptual, sensuous Being and to show how the pointing to an "it-ness" (by diagnoses, for instance) impacts upon our "is-" and "us-ness" (lived experience) I shall re-inverse the use of the möbius strip. The relational disorder that I shall use in this chapter is Tourette's Syndrome, which may be phenomenologically described as a neurological ticcing disorder of hyper sensuality (i.e., too much desire for sensual experience). The medical diagnostic description is quite different, as I shall later show. As was an underlying purpose for using Asperger's Syndrome to re-embody empathy, I shall use case studies of Tourette's Syndrome not to exhibit difference or oddity, per se, but demonstrate similarity, and the possible highlighting of tacit transaction in everyday life of non-Tourettter experience. I shall consider, for instance, the way in which experience is enfleshed, incarnated (cf. Leder, 1990: 1), "absorbed" into our very physiology (cf. Oliver Sacks: 1995).

It should be said, however, that Tourette's Syndrome (TS) is a "hyper" syndrome and sufferers encounter the world much more impulsively than do non-Touretters. TS ticcing (which is impulsively repetitive) has peculiar characteristics different from non-ticcing repetition which I shall examine further on in this chapter. By its nature, TS evokes strongly
negative social responses; phenomena that give us clues to what it is about sensual display that is considered so abhorrent in the West. The evocation of abhorrence is reflected in varying medical explanations and diagnoses for the disorder throughout history. TS, however, by its nature, is incredibly reflexive, indeed imitative, such that what is interacted with is mirrored at an increasingly rapid rate - so much so that the abhorrence felt by others increases equally rapidly. This morbid correlation needs to be illustrated graphically; which is why I will employ the image of the möbius strip.

*Möbius strip: Surface A*

Theorizing body-mind from body experiences

The human body shapes social practices, and social practices shape our use and understanding of the body (Leder, 1990: 152).

Attitude to the sensual is entwined with the experience of the sensual, and both are found in the sinews of the embodied self as memory and as engagement (I shall provide two examples of this soon). Sensuality refers to not only the messages received by the senses, but the experience, indeed enjoyment, of the things of the world obtained. Sensuality thus moves the level of discussion from a dry discourse on stimuli and receptors (such as might be the empiricist approach) to the dynamic experiential engagement with specific encounters. Merleau-Ponty (1962) uses the words *sense experience* to capture a similar intention. He notes that it is empiricism that ‘emptied’ the sense of experience ‘by bringing it down to the possession of a quality’, a static ‘dead’ quality (p. 52).

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* I have chosen the word “sensuousness” instead of “sense experience” for the latter retains a feeling of objective distance. “Sensuousness” and “sensuality,” by contrast, suggest interactive engaged encounter.
By mutilating perception from above, empiricism mutilated it from below too: the impression is as devoid of instinctive and affective meaning as of ideal significance. One might add that mutilating perception from below, treating it immediately as knowledge and forgetting its existential content, amounts to mutilating it from above, since it involves taking for granted and passing over in silence the decisive moment in perception: the upsurge of a true and accurate world (Merleau-Ponty, 1962: 53). 'The pure quale,' Merleau-Ponty says, 'would be given to us only if the world were a spectacle and one's own body a mechanism with which some impartial mind made itself acquainted.' By contrast, sense experience (sensuality) 'invests the quality with vital value, grasping it first in its meaning for us' (Merleau-Ponty, 1962: 52).

The idea of the sensuous, however, moves beyond a sense of life, vitality, to reconnect us to the reciprocal intricacies of the earth, as Abram (1997) explores. The recognition of this dimension of sense experience has a revolutionary capacity to balance out dispassionate accounts and interactions and restore sensitive engagement with the things of the earth. It is engaging in the recognition of sensual mutuality that poses difficulties for many mainstream Western thinkers, conditioned to a belief in the supremacy of transcendent mind over a mechanistic matter. The level of this conditioning goes beyond a theory of mind-body dualism to the social acceptability of this way of thinking, such that any other proposal is met with disbelief. The conditioning, however, goes even further into our experiences of our bodies and, reflexively, into how we use our bodies and the environments we create for ourselves. All this is compounded by the neurophysiological structure of sense neurones in our bodies that organically determines how we perceive our bodies. The body,
as Leder points out (1990), does not perceive itself-in-interaction in a uniform way but largely according to use (although the brain and central nervous system\textsuperscript{37}, and some other "depth viscera" is never self perceived). The nature of engagement is a Gestalt play of focal prominence and ground disappearance.

Body areas presence and absent themselves in encounter, voluntary movement, sensory engagement, dysfunction and pain. Sometimes the seeking of presence is impulsive, iterative, compulsive: hyper sensual (for pleasure or self-affirmation). Such hyper sensuality may not be necessarily merely body seeking pleasure, but can be enmeshed in the memories of previous encounters and the preoccupations of the society in which a person lives. The nature of some hyper sensual acts may have a cultural flavour. The compulsion to swear, for instance (a possible symptom of Tourette’s), therefore inversely mirrors the degree of social prohibition.

The entwining of attitude with experience and activity in corporeality is also true for the style of theorizing we engage in. Theory emerges through the fleshly integrity of our bodies in relation to prevailing cultural ideas. This relationship is well explained by Leder in his account of the development of a theory of dualism as suggested by Descartes (1596-1650); a theory that has had a very profound impact upon Western thought, scientific and otherwise.

A sickly man,\textsuperscript{38} Descartes sought to disentangle his thoughts from the

\textsuperscript{37} The central nervous system, ‘weaves the threads of the unified body’ (Leder, 1990: 114). It weaves a chiasm of inner and outer functions, of surface and depth experiences, into a single interfacing whole such that there is shimmering play of perceptions, a presencing of some and a dis-appearance of others. In this way, the brain, its spinal cord, and nerves spread out like tributaries throughout the body.

\textsuperscript{38} Gaukroger (1995) notes that Descartes probably suffered anxiety attacks (p. 17), depression (p. 18), suffered several breakdowns, breathing difficulties (probably asthma) (p. 17), back problems, and general frailty. He died of pneumonia.
pains that racked his body. The nature of his pain had a sense of “otherness”, with a capacity to intrude upon him. His epistemology reflects his desire to deny the intrusion of this quality of pain and lay all the capacity for knowing at the door of the psyche (soul-mind). When the body hinders thought ‘in situations of pain and fatigue,’ as Leder (p. 132) describes it, then, Descartes concluded, ‘the rational soul is simply unable to disassociate itself from “a brain which is too soft or damp, as in children, or otherwise ill tempered, as in those who are lethargic, apoplectic, or frenetic, or as in all of us when we are deeply asleep.”’ ‘The soul can only,’ as Leder describes Descartes thinking, ‘detach itself from a certain sort of body, one calm, healthy, and awake’ (Leder, 1990: 132).

Descartes’ personal experience prompted his philosophic bent (as it does for us all). The body, as Leder continues, exhibits itself in times ‘of perceptual error, injury, madness, disease, fatigue, excessive passion, and pain’. It ‘opacifies’ itself, ‘clearly exhibiting its role in experience.’ This skew of attention encourages a dualist reading and allows the body to be considered nothing more than a piece of machinery; a precept that ‘lays the groundwork for a modern scientific medicine’ (Leder, 1990: 132). It must be remembered that Descartes’ theory for a dualism was not merely the result of his ill health. He also drew upon the scientific, materialistic

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9 I suggest that not all pain is experienced as “other”. Dull ache, for instance, can be there continuously and be sensed as integral with the bones and muscles of one’s bodily frame.

* Sacks reflects upon the nature of Tourette ticcing in this similar way:

Any disease introduces a doubleness into life - an ‘it’, with its own needs, demands, limitations. With Tourette’s, the ‘it’ takes the form of explicit compulsion, a multitude of explicit impulses and compulsions; one is driven to do this, to do that, against one’s own will, or in deference to the alien will of the ‘it’ (Sacks, 1995: 73).

I question whether the impulses of Tourette’s can be properly described as a ‘sudden intruder’, given that Tourettet’s often describe their onset of ticcing, for instance, as something they need to do to satisfy an “itch”.

4 There is a curious little gossiply story about Descartes that apparently has its origin in the 18th century (and is therefore probably false). It is said that Descartes carried with him on his travels a lifesize mechanical female doll (in a box) which he himself had constructed to illustrate that ‘animals are only machines and have no souls.’ The doll was named after his illegitimate daughter, Francine. During the crossing over the Holland Sea during the early 1640s, the captain, intrigued to know what was in the box beside Descartes’ bunk, opened it and got such a fright that he threw it overboard (Gaukroger, 1995: 1).
and religious ideas of the time (he was a fervent Roman Catholic and academically trained at the Jesuit college of La Flèche at Anjou and graduated in civil and canon law and possibly medicine from the University of Poitiers in France, cf. Gaukroger, 1995: 38, 64).

Just as the particular bodily experiences felt by Descartes nurtured his theory for a transcendent psyche (mind/spirit), a theory for a transcendent psyche may be found in what, to the ordinary observer, looks like body-centred activities. Herein lies a reflexive twist between philosophic ideas and bodily experience and practice. I shall illustrate this by briefly describing a so-called therapeutic practice known as Rolfing. Developed by Ida Rolf, a physiologist, Rolfing is a deep tissue massage where the practitioner uses, fingers, fists and elbows to move the person’s connective tissues - fascia, tendons, ligaments and muscle groups.

The manipulation is slow and often extremely deep, the fingers going all the way through the abdomen, for example, to touch the psoas muscle which lies directly in front of the spinal column. ... Unlike massage, which aims at relaxing and evoking pleasant sensations, each move ... is aimed at making specific changes in the tissues, sometimes accompanied by pain (Johnson, 1994: 85).

The purpose of Rolfing is to mold the structure of the body to an ideal template: a geometrical ideal of Greek statuary (Rolf, 1989, introduction), ‘indicating the precise location of the head and neck, torso, pelvis, legs and feet’ (Johnson,² 1994: 89), with an emphasis on the vertical. The vertical, Rolf thought, indicated (spiritual-bodily) health; an act of ‘lifting from the earth’ (p. 88). Thus all patients were to be remoulded according to Greek ideals, and not to their inherent anatomical structures.

²Don Hanlon Johnson was one of Ida Rolf’s first students (Johnson, 1994).
This example of Rolfing praxis as designed around a philosophic ideal, is a useful one. Similar unsubtle relationships between praxis and philosophy is most relevant for discussing diagnosis, treatment and prognosis of Tourette's Syndrome. Likewise, this relationship uncovers other deeply held beliefs about the experiential body.

What follows is a medical description of TS. The purpose of this is to provide necessary background to the further development of the main subject of this chapter, i.e., relationality and the sensory impulse as exposed by TS. The matter of theorizing from the perspective of sensual body phenomenology and the obverse rejection of such sensual phenomenology, as illustrated by negative readings of TS through the ages, will form the latter part of this chapter. This is intended to demonstrate that theorizing is not an objective act, but one entwined in individual and social experiences of and about the body.

**Tourette's Syndrome**

TS is characterized by both multiple motor and one or more vocal (phonic) tics, which occur many times a day in bouts, the number, frequency and complexity of which change over time (American Psychiatric Association, 1987; World Health Organisation, 1992, cited by Robertson, 1994: 597). It is identified as a condition brought about by 'postsynaptic dopamine hypersensitivity in the basal ganglia' (Shapiro, et al., 1988: 268).

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6 The basal ganglia are a collection of interconnected subcortical nuclei found in the forebrain and the midbrain. They are composed of the striatum, the globus pallidus, the subthalamic nucleus, the ventral tegmental area and the substantia nigra. The basal ganglia are generally associated with regulating motor control and activity, emotions, timing, inhibiting muscle tone throughout the body, selecting and maintaining purposeful motor activity while suppressing useless or unwanted patterns of movement and helping monitor and co-ordinate sustained contractions, especially those related to posture and support. Postsynaptic dopamine hypersensitivity in the basal ganglia would result in 'irritability' of responses in all the areas identified above and impact greatly on smooth relational interaction.
The pathological expression of Tourette's may be nothing more than simple motor tics and vocalizations, iterations and perseverations, or it may involve more complex 'elaborations, playful mimicry, extravagant impudent inventiveness, and audacious dramatizations, surreal associations, uninhibited investiveness, incontinent reactivity, stimulus hunger, imagery, and exuberant art' (Bradshaw and Mattingley, 1995, 333).

The presence of tics is probably the most unpleasant aspect of the syndrome. The form Touretter tics take varies from person to person. Echophilia (the semivoluntary performance of the repetition or echoing of sounds, words, phrases, sentences, or movements) is present in 32.7% of the TS population (according to the research conducted by Shapiro, et al., 1988). Echolalia (semivoluntary imitation of the speech of others) was present in 17.6% of the TS population studied. Echokinesis or echopraxia (semivoluntary imitation of the movements of others) was present in 8.4%. Pallilalia (semivoluntary repetition of one's own last sound, word, phrase, or sentence) is present in 17.4%. Mental echolalia (the unspoken repetition of sounds, words, phrases or sentences) is much rarer, at less than 1% (Shapiro, et al., 1988: 145). Coprophilia may also manifest, though its presence is actually quite rare: less than one third of all cases (Robertson, 1994), even though quite often, a diagnosis of TS is not made unless coprolalia is present (Shapiro, et al., 1988: 153). Coprophilia has three forms: coprolalia (semivoluntary uttering of obscene sounds, words, phrases, or concepts), copropraxia (semivoluntary and inappropriate gestures or imitations), and mental coprolalia (unspoken, semivoluntary, sudden intrusion of socially unacceptable thoughts, words, phrases, etc.). Jankovic (1987: 385) notes that the coprolaliac words are not spoken
clearly, but 'are usually slurred, mispronounced and shortened'. Examples of TS vocal ticcing include throat clearing, grunting, high-pitched screaming, sniffing, coughing, snorting, shouting, barking like a dog, humming, spitting, hissing on inspiration and expiration, clicking, stuttering, accentuating words, whistling, breathing noisily, making 'ow', 'tsk', 'pft', 'ouch', 'ye', 'ee', 'eek', 'yoo', 'yahoo', 'er', 'eh-eh', 'whoo', 'hoot', 'ulp', 'uck', 'phew', 'sh', 'dip-dip', 'cha', 'tut' sounds, hiccoughing, moaning, gasping, blowing, sucking, gurgling, giggling, quacking, belching, muttering, and the like (Shapiro, et al., 1988: 146-147). Motor tics may include: repetitively touching oneself or others, 'sudden hopping, skipping, jumping, stamping, squatting, kneeling, flexing trunk, deep-knee bends, retracing steps, twirling' and other movement (Shapiro, et al., 1988: 141). Boredom, anxiety and stress exacerbate ticcing. Tics even occur during all stages and phases of sleep, although relaxation techniques lessen them (cf. Bradshaw and Mattingley, 1995: 330 -331). Dietary manipulation can also reduce their incidence (cf. Robertson, 1994: 604-605). Dopamine antagonist medications, such as Haloperidol, pimozide and sulpiride, are said to be effective in the treatment of TS (Robertson, 1994: 603 - 604).

The word "tic" has its origins in a 17th century word meaning 'an unsightly muscular caprice' (Bradshaw and Mattingley, 1995: 329), which allows us to see that the condition has, for hundreds of years, been seen as a social disorder. Certain TS behaviours are, undoubtedly, clearly socially disruptive; a fact which isolates and excludes the Touretter from ordinary

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* Dopamine is a neurotransmitter that is released by neurones in the brain and throughout the body. Neurotransmitters are chemical compound that cross synaptic gaps between nerve fibres to act upon the nerve receptors, where they produce specific effects. Receptors are sites on the membranes of neurones that recognize neurotransmitters, hormones or drugs in very specific ways. The firing of one neurone influences others only when the receiving neurone possesses a specific receptor for that neurotransmitter (cf. Birkmayer and Riederer, 1986: 18). Dopamine is found in greatest quantities in those cells which originate in the medulla-oblongata. These cells are called the substanta nigra which project upwards into an area of the brain called the corpus striatum, which is involved in the regulation of movement, muscle tone (static and dynamic) and inhibition of tropic functions.
society. Child sufferers are very likely to be severely punished for it (have their mouths washed out with soup and water) and adult Touretters are often ostracised. This social isolation often reinforces the sense sufferers themselves have of being bizarre and crazy. Touretters, despite this, may be found among all the levels of society (though probably not the diplomatic service!). There are Touretter psychologists, psychiatrists, surgeons, social workers, chess players, musicians, mathematicians, actors, mechanics, athletes, construction workers, homemakers, school children, university students and graduates, etc. (cf. Shapiro, et al., 1988; Sacks, 1985, 1995, and Robertson, 1994).

**Ticcing**

TS tics are interesting phenomena and, as such, I will examine them in depth in this chapter. They are semivoluntary, thus are not generated through the normal cortical motor pathways utilised for willed human movement as evidenced by a greater degree of dysrhythmia of electroencephalographic patterns (Robertson, 1994: 601). When normal subjects are requested to produce tic-like movement, 'a slow negative EEG wave can be recorded 500-800 milliseconds before the actual movement occurs.' (Obeso, Rothwell, and Marsden, 1981, cited by Bradshaw and Mattingley, 1995: 331 and Jankovic, 1987: 389). TS does not manifest at the same degree of severity every day, but fluctuates from day to day and the impulse to ticcing can also be controlled according to social circumstance. Often they will cease altogether during an examination by a physician.

Choosing not to tic, as opposed to not tic (as one might be forced to do if ticcing was involuntary) is, however, quite different. What one is attempting to do is ignore the urge to tic. The urge to tic, according to
Kurlan (1997: 569) form sensory symptoms that precede ticcing. These sensory symptoms are 'patterns of uncomfortable somatic sensations, such as pressure, tickling, or warmth that are localized to specific body regions, such as face, shoulder, or neck' which patients, attempting to relieve themselves of, tighten their muscles in movements 'often interpreted as 'voluntary, usually tonic tightening or stretching of muscles indicative of a dystonic tic.' The relief gained from such movements is temporary and so the movement is repeated. Kurlan thinks that other tics, such as vocalizations are similarly responses to a sensory stimulus in the larynx or throat (Kurlan, 1997: 569-570; cf. also Jankovic, 1987: 386). Ticcing thus relieves an "itch".

Some iterative dopamine-charged behaviour have characteristics many of us non-Touretters can identify with. For instance, the TS urge to echolalia (e.g. imitating the speech patterns of others), flights of rapid thought, lightning wit, punning, and periodic compulsions to check and recheck things are not unusual in the non-Touretter population. Similarly, a passion for nonsense words (said to be a symptom of TS), which forms the basis of Lewis Carroll’s Hunting of the Snark; coprolalia⁶ (the semivoluntary utterance of obscene sounds, words, and phrases), and the "crushing" of words such as the obscene "fuhkuh", or grunts, gafaws and other guttural noises, words and phrases collapsed into a string of consonants that might be said by a Touretter, is also not so rare. The English language itself does this whenever it combines two or more words. "Can't," "wont," "nevertheless," and "he'll," are some obvious examples of these. "Good bye" for "God be with you," or "Struth" (a Shakespearean word) for "it's the truth" are less obvious "crushed"

⁶ Charcot described an aristocratic Parisian woman Touretter who was known to swear in public. He admitted that he had not had the privilege to meet her but he 'did see her once pass by on a stairway, and ... was surprised to overhear her say SND. SND is a coy reference to "Sacre nom de Dieu", or "Holy Name of God." Such a phrase in 19th century society was absolutely unacceptable (cf. Charcot, 1987: 58).
words.  

The creative act itself bears similarity to TS (cf. Sacks, BMJ, 1992: 1515 - 1516). Much creativity emerges out of using familiar things: rhythms, concepts, relations - even accidents. Ray, a jazz musician Touretter similarly transformed his tics into a 'wild and wonderful improvisation' on drums 'which would arise from a tic or a compulsive hitting of a drum and would instantly be made the nucleus of a wild and wonderful improvisation' (Sacks, 1985: 92).

Other Touretter characteristics are less easy to identify with. It is these, I believe, that allow us to extend our understanding of normal sensuous encounter. Such characteristics, or behaviours, though apparently bizarre, are also purposeful.

**Seeking the sensuous through ticcing**

... very different from the sudden impulsive or compulsive touching [of a Touretter surgeon named Bennett] ... is a slow, almost sensuous pressing of the foot to mark out a circle in the ground all around him. 'It seems to me almost instinctual,' he said when I asked him about it. 'Like a dog marking its territory. I feel it in my bones. I think it is something primal, prehuman - maybe something that all of us, without knowing it, have in us. But Tourette's "releases" these primitive behaviours (Sacks, 1995: 79).

Touretters have an urge to sensuous encounter, as Sacks (1995) points to here. The nature of this is simultaneously movement, sensing, and exploring the limits of the space around them.

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46 Sorting through the "crushed" and "crumbled" verbiage of words wrapped together, requires us to already know what is being referred to and knowing requires us to have a context. When the context, in the case of the Touretter, is a personal history, it is difficult for us to ascertain the utterances and their original meanings for histories of the self are not often shared, except in families. When strangers hear the Touretter's utterances, they respond as if to the mad.
As we sat at the table, Bennett was repeatedly distracted by tics - a compulsive touching of the glass lampshade above his head. He had to tap the glass gently with the nails of both forefingers, to produce a sharp, half-musical click or, on occasion, a short salvo of clicks. A third of his time was taken up with this ticing and clicking, which he seemed unable to stop. Did he have to do it? Did he have to sit there?

'If it were out of reach, would you still have to click it?' I asked.

'No,' he said, 'It depends entirely on how I'm situated. It's all a question of space. Where I am now, for example, I have no impulse to reach over to that brick wall, but if I were in range I'd have to touch it perhaps a hundred times' (Sacks, 1995: 78).

Such an urge to impulsivity may be expressed as a sort of "sensuous" attraction (cf. Sacks, 1995: 79). This desire is not confined to Tourette's. Non-Tourette runners or swimmers, for instance, experience a sort of "high" by engaging in their sport that involves the intimate contact of feet on pavement or bodies immersed in water, and young children who seek out the sensuality of wet grass between their toes. There is also the speed of the sport. Speed and sensuousness are coupled in the performance of much sport. Another element is repetition. Much pleasure is gained from repetitive action. Break dancing and skateboarding are good examples of repetitive, urgent, speedy, impulsive, impetuous and flamboyant play. It is a pleasure that is a combination of body-in-relation to the medium in which one plays.

Sensuous engagement is a fundamental of human experience; not just a symptom of a basal ganglia disorder. Many of us can identify with a desire for sensual contact. Velvet that "urges" to be touched, the sleek coat of a cat, the rough diamond texture of a clay vase, the thick curly hair of a lover, the soft chalk of pastels, the graininess of home-made paper, bottles of essential oils "wanting" to be smelled - all these experiences are sought after.
It is most particularly at these times of sensuous participation that we perceive the interweaving of our world with ourselves; it is 'an experience of reciprocal encounter - of tension, communication, and commingling', as Abram (1997: 56) puts it. Indeed, it is the sensuous engagement with the object of our encounter that alerts us to the fluidity and dynamism of our relationship, as well as the pleasure gained in our own body.

For the Touretter the urge to sensuous encounter can be simultaneously a disturbance:

'If the light so disturbs you, why do you sit near it?' I asked.
'Sure, it's "disturbance"," Bennett answered. 'But it's also stimulation. I like the feel and the sound of the click. But, yeah, it can be a great distraction. I can't study here, in the dining-room - I have to go to my study, out of reach of the lamp' (Sacks, 1995: 78).

The TS urge to sensuous engagement is difficult to bypass, even when contact is disturbing and potentially dangerous. In driving, for instance, Touretters may feel that 'other vehicles are "too close" or "looming", even that they are suddenly "zooming", when they are (a non-Tourettic person would judge) at a normal distance' (Sacks, 1985: 79). Sacks reports that there can be likewise 'a tendency to be "attracted" to other vehicles, to drift or veer toward them - though the consciousness of this, and a greater speed of reaction, usually serves to avert any mishaps' (p.79). They feel attracted to objects and other beings: cars, walls, people, and feel impelled to close the space between themselves and those things.

Tics are speedy, sensuous, impulsive, impetuous, and disturbing. They are, as the "crushing" of a tiqueur's utterance can be, also "crushed"
experiences from meaningful encounters. They are short-hand enfleshed memories and they also actively enflesh encounter. Here, like the other "oddities" of Tourette's, are indications of how we might understand the nature of ordinary non-Touretter engagement in the world.

**Ticking as enfleshment of experience**

Experience, as 'an embodied sociobiological phenomenon', the 'organism-environment in transactional exchange' (Beck: 1976: 143), becomes incorporated in our very physiology. As such, our corporeality and our experiences reflexively reflect one another. Touretter tics are likewise archived experiences (cf. Sacks, 1995: 76), or as Friedreich, in 1881, called them, 'remembrance spasms' (Weingarten, 1968: 797), where a 'name, a sound, a visual image, a gesture, perhaps seen years before and forgotten, may first be unconsciously echoed or imitated and then preserved in the stereotypic form of a tic'. These tics are 'life hieroglyphic, petrified residues of the past and may indeed, with the passage of time, become so hieroglyphic, so abbreviated, as to become unintelligible' (Sacks, 1995: 76, footnote). Dr Bennett, the Touretter surgeon and subject of Sacks' 1995 book, had 'sudden, high-pitched vocalizations, in a voice completely unlike his own, that sounded like 'Hi, Patty,' 'Hi, there,' and, on a couple of occasions, 'Hideous!' These vocalizations 'enshrined' a former girlfriend. (Sacks: 1995: 76) (How 'Hideous!' fits in, I am unsure.) The archiving* of experience in a ticqueur's words also, obviously, 'enshrines' feelings (for experience taken into the body and expressed through words has a psychological component*). Thus the utterance of a man whose father expressed himself in a 'constantly forbidding German voice,' as

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*Though Sacks uses the word 'enshrinement' (1995: footnote, p. 77) this word is problematic. It suggests that not only is experience enfleshed, but that it takes on almost religious significance. To avoid this connotation, I am using Sacks' other metaphor, that of the archive, to develop my argument. Sacks writes, 'It is almost as if the Tourettebody becomes an expressive archive - albeit jumbled - of one's life experience' (Sacks, 1995: footnote, p. 77).

* The 'life of the human body cannot be described without it becoming a psycho-physical body' (Merleau-Ponty, 1968: 168).
Sacks writes, became a ‘very accelerated, crushed rendering of “Verboten!”’ (Sacks, 1995: 77). Tics provide stimulus to the neurosystem of the Touretter, as noted above. So there is a feedback, feed-forward looping system between experience, tics, and neurological stimulation.

As I have suggested in the previous chapter, being embodied is being mutually participative in one’s situated milieu. What is now being suggested is that there is a reciprocity at work: one’s situated milieu is, to some extent, incorporated, embodied, to be expressed in various ways: sometimes through utterance, sometimes through gesture, sometimes in the flesh of our creaturehood. Merleau-Ponty noted this self-environment reciprocity (though his use of the word ‘flesh’ seems to move the discussion to a superficial level), thus:

The flesh is a mirror phenomenon and the mirror is an extension of my relation with my body. Mirror = realization of a Bild of the thing, and I-my shadow relation = realization of a (verbal) Wesen: extraction of the essence of the thing, of the pellicle of Being or of its “Appearance” — (Merleau-Ponty, 1968: 255).

The Touretter, like the rest of us, does not mirror everything in her world; she takes a ‘sensuous abstraction’ (Samuel Todes, cited by Levin, 1989: 82), a discrete object or characteristic, of her world and parodies it (imitating its style, not necessarily its form). ‘Sensuous abstraction produces its object - an ‘intentional object’ that is constituted entirely within the experiencing process’ (Levin, 1989: 82). Such a process is part of normal relating to the world, for example, when we sniff the air to identify a particular aroma, or seek to identify someone’s accent during a conversation - though neither Todes nor Levin (at least in his 1989 book)

6 ‘Flesh,’ as Merleau-Ponty uses it, refers to the ‘sensorimotor surface’ (Leder, 1990: 65) of the body.
considers it so. The Touretter’s parody, however, is not intentional, and it has the paradoxical characteristic of belonging to the realm of the sensuous, the intimate, the contextual. In this way, in TS mirroring, there is a combining, in a single act, two contradictory patterns of being: extracting, from the general perceptual field discrete properties and immersing herself, uncontrollably, in the “juice” of its sensual complexities. A very graphic account of this is related by Sacks (1985: 117-118). I present it here nearly in its entirety to illustrate a mirroring where the mirrored mirrors the mirror mirroring the mirrored.

My eye was caught by a grey-haired woman in her sixties, who was apparently the centre of a most amazing disturbance ... Was she having a fit? What on earth was convulsing her - and, by a sort of sympathy or contagion - also convulsing everyone whom she gnashingly, ticcily passed?

As I drew closer I saw what was happening. She was imitating the passers-by - if ‘imitation’ is not too pallid, too passive, a word. Should we say, rather that she was caricaturing everyone she passed? Within a second, a split-second, she ‘had’ them all.

The woman not only took on, and took in, the features of countless people, she took them off. Every mirroring was also a parody, a mocking, an exaggeration of salient gestures and expressions, but an exaggeration in itself no less convulsive than intentional - a consequence of the violent acceleration and distortion of all her motions. Thus a slow smile, monstrously accelerated, would become a violent, milliseconds-long grimace; an ample gesture, accelerated, would become a farcical convulsive movement.

In the course of a short city-block this frantic old woman frenetically caricatured the features of forty or fifty passers-by, in a quick-fire sequence of kaleidoscopic imitations, each lasting a second or two, sometimes less, and the whole dizzying sequence scarcely more than two minutes (Sacks, 1985: 117).

The people being mirrored by this Touretter woman responded in shock and this shock was mirrored back to them. Their reactions to this was again mirrored to them, greatly amplified. Sacks writes that, by ‘becoming
everybody’ this woman ‘lost her own self, became a nobody’ (1985: 118). I suggest that perhaps, though, that by parodied mirroring those forty or fifty people in the street, she did not lose herself at all, but rather realized herself as a relational being. We all actively participate in one another; there is between us a reciprocal interplay between the perceive and perceived, the speaker and the listener. Mirroring, as such, is not a symptom of disorder, but an unconscious\(^\text{50}\) sharing in the expressions of the other. A facial movement is taken and elaborated upon. A style of posture or gait is seized and duplicated. Abram describes this mutual participation particularly well:

If... one comes upon two human friends unexpectedly meeting for the first time in many months, and one chances to hear their initial words of surprise, greeting, and pleasure, one may readily notice,... a tonal, melodic layer of communication beneath the explicit denotative meaning of the words - a rippling rise and fall of the voices in a sort of musical duet, rather like two birds singing to each other. Each voice, each side of the duet, mimes a bit of the other’s melody while adding its own inflection and style, and then is echoed by the other in turn (Abram, 1997: 80-81).

When people mirror one another there is not a sense of loss of self or identity; instead there is a mutual feeling of relating well to one another. In this way, shaping. It is also puts away the experience of being (with) the other in one’s own bodily form. Thus archived, experience is not an experience desiccated and separated from the flux and flow of life, but is a sensual distillation of the essence of that experience.

In the case of the old woman, the experience of condensing so many people must have felt almost toxic for her response was to “vomit” all the identities of the people she had gathered into herself. As Sacks puts it,

\(^{50}\) The unconscious, as Merleau-Ponty (1968: 180) points out, ‘is to be sought not at the bottom of ourselves, behind the back of our “consciousness,” but in front of us, as articulation of our field.’
She delivered one vast, pantomimic egurgitation, in which the engorged identities of the last fifty people who had possessed her were spewed out. And if the taking-in had lasted two minutes, the throwing-out was a single exhalation - fifty people in ten seconds, a fifth of a second or less for the time-foreshortened repertoire of each person (Sacks, 1985: 117-118).

The idea of bodily archiving experience is not one generally recognized by those studying normal behaviour,\(^{51}\) although it is an idea that is often referred to by bodyworkers, such as practitioners the Alexander Technique and the Feldenkrais method (cf. Johnson: 1995).\(^{52}\) Memory is a bodily *archive* of experience in that the organ of memory is the central nervous system that spreads into every area of flesh that is the body. Learning to dance or play basketball is committing experience into bodily form; to re-programme the body as a corpus of motile reflective being.

All enactment (whether of individual or social groups) is performed by enfleshed experiences and interactions borne out of relational movement in a contextual field. Much of this enactment does not require conceptualizing thought or planning; rather it is as though the body "knows" what it has to do once it is in its familiar context. Connerton observes that, for example, in the process of typing, we do not have to find each letter afresh, neither do we need to 'know the place of each letter among the keys' nor, indeed, 'is it to have acquired a conditioned reflex for each, which is set in motion by each letter as it comes before the eye.' There is, indeed, a knowing in the fingers akin to the knowing of the location of our limbs. 'We remember this through knowledge bred of familiarity in our lived space' (Connerton, 1989: 94, 95).

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\(^{51}\) A possible reason for the neglect of recognition of the normal process of archiving experience in the body may be because the main focus of neurology is on neuropathology and psychology has no particular interest in the body at all.

\(^{52}\) It is little known that the work of body therapists was used by both Freud and Jung as an adjunct to their psychotherapy (cf. Gerda Alexander in Johnson, 1995: 270), though never referred to in their writings. Body therapy has had a parallel history to the history of mind-therapy, but has never been taken seriously by mainstream medicine - although massage therapy is now being employed by some doctors.
Stability as a condition for archiving experience

Any pattern of body use - sitting at a table, typing this thesis, reading an article, doing flower arranging, drinking green tea out of a large ornate mug (hands cupped around the barrel shape of these vessel) - the habitus, as described by Bourdieu, is an archivement of experience. This experiential archiving is a process reinforced by the ideas and habits themselves, but only as long as the 'environment in which these attitudes are grounded itself remains stable' (Jackson, 1989: 139). The habitus is altered when new experiences and new ideas change the internal relations of that particular body use. A change in the way the body performs its habitual pattern, may, as Jackson (1989: 129) puts it, 'induce new ideas and experiences'.

In the case of TS ticcing, a stasis in movement is set up; there is no alteration in the nature of the habitus. In this way, Touretter archivement takes in nothing new - as it were, but recapitulates the same pattern of behaviour over and over again. Such TS stasis, however, is able to be broken in various ways. For example, when the Touretter surgeon Dr Bennett written about by Sacks, is caught up in ticcing, 'he seemed unable to stop' (Sacks, 1995: 78), but this ticcing, as noted earlier, is entirely dependent on the spatial position of himself in relation to objects. He is not compelled to tic when an object was beyond reach. Sacks enquires why, if the position of an object such as an electric light is so disturbing to him when within touching distance to cause him to ticcingly engage with it, did he sit near it? Dr Bennett's response is that sitting near something that causes a ticcing response, provides him stimulation (Sacks, 1997: 78). This statement provides further insight into the nature of bodily engagement. It suggests that the activity of engagement is a sensuous one and a sensuousness that is stimulative to the organism. This idea, in
another form, was developed in the chapter on empathy. It was suggested, using the experiences of Temple Grandin, that the empathic response first has its impulse in bodily feelings of comfort and gentleness. The process of engaging with the objects of one’s immediate world provides stimulation to the body and to the act of engagement itself. To engage, to relate, is also to receive bodily stimulation. The underlying impulse is the impulse to sensuous engagement.

Ticcing provides the Touretter with a kind of stability of sensuous experience (even though, to the outsider, it looks anything but stable). People with TS can also engage in precise, fine movements free of their ticcing. Dr Bennett is a case in point. When preparing for the operating room, Bennett was a mass of Touretter impulses, vocalizations and ticcing, but in surgery he was entirely free of them:

The scrubbing over, Bennett and his assistant were gloved and gowned, and they moved to the patient, already anaesthetized, on the table. They looked briefly at a mammogram on the X-ray box. Then Bennett took the knife, made a bold, clear incision - there was no hint of any ticcing or distraction - and moved straight away into the rhythm of the operation. Twenty minutes passed, fifty, seventy, a hundred. The operation was often complex - vessels to be tied, nerves to be found - but the action was confident, smooth, moving forward at its own pace, with never the slightest hint of Tourettes. Finally, after two and a half hours of the most complex, taxing surgery, Bennett closed up, thanked everybody, yawned, and stretched (Sacks, 1995: 90).

Doing surgery is also a sensuous activity, and it is one where a habitus is expressed, thus it exhibits stable characteristics. Ticcing also has stability - and it is repetitive. Surgery is also repetitive, but with a fundamental difference. Sewing the wound at the surgery’s conclusion is repetitive: the same shape and scale of each threaded insertion and pull is made again and again, yet moving along the clean edges of the wound the needle
finds a different place, a different texture and form. Each repetition in a
different location takes the action into the realm of process. ‘Process
entails repetition,’ so Conville notes. ‘An event that occurs only once is not
a process’ (Conville, 1991: 61).

Not all repetition is process, however. Repetition becomes process when
each repeating act takes place in a different space-place, across a body of
different textures, shapes, and densities, developing and integrating all
the time. Repeating the same phrase, jerk, or twitch is not to take the tic
into new places, but to engage in stereotypy. The tic is thus only one
intense event.

The relationship between repetition, stability and process is not far
removed from the relationship of simple repetition and stability. The
factor of process is added when repetition and stability are engaged in
within a definite milieu and activity with a definite purpose\(^3\) with the
attendant possibility of risk. The addition of risk to the activity ensures
that the surgeon enters fully into the activity (risk introduces an open-
endedness to a situation, and the possibility of finality, and fatality). A
doctor with TS would thus become a very good surgeon (because of his
capacity to enter deeply, fully, sensually into his engagement with the
world). Just as a skier must continually establish ‘the terrain in submitting
to its possibilities’ (Joel Shapiro, 1992: 228), so the surgeon moves through
the recesses of the patient body being at once mindful of risk, yet also
assuredly forgetful of the movements he has to make. This curious
interplay of mindfulness and forgetfulness is a characteristic of flow and is
an experience that consumes and delights (cf. Csikszentmihalyi, 1992: 67).

\(^3\) Csikszentmihalyi (1992: 67), in describing how an activity such as this can become imbued with
a feeling of flow, calls this sort of experience ‘autotelic’. The term ‘autotelic’ is derived from two
Greek words, \textit{auto} meaning self, and \textit{telos} meaning goal. It refers to a self-contained activity, the
doing of which is reward in itself.
When Bennett enters into surgical operating, his Tourette's disappears (Sacks, 1995: 91) because he enters a flow state (cf. Csikszentmihalyi and Csikszentmihalyi, 1988). Flow states, importantly, consist of two of the three necessary characteristics of TS ticcing: stability and repetitiveness, with the valuable (and releasing) addition of on-goingness, or process. Process has stability and repetition, albeit of an open-ended kind. Surgery is performed in a definite location (the recesses of another person's body), with a purpose and an attendant risk, which means that Dr Bennett no longer needs to tic (for the "itch" to stimulation is satisfied). When the operation is over, however, the Tourette's returns: when 'waiting, unoccupied' Bennett 'remembers that he is Tourettic, and in that instant he becomes so' (Sacks, 1995: 91). The sensual intensity of doing surgery is replaced by the sensual intensity of Touretter's. This exquisite edge is always present for the Touretter. Dr Bennett's observes that in order to hold his Tourette's at bay during operations, he had to ensure that he was not interrupted, for 'distractions, would break his concentration, break the smooth and rhythmic flow' (Sacks, 1995: 91), thus bringing much risk to the patient.

*Möbius strip : Surface B*

I have used Touretter ticcing to explore sensuous relationality and the idea that experience is archived in the body. I have also suggested that what we learn by studying ticcing allows us to reconsider our own embodied interactive participation in the world. Realizing that our interaction is sensuous, indeed, allows us to enter a recognizable domain that previously we thought we hardly knew at all. That this domain is still poorly understood suggests to me that we, as a society, are resistant to
the recognition. I suggest, with Abram and Leder, that this resistance stems from the Western way of philosophizing the mind-body and subject- and objecthood; a pattern which reflects reflexively in the way we design our urban life:

The superstraight lines and right angles of our office architecture, for instance, make our animal senses wither even as they support the abstract intellect; the wild, earth-born nature of the materials - the woods, clays, metals, and stones that went into the building - are readily forgotten behind the abstract and calculable form (Abram, 1997: 64).

Such a Euclidean move by Western society simplifies our understanding of the nature of nature, our encounters with the world, and our self understanding. This is not to say that such abstraction does not serve a useful purpose; indeed, it allows us to concentrate on the ‘typical focal event as an example of meaning’ (Wu, 1997: 235), thus allowing us to make meaning from more and more complexity without being overwhelmed by it, as is required in modern life. Such abstraction, however, confuses us as to the actual degree of diversity and dynamic relational complexity of our milieu and ourselves, allowing us to mentally absent ourselves from the world of the sensuous, and ‘conceptually immobilize the phenomenon’ (Abram, 1997: 56). Thus it is no irony that we designate those who engage in overt sensuous encounters as pathologically disordered (this is not to say that there are degrees of sensual encounter and some may well be too excessive).54 Nevertheless our attempts at curing such disorder has an element of “overkill”.

54 Too much antisocial sexual activity, treatable by a drug known as Benperidol, a member, with haloperidol, of the butyrophenone group of drugs (Bradley, 1989: 208), is a case in point. “Too much antisocial sexual activity”, however, maybe is a value judgement.
Denial of the sensual: Western society on Haloperidol?
In Tourette's 'there is excitement of the emotions and the passions' (Sacks, 1985: 90); a condition of being that responds to the dopamine blocker Haloperidol (a member of the butyrophenone group of drugs and also used to manage psychotic behaviour and popularly called 'haldol'). A side-effect of this drug is to slow the person down mentally and physically, which must be disconcerting for the Touretter whose main character is speediness, acuteness, wild impetuosity, and impatience (Sacks, 1985: 96); all part of lived experience, living encounter.

Having Tourette's is wild, like being drunk all the while. Being on haldol is dull, makes one square and sober, and neither state is really free... You 'normals', who have the right transmitters in the right places at the right times in your brains, have all feelings, all styles, available all the time - gravity, levity, whatever is appropriate. We Touretter's don't: we are forced into levity by our Tourette's and forced into gravity when we take haldol. You are free, you have a natural balance: we must make the best of an artificial balance (Ray, a Touretter jazz musician, quoted by Sacks, 1986: 96).

Much modern life is devoid of such a rich-earth sensuality; indeed, though we might seek it in movies, meals, and sexual encounters, our denial of sensuous connection with the earth gives me the impression that we are all on haldol (Haloperidol). This denial of the sensuous is most clearly seen in the practice of certain streams of medicine. Psychiatrists who have had most to do with the treatment of TS are seemingly most formed by this attitude of sensuous-flesh denial. Indeed, it could be said (by the act of a broad generalization) that the birth of neurology and psychiatry was, in some respects, the birth of a new institutionalization of flesh denial.

The excessive sensuality of Tourette's may have been the very thing (the
strongly felt impulse to sense relationality) that attracted such negative ideas about it. The way TS has been understood and treated is evidence of this. Jean-Martin Charcot (the "father" of neurology) and his pupil Gilles de la Tourette (circa 1887) working at the Salpêtrière Hospital of Paris, much influenced by Darwinian thought, considered TS a "degeneracy". He based his reasoning on the supposition that people with Tourette’s Syndrome occupied a lower position on the human phylogenetic scale.

Gilles de la Tourette (after whom TS is named) "treated" his patients with physical suspension, perhaps thinking that as "primitives" they needed straightening out to help them achieve the status of modern homo erecti. This suspension was a method developed in Russia by Motchoukowsky and brought to France by Raymond where it was studied in depth by Charcot. It used 'gravity and the patient’s weight to put excessive vertical traction on the spinal cord and nerves'. The therapist 'hoisted the subject in mid-air with pulleys and a harness that slipped under the chin and occiput ... Patients were suspended for a maximum of four minutes at each session and treated daily or every other day’ (Goetz's commentary in Charcot, 1987: 63). Such a practice is reminiscent of how Ida Rolf worked, described at the beginning of this chapter. Rolf strived for verticality, for moulding the patient's body according to Greek statutory ideals. Gilles de la Tourette's suspension idea, it would seem, was based on a similar preconceived ideal of the perfect upright human being.

Charcot and Tourette’s assessment of those with TS as degenerates influenced workers in the field for most of the 20th century. Meige and Feindel (1902) thought of TS as a sign of mental illness and degeneracy. A tic, they said, was

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a co-ordinated purposive act, provoked in the first instance by some external cause or by an idea; repetition leads to its becoming habitual, and finally to its involuntary reproduction without cause and for no purpose, at the same time as its form, intensity, and frequency are exaggerated; it thus assumes the character of a convulsive movement, inopportune and excessive; its execution is often proceeded by an irresistible impulse, its suppression associated with malaise. The effect of distraction or of volitional effort is to diminish its activity; in sleep it disappears. It occurs in predisposed individuals, who usually show other indications of mental instability (Meige and Feindel, cited by Shapiro, et al., 1988: 11).

Freud saw it as a neurosis with characteristics so similar to hysteria that he thought of it as just a form of hysteria. (Interestingly, Charcot did not agree with this, describing hysteria and TS as fundamentally different.) Probably the feature of coprolalia was a key to this idea for Freud. He theorized that the tic was the unconscious expressing repressed developmental elements (oral, anal and sexual repressions).

Western society’s anxiety regarding the body, and particularly the female body, and our (male and female) relationships with all that we encounter, is highlighted in such theories as Sadger’s (1914, cited by Shapiro, et al., 1988: 13) who wrote that tics in female patients were a source of erotic pleasure for them. Ferenczi (1921), similarly, thought of tics as a form of masturbation. He wrote, ‘In a tic, libido connected with genital sensation was displaced onto other parts of the body, resulting in increased pleasure in muscular movements’ (quoted by Shapiro, et al., 1988: 13). Coprolalia was thought of as a linguistic equivalent of this same muscular erotic pleasure. Contrariwise, Oberndorf in 1916 thought that tics were a defence against ‘a primarily autopleasurable act’ (cited in Shapiro, et al., 1988: 13).

Understanding Tourette’s Syndrome, after a period of about one hundred
and fifty years of considering it in a very negative light, then shifted quite dramatically as theories of the mind, neurological and pharmacological development, and associated social change and awareness took hold in the community. This shift is dramatically demonstrated by the presentation of several clinical accounts of a single patient over a thirty year time span, as recorded by Shapiro, et al. I shall include an abbreviated form of these accounts.

A man was evaluated at Johns Hopkins Hospital at the age of 30 by a Freudian. The first clinical report read as follows:

The interesting dichotomy between his pleasant social manner and the violent tic is reminiscent of some paranoid schizophrenics who, after replying to a question of an examiner, will turn their head and speak in foul and violent obscenities to their private companions. It gives the same impression of early splitting in the personality and direct contact with the raw unconscious. Without treatment it might be predicted that the tic will increase and that while he will not become a withdrawn schizophrenic, he will certainly become more and more schizoid.

To the patient’s statement that “there is hardly anything I would do - to get well,” the psychologist responds, “an interesting slip which reveals the unconscious hostile character of the symptomatology. [According to the psychologist, this patient] has lost contact with his own internal aggressive, hostile, and power-driving impulses, with the result that they speak for him without his voluntary control (In Shapiro, et al., 1988: 220-221).

Thirteen years later this same patient (a patient patient!) was re-evaluated at the age of 43 by an clinician influenced by obsessive-compulsive
disorder theory.\footnote{Interestingly enough, those who suggest Tourette’s Syndrome is an obsessive-compulsive disorder (such as Pauls, et al., 1986, noted by Shapiro, et al., 1988: 239) refer, for support, to their translation of a paper of Gilles de la Tourette. Pauls, et al., begin by stating thus,}

[The patient is] an anxious, basically passive individual, with easy tolerance of his passivity. It is only in this man’s fantasy life - and symbolically in symptomatology - that his powerful craving for the virility of personality and freedom of instinctual expression with which he identifies his masculine ego idea find expression ....

He smiled often and related to the examiner in a boyish manner, not seeming to regard such obscene outbursts as relevant. The appearance of obscenities seemed to be related to superficial hostilities and showed some relationship to sex and authority figures. His obscenities sometimes appeared in situations in which they were peripherally appropriate (political arguments), but were most irrelevant or founded on superficial hostilities. He could not be made to appreciate the most obvious connections between his verbal productions and feelings. Diagnostic impression: “Obsessive-compulsive reaction, manifested by compulsive reaction, manifested by compulsive obscene outbursts with tics (Gilles de la Tourette’s Syndrome) (Quoted by Shapiro, et al., 1988: 221).

Three years later, at the age of 46, the patient was re-evaluated by A. K. Shapiro (one of the psychiatrist writers of the quoted text above, Gilles de la Tourette Syndrome, 1988) who could not confirm the earlier diagnosis of a symptomatology similar to paranoid schizophrenia nor the second diagnosis of obsessive-compulsive disorder. The man was given a script

\footnote{Gilles de la Tourette anecdotally reported an association between recurrent motor and phonic tics and obsessive-compulsive behaviours. He described a patient who suffered from tics and vocalizations as well as obsessive thoughts that ‘tormented’ her. He wrote that ‘the more tormented she becomes by fear that she will say them again; and this obsession forces these words into her mind and to the tip of her tongue’ (cited by Shapiro, et al., 1988: 239).}

Shapiro’s group (Arthur K. Shapiro, Elaine S. Shapiro, J. Gerald Young and Todd E. Feinberg) translated Tourette’s French differently,

It is that the more they seem revolting by their vulgarity, the more she is tormented by the fear of mouthing them and that this preoccupation is precisely what puts them on the tip of her tongue when she cannot master it anymore (Shapiro, et al., 1988: 239).

Shapiro, et al., also point out that the statement attributed to Tourette by the quote should not be regarded as his own words. They note he was quoting the Marquise du Dampierre’s explanation for her coprolalia. The terms ‘obsessive-compulsive behaviour,’ ‘obsessive thoughts,’ and ‘obsessions’ are not used by either the Marquise nor Tourette. Furthermore, they say the suggestion that the Marquise’s concern about erupting with involuntary coprolalia as the object of obsession is silly. Coprolalia is the concern, not the concern about erupting into coprolalia. Coprolalia is socially undesirable, after all (ibid.).
for Haloperidol to manage his Touretter tics and sent home - an approach quite different to the earlier methods of confining such patients to psychiatric institutions.

Diagnosis of a disorder like TS has thus been more often subject to classification according to ideology. (In some respects the existence of diagnostic manuals like the DSM lessens this tendency.) While ideology-driven classification is true for every disorder process - particularly those that appear to fall between the two disciplines of psychology and neurology, TS is perhaps even more prone to diagnosis by ideology. The reason, as already noted, is that some of its symptoms transgress “good” social behaviour, thus they are more readily subsumed by a moral rather than a sickness category. Sartorius (1990: 1) notes that this kind of thing (‘the consensus of what in a given society is [considered] normal, what is abnormal, what is asocial and what is part of a disease’) has been the driving force behind medical classificatory systems until recently when the tools of resonant imaging, and the like, became available (which allow the viewing of living brain). It should be noted, however, that medical classification is still far from being value-free - a truly value-free assessment process is not possible, given that any interaction, whether for medical assessment purposes or not, is a person-to-person relationship. When a clinician sees a patient, she engages in a complex process that includes observation and categorization (with reference to patient, current literature, her own belief systems, her social milieu, her medical training and trainers, and so on). Both activities form part of their interpersonal relationship. Goodman puts it this way,

56 "A classification is a way of seeing the world. It is the reification of an ideological position, of an accepted standard of theory and knowledge," according to Sartorius (1990: 1).
There is no perceptual experience that does not involve cognitive processing directed by underlying assumptions, no fact that is not constituted by theory-guided interpretation of sensory stimuli, and no observational language that can describe experience without involving some theoretical background, whether explicit or implicit (Goodman, 1994: 295).

What occurs in the interpersonal domain of clinician and patient is as important as what diagnosis is finally reached and what treatment is prescribed. "Reading" symptoms, classifying them, and engaging in a patient-clinician relationship are simultaneously tacit and explicit dynamic and situated activities where both parties embody the manifestations, peculiarities, and belief systems of the other. The account of the old Touretter woman described above mirroring, frenetically, the people in that New York street and their reactions (their mirroring of her mirroring) mirrored back at them in a bizarre accumulation of mutual reactions is a speeded up account of any embodying process. A clinician and her patient actively participate in one another, and mutually and reciprocally embody that participation. Mirroring, so extreme in that Touretter woman, is thus not a symptom of disorder, but a sharing in the expressions of others. Facial movements are taken and elaborated upon. A style of posture or gait is seized and duplicated. An attitude to life may be mirrored back - even if finally rejected.

Tourette's lends itself to bizarre readings, because of its speedy reciprocity. The Touretter's ready mimicry is profoundly disturbing particularly to an Anglo-Australian (or Anglo-American) culture\(^7\) where sensual and active interactive display is not readily embraced as acceptable behaviour. Rather than think about sensuality and active involvement in one another, we readily turn to negative explanations for

\(^7\)It is noteworthy that Tourette's Syndrome has tended to be more frequently diagnosed among the educated classes until recently, due - I suspect - to an snobbish inability to notice what is (ab)normal behaviour in the uneducated.
the behaviours of others. Singer and Walkup (1991) note this relationship in a recent account of a young boy Touretter who was considered bad and then mad, before diagnosed with the syndrome:

An 11-year-old child of an upper middle class family was referred for evaluation of spitting, cursing, and copropraxia. This patient had the onset of ocular tics at age 7, subsequently replaced after several months by a transient horizontal head tic and sniffing. At age 9, he began to hit himself, smell his hands, kiss objects, and kneel. After washing his mouth with soap failed to deter spitting sounds, he was referred to a child psychologist who interpreted his symptoms as an indication of severe psychopathology. Symptoms led to punishment by parents, discipline by teachers, and ostracism by peers. Intensive psychotherapy failed to diminish his movements and vocalizations. Finally at the age of 11, concurrent with the onset of vocalizations including socially unacceptable words and common four-letter obscenities, he was diagnosed as having Tourette's Syndrome (Singer and Walkup, cited by Bradshaw and Mattingley, 1995: 333 - 334).

Tourette's, of course, is more than a display of symptoms that go against good social order; it is an identifiable neurological disorder. Perhaps, though, TS has been a somewhat umbrella diagnosis to cover a multitude of diverse ticcing behaviours. The "syndrome" part of the title means "running together", after all. The current practice in some parts of the world to speak of Tourette's "Disorder", instead, obscures this possibility. The use of the word "disorder" suggests that all the symptoms "run together" in a coherent fashion, allowing for a single diagnosis.

It is conceivable, however, that some societies may well value the ticcing behaviours of TS. Identifying which societies is not easy. Psychiatric studies of other societies have tended to attribute a diagnosis of Tourette Syndrome to a range of behaviours that may have nothing to do with TS.
upon the ways in which, for example, in mainstream Western philosophy, the carnality (including its sensuousness) of the body “dropped out” of consideration as part of descriptions of the self and lost its apparent relevance as a subjectively felt identity.

Tourette’s Syndrome is very confronting for Western society, because, as a neurological disorder where there is a hypersensitivity to the neurotransmitter dopamine manifesting in an “irritability” of movement, language and thought processes and responses (and sensual impulses), it often manifests in exactly the way in which society has the greatest difficulty in facing. Worse, for our society and our “hang-ups”, Touretters mimic and mirror our expressed abhorrence to their display compounding them over and over again. It is as though we have drawn a black line around our mōbius strip, and as we draw, the line gets thicker and blacker and blacker as we layer our ink upon this continuous loop. Tourette’s is thus a very good disorder to study, in order to uncover what dearly held assumptions our society has. I identified, for instance, our horror of sensuality publicly displayed and I somewhat facetiously suggested this parallel to our being on a dopamine blocking drug like Haloperidol. Haloperidol slows a person down mentally and physically. Once slowed down, there can be little inclination to engage in rich-earth sensuality. A theorizing that is disconnected with sensuality must, I think, be one a drugged theorizer engages with.

Recognizing that the sensual impulse is part of everyone’s daily interaction is the important point, however. It is one in which allows us not only to understand Touretter experience better, but gives us a way to break down the somewhat artificial barriers between our comprehension
of health versus disease and opens us to making less rigid decisions on the care of those with Tourette’s and similar ticcing disorders. In other words, situating ourselves in others’ experiences gives us insight not so much into difference, but mutuality as well as the particular needs of others.

In the next chapter ‘The shapes we sculpt in space-place’ I will suggest that in the experiential body, time and space, rather than being abstractions or external structures outside the living interactive self, merge in us, as we emerge through them in our engagement in the world. I shall examine this proposal by neurological evidence. This evidence suggests that beat frequency (a factor of time perception) is “measured” by the basal ganglia in the brain. Just as the basal ganglia are associated with initiating, maintaining, and controlling motor activity, they also function in inhibiting, monitoring and co-ordinating muscle tone throughout the body. They have also been implicated in the regulation of emotions. Time and the experiential sense of space to move are thus interlinked. Time and space-place cannot be held apart in the realm of the flesh. They make possible our capacity to relate not only to one another but to all the world. It could be said that time and space-place pulse and cradle us within our own corporeality (cf. Merleau-Ponty, 1968: 259). In order to explore this further, I shall consider Parkinson’s Disease, for in this disease, time and space-place distort, expand, contract, and warp (cf. Sacks, 1990: 339). The experiences of space-place and time are linked in this disease, to the ability to choose to move. This relationship, I shall suggest, gives us a very good insight into the process of embodiment and what we take for granted in our daily enactive encounters in the world.

As for the reasoning of using Asperger’s Syndrome in the first chapter and
Tourette’s Syndrome in the second chapter, my use of Parkinson’s Disease in this third chapter serves, once again, to think through those things we take for granted by offering other ways of understanding experiencing the world. Some characteristics of Parkinson’s Disease are not so dissimilar to ordinary non-Parkinsonian life experience. This is part of my raison d’être: to more closely align disordered self experience with so-called normal experience in order to allow us to rethink what it is that we regularly overlook and devalue.
Chapter three

The shapes we sculpt in space-place:
the meaningfulness of encounter

This chapter investigates the relationship between the capacity to move and a sense of agentive being, i.e., the sense we have of being able to decide to move. The subject of the embodiment of time and space as en-nested in specific places is crucial to this investigation. It is thus these latter topics I first explore before expanding my argument outwards to the central problem of agentive being. In order to situate the relationship between time and space-place perception, the capacity to move and a sense of agentive being, I will draw upon research literature on Parkinson’s Disease. This disease lends itself very well to such an investigation as this for it deconstructs the elements needed for interactive participation in the world, by virtue of its, symptom by symptom, specific “dismantling” of this relationship.

Many previous accounts of time and space in relation to the human body have been hampered by confusion about what is actually meant by time and space. On the one hand, time and space are considered from the perspective of absolutes where is space is a void, an emptiness and time is thought ultimately determinable by timepieces. On the other hand, time and space are also sometimes viewed as relative and thus ultimately indeterminate. But, relative to what, to whom? From the perspective of the embodied self, this particular self, the relativity of time and space is not an objective fact, but an intensely subjective one and one sensuously felt. Nevertheless we do also have a sense of the objectivity of time. In other words, for us time and space are both phenomenal experiences,
they are objects of knowledge - and they are lived, living facts of bodiliness. Time and space are thus more than mere concepts; they are facets of the 'interactive emergence' (Hendriks-Jansen, 1996) that is embodiment.

Time and space are processes intricately entwined with our physiological capacity to move as well as our perception of movement. As we move we occupy spaces that are also places. I shall use the single word space-place to capture a simultaneity of the sense of situation ('place') and place for occupation ('space'). Should we come to a standstill and be unable to move (through disease, or circumstance) we would also experience time and space-place quite differently to those times when we are moving swiftly. For example, waiting twenty minutes for a dental appointment seems interminable compared with a twenty minute computer game full of furious action (a swift movement of fingers on a keyboard).

How we make sense of time and space-place is entwined in our capacity to move. As well as this, all of these are necessary for a sense of agentive being; the sense we have of being initiators of our participation in the world (what used to be called will). These interrelational entwinements are mutually dependent. This is revealed in Parkinson’s Disease and in other disorders and health conditions. The non-use of a limb through injury, after a certain period of time, inhibits the capacity for willed (intentional) movement in that limb - even after the limb has healed. The will to move is linked to an autonomic ability to move, which itself is linked to a narrative sense of meaningfulness for that particular person of a particular movement. The will to move is therefore not just a psychological determination, nor a physiological one; it is gathered up
into the person’s sense of being embodied, of embodying the world.

The significance of the immediate situation of our milieu is made through our bodily interactions, while its structure is realized in our body’s capacity for recognizing the affordances in that milieu. Affordances, as I indicated in chapter one, are what our environment (surfaces, objects, substances, and events) provides us; they are the resources at the scale of behaviour that are "measured" and understood relative to us (cf. Lombardo, 1987: 346). Our understanding of our interaction is emergent, for we do not have an absolute a priori knowledge of the properties (the impulsors) of our environment. In encounter, in our knowing through doing, our 'praktognosia', in Merleau-Ponty’s (1962: 14) words, the features are made sense of. There is thus a reflexivity: of reaction and enaction.

Thinking, too, though it seems to transcend this time and this space-place of where we are now, is still a situated function and coloured by our relational engagement in the world. Thinking is not information nor knowledge, per se, but ‘an activity of dealing with information or knowledge’ (Wu, 1997: 7).

Embodying time and space-place

Time and space-place re-enfleshed returns the so-called “problem” of time and space from an objectified consideration to the ‘very personal and immediate’ domain, as noted by Loy (1988: 219), a move that “reinstitutes” self-world relationality. This move was instituted by Merleau-Ponty in his later musings, as Abram notes of Merleau-Ponty’s Working Notes to the 1968 book). By re-enfleshing experience, Merleau-Ponty inaugurated ‘a sweeping resuscitation of nature, both human and
nonhuman’ (Abram, 1988: 109). Our flesh becomes the flesh of the world, our participation is our lived experience and our understanding of the world. Time and space-place are restored to our world-being. It is, indeed, only ‘by the flesh of the world that in the last analysis we can understand the lived’ (Merleau-Ponty, 1968: 250).

Time and space-place belong in the living flesh, and in a very literal sense. We organize our activities by more than a socially conditioned response to timepieces; there is an organic time sense.

It is interesting that the subject of social conditioning, along with language, has been seen in a somewhat disengaged sense. Connerton (1989: 94-95) warns us against this approach, which he sees as a ‘cognitive imperialism’. He argues that this mode of theorizing reduces all to what he calls ‘the status of the sign’; where the body is thought of merely ‘as an object arbitrarily carrying meanings’ (Connerton, 1989: 94). He observes that,

a meaningful practice does not coincide with a sign; meaning cannot be reduced to a sign which exists on a separate “level” outside the immediate sphere of the body’s acts. Habit is a knowledge and a remembering in the hands and in the body; and in the cultivation of habit it is our body which ‘understands’ (Connerton, 1989: 95).

Time perception, even while it has a biological dimension is also a cultural one. Culture and nature are not to be held apart. Embodiment incorporates (em-bodies) language; there is no pre-linguistic, pre-cultural state; no state in which the peculiarities of cultural tradition are not simultaneously present. As Gendlin writes,
We have no difficulty answering those who think that we cannot talk of anything before language. Of course there are cultural differences once there is language. We are not concerned with a body without language. It is rather from how the body now functions ... These are still-now performed functions of the body in and after language (Gendlin, 1992: internet).

The relationship is here like the cabinetmaker who answers the call of wood (cf. Heidegger, quoted in Leder, 1990: 166) to explore the possibilities of the grain and outward shape of the wood. As with wood, the culture of time entwines our physiological propensity for participation with it. By this I mean the way we physiologically respond to the way our culture designates duration. Our gastric juices flow at the time designated for lunch, and we may feel, on holiday, an urgency or even guilt at the time we usually race for the bus.

Time (the cultural time of clocks and the time relative to state of health) is in the flesh of the embodied self (where all experience is embedded). Space is similarly no more "out there" in the empty places between things, but it is in the praktognosia of the body where we encounter the world. Space fluctuates around moving selves. A walk around a room is the responsive negotiation of objects and people where our bodies shape and are shaped by these encounters. The spaces we encounter are the places we occupy. The spaces we choose not to enter into are clearings (wu) bordered by objects. It could be said that every object simultaneously provides a space.

Our own bodies are a mysterious combination of spaces and borders. A blood vessel is a hollow non-empty tube continuously pulsing with corpuscles, leucocytes and other cellular matter. A room is a hollow non-empty box pulsing with life: human, insect, and bacterial. Rooms and
blood vessels, those space-places are occupied by pulsing presences. These presences pulse rhythmically, beating time.

**Spatio-temporal perceptual experience**

In the body and experienced by it, time and space are not absolutes nor do we submit passively to them; instead we actively assume and express them for they are part of our actual flesh of being. They are incorporative of perceptual experience, of actively perceiving and encountering what is a process of continually keeping in touch with the world (cf. Natsoulas, 1989: 445). Gibson writes of perceiving in this way. It is,

an achievement of the individual, not an appearance in the theatre of his consciousness. It is a keeping-in-touch with the world, an experiencing of things rather than a having of experiences. It involves awareness-of instead of just awareness (Gibson, 1979: 239).

The perceptions of time and space are often identified, indeed located, as functions of the different hemispheres of the cerebral cortex, but this is a simplification of what actually occurs. The two hemispheres are not to be thought of as two separate brains: a right brain (that deals with spatiality, intuition, expression of emotional content, musicality, the ability to fill gaps - to confabulate and to connect - perceptual images, the discernment and recognition of environmental sounds, etc., cf. Joseph, 1989: 4 - 5); and a left brain (concerned with the ‘organization and categorization of information into discrete units’, the ‘perception and labelling of material that can be coded linguistically or within a linear and sequential time frame’, ibid., 1 - 2). This two-brain idea arose out of split-brain research and research concerning localized damage (which shows neglect for very specific functions). Between the two hemispheres, however, is the corpus callosum, once thought of as nothing but a fibrous sheath (Stevens, 1973:
298). It was Sperry (1961), and his co-workers, who realized that the corpus callosum served as a "gateway" of information (learning and memory) between hemispheres. It has since been found that the corpus callosum consists of 60% myelinated (sheathed) cells and 40% non-myelinated (unsheathed) ones. This is significant because myelination or lack of it indicates what information is shared in a non-differentiated (demyelinated) or differentiated (myelinated) way. In other words, perhaps neuroscience needs to refocus on this "gateway" rather than on the notion of a two-hemisphere brain. To do this would shift the discussion from location of functions to relations of functions. In a likewise fashion, the "re-embodiment" of time and space-place would allow us to understand the relationships of one to (or in) the other.

Re-embodiing time and space-place theoretically

Many current accounts (e.g. Adam, 1990; Adam, 1995 and Luce, 1973) that attempt a "re-embodiing" of time and space treat these dimensions separately and somewhat superficially. For instance, they write of the big rhythms of the bioself: varying from the 'very fast chemical and neural oscillations' to the 'slower rhythms of heartbeat, respiration and circadian' rhythms' and the even slower 'menstrual and reproductive cycles, and to the very long-range recurrences of seasonal and even climatic changes' (Adam, 1995: 45), but they do not "nest" these rhythms in actual fields, actual bodies occupying actual spaces and places. Such accounts do not take account of the way in which these rhythms flux and flow according to specific psychophysiological conditions, and emergent with sense of self, and agenthood. I shall attempt to redress this in this chapter when I write of Parkinson's Disease.

59 See the work of Hadjistavropoulos, Beattie and Tuokko (1997) for an update of this.
60 'Circadian rhythms are daily oscillations in physiology, metabolism, or behaviour' (Page, 1988: 15). Each oscillation moves through its cycle in approximately twenty four hours.
The phenomenology of perception is dependent upon psychophysiological states. The way in which we differ from one another and in ourselves throughout the day (tired, not tired, energized, engaged in repetitive tasks, not engaged in this way, ill with fever, healthy, etc.) mean that the perceptual meanings we attribute to time vary (sometimes quite considerably). For instance, people in pain experience time as stretching outwards; people hot with fever, on the other hand, experience time as contracted inwards, foreshortened (cf. Hoagland, cited by Hancock, 1993). People with injured limbs envisage their relations with the amount of space they have to move in as considerably reduced. Every opening has to be carefully considered and estimated in relation to the injured limb before entering. This is even true for those with phantom limbs.  

People bedridden due to some extended illness lose their sense of time: lying there unable to interact with other spaces beyond the scope of

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61 The phenomenon of the phantom limb is not confined to amputees (approximately 70-80% of whom experience phantom sensations), but also occurs in people born without limbs, the paralyzed, and those who suffer from brachial plexus avulsion (the brachial plexus is a network of nerve fibres which provide innervation to the skin and muscles of the arms as well as the muscles to the trunk that move the arms (cf. Beck and Groër, 1982: 110). There are many explanations for the phenomenon ranging from the overstimulation of existing nerves (an old view), to the existence of a neuromatrix homunculus (a relatively new view, Melzack, 1992, see Shaw, 2000: internet). Shaw (2000: internet) writes,

In 1992, Ronald Melzack introduced a theory attesting that phantom pain could be explained through genetics and the neuromatrix. Melzack proposed that a neuromatrix, a network [of] many interconnected neurons, exists in every person. This neuromatrix, in addition to responding to sensory stimulation, continuously generates a characteristic pattern of impulses indicating that the body is intact, and identifies the body as its own. Melzack calls this pattern of self-identification a neurosignature, which is imprinted on the output signal carrying information about the sensory input.

Shaw continues,

Melzack’s theory is based on the supposition that the neuromatrix and its image of the human body is pre-wired by genetics. This blueprint assumes that the human body is complete with all limbs intact, whether or not in actually the person does possess all te limbs to constitute a complete body. Therefore if the brain expects a limb is there, it might sense an output signal to the limb through certain neural pathways in the neuromatrix. Because there is no limb, the brain receives no sensory feedback. The brain will then subsequently increase the intensity of its signals, thus causing phantom pain.

This theory successfully explains cases of individuals who were born with limbs and still experience phantom pain. The theory, however falls apart when it is considered that 20-30% of amputees do not experience the phantom limb phenomenon. Similarly, it does not account for the way in which limbs can “fall out” of consciousness through non-use, such as that described by Oliver Sacks in his 1991 book, and the neurological accounts of A. N. Leont'ev and A. V. Zaporozhets, 1948/ 1960.
the bed, seems to have a bearing on time - time drags.

We perceive time as a result of the nature of the interaction of ourselves with the tasks that we perform. Complexity of tasks (that is, diverse interactions in the environment) seems to be a criterion for the way in which we experience time. The more varied things are done within a set space of time, the more we experience time as foreshortened. In contrast, few but dull activities result in a feeling that time is very extended. Writing, using a computer keyboard, is a relatively complex activity. It combines intellectual composition with the physical act of rapidly putting fingers on keys. Thus fifteen clock minutes from “save” to “save” seem to dash by - irritatively. Sitting waiting for a doctor - perhaps a fifteen minute wait, on the other hand, seems an eternity. A set period of time is experienced according to the complexity of the activity, not the number of minutes in that period. These experiences seem to indicate that something physiological is happening. I shall give a brief account of what neuroscience has discovered in this regard - reminding the reader that all that occurs beneath the flesh of our acting being is as part of our phenomenological selves as the visible self we present to the outside world. Those of us who study embodiment, must, I believe, go into regions of ourselves of which we have no direct knowledge; where our information is gathered in ways other than self-reflection. We are phenomenologists of the body, and as such, as Leder puts it, “hermeneuts” (Leder, 1990: 37). To ‘explore the region of the body most hidden from awareness is merely to extend this hermeneutical approach’ (Leder, 1990: 37).

Inner time perception, according to some current neurological research, is
a physiologically moderated psychological event interpreted within concrete situations. Warren Meck (1996, 1998), in his research into the human brain's capacity to process the duration of events, has suggested that the basal ganglia of the striatum (part of the brain formerly thought to only control movement) may be responsible for keeping track of short intervals of time.

For the benefit of understanding the significance of Meck's work, I shall here give a brief description of the neurological sites involved in motor activity and timing.

The basal ganglia are a collection of interconnected subcortical nuclei found in the forebrain and the midbrain. They are composed of the striatum, the globus pallidus, the subthalamic nucleus, the ventral tegmental area and the substantia nigra. The striatum is the main afferent structure of the basal ganglia, lying beneath the cerebral cortex and receiving input from the cerebral cortex. The striatum receives most input from the intralaminar nuclei of the thalamus and from the substantia nigra. There are two parts of the striatum: the caudate nucleus and the putamen. The striatum sends its outputs to globus pallidus and the substantia nigra. There are five closed loops and three open loops that link specific areas of the cerebral cortex, basal ganglia and thalamus. The five closed loops are: 1) motor, 2) oculomotor, 3) dorsolateral prefrontal, 4) lateral orbitofrontal prefrontal, and 5) limbic. The open loops allow cross communication between closed loops permitting a striatal arc to influence a cortical field that does not project into it (cf. Afifi, Van Hoesen, Bechara and Rodnitzky, 1999). Not only are the basal ganglia associated mainly with regulating motor control, activity, and, as Meck indicates, beat
frequency, that is, timing; they also function in inhibiting muscle tone throughout the body; selecting and maintaining purposeful motor activity while suppressing useless or unwanted patterns of movement and helping monitor and co-ordinate sustained contractions, especially those related to posture and support. Edelman (1992: 106) notes that they also regulate emotions. There are other functions that are still poorly understood. Robbins, Owen and Sahakian (1998) suggest that the basal ganglia might also be implicated in cognitive activity, particularly planning function (planning has an “on-goingness”, similar to timing and motor activity). Edelman (1992: 104) calls the basal ganglia, the hippocampus and cerebellum, ‘organs of succession’, because they have to do with ‘ordering the output of the brain’. The cerebellum plays ‘a very specific role in the timing and smoothing of successions of movement’; ‘it provides the basis for producing and categorizing smooth gestures.’ (Edelman, 1992: 105) The main role of the hippocampus is to do with memory, relating short-term memory to the establishment of long-term memory.

The basal ganglia produce a neurotransmitter\(^\text{a}\) (brain chemical) called dopamine. Dopamine travels down several pathways: the nigro-striatal pathway which indirectly controls involuntary motor movement; from areas of the midbrain to the limbic system and areas of the cortex (the meso-limbic and meso-cortical pathways); and through the hypothalamus, which helps in the release of growth hormones and corticotropin (cf. ‘Dopamine’: internet). Dopamine is a particularly relevant neurotransmitter for my forthcoming discussion on spatio-temporal

\(^{a}\) Neurotransmitter molecules cross the synaptic gaps between nerve fibres to act upon the nerve receptors, where they produce effects specific to the nature of the chemical. Receptors are sites on the membranes of neurones which recognize neurotransmitters, hormones or drugs in a very specific way. The firing of one neuron influences others only when the receiving neurone possesses a specific receptor for that neurotransmitter. The transmission of nervous activity may involve voluntary or involuntary movements, emotions, mood changes, intellectual and creative thought processes or the experiencing of some sensory input (cf. Birkmayer and Riederer, 1986: 18).
experience in relation to Parkinson’s Disease.

**Parkinson’s Disease**

If too little dopamine is produced, all these processes (the regulation and calibration of motor activity and control, beat frequency, inhibition of muscle tone, selection and maintenance of purposeful motor activity while suppressing useless or unwanted patterns of movement, helping monitor and co-ordinate sustained contractions, regulate emotions, and possibly cognitive functioning in terms of planning) will be too slow, as in Parkinson’s Disease and its correlates, where there is a destruction of the basal ganglia in the substantia nigra and thalamus (cf. Robbins, Owen and Sahakian, 1998). Parkinson’s Disease is not just a disorder of the basal ganglia, for it affects other domains of a sufferer’s life, e.g. cognitive dementia occurs at a later stage of Parkinson’s (Robbins, Owen and Sahakian, 1998: 57). I shall, however, concentrate on the impact of dopaminergic deficiency on movement and the relation of this to intentionality.

Parkinson’s Disease expresses itself in a loss or impairment of some motor functions, including loss or reduction of spontaneous movement (hypokinesia), a slowness in initiating movement (akinesia), and a slowness in executing movement (i.e., a movement time increase, or bradykinesia) and tremor. Other PD symptoms may include micrographia, which involves a progressive decrease in size of one’s handwriting, slowing gait, often with freezing or minute steps, though festination may also occur. Other symptoms may be manifest: reduced arm swing, the tendency of the body to topple, movements which occur all at once rather than sequentially,
a dull, weak, uninflected, and hypophonic voice with slowed speech (again, paradoxical tachypnea [fast speech] may sometimes occur), a masklike, unemotional expression, reduced blink rate, and slowed, hypometric, or absent saccades. Indeed, changes in fixational eye movements (increased latency, reduced velocity, multiple stepping, hypometria, and fewer spontaneous saccades) ... (Bradshaw and Mattingley, 1995: 294).

People with PD have difficulty pacing themselves to temporal-spatial dimensions in everyday life; i.e., these no longer afford movement (this suggests that time and space are at once biological impulsors and that their forms are embedded in our socio-physical environment). Sacks provides dramatic examples of this pacing difficulty in his 1990 book. For instance, a patient of his, Aaron E. was requested to clap his hands steadily and regularly to an audience of medical students. He started regularly enough, but then proceeded 'into an incontinent festination of clapping, culminating in an apparent "freezing" of motion' but was completely unaware of doing so. Furthermore, he did not recognize the imitation of his movements by the students. (Sacks, 1990: 341). Aaron's clapping speeded up and then "froze", as though the clapping was so fast that it simply ceased to move - which is not to say that this impression was accurate, but that Aaron's time perception was no longer approximating the normal. He instead, suffered 'illusions of scale' (Sacks, 1990: 340). The term 'illusions of scale' indicates the relationship of time and space-place. A movement is done within certain parameters, say, for instance, for a period of five minutes. Five minutes thus serves as a sort of "container" (has spatial dimensions) for the expenditure of the movement. This relationship is well illustrated by another of Sacks' patients. Miss D. described her 'freezing' as not just coming to a halt, but as a sense of running out of space to move in. She said, 'You see, my space, our space,
is nothing like your space: our space gets bigger and smaller, it bounces back on itself, and it loops itself round till it runs into itself' (Sacks, 1990: 339).

This sense of running out of space manifests in a number of different ways for the Parkinsonian person: in rapid or slow speech, massive or micro writing, festinated walking or "freezing", or any other action. Another interesting effect of "freezing" is that the person cannot even think, or remember what is necessary for releasing themselves. Sacks points us to some profound questions in this regard: what constitutes "knowing" or "understanding" in this context? Their 'understanding is embedded in, inseparable from, the undertaking: and thus, if the undertaking, the power of action, is arrested, so too is the understanding, the power of thought' (Sacks, 1982: 291).

Interestingly, this akinesis, which is actually a kinesia paradoxa, can be 'activated and regulated, ordered and organized' (Sacks, 1990: 347) by providing social or physical measured patternings for the person to follow, as these following examples illustrate.

When a person without PD walks with a sufferer the latter is often able to "participate" in the movements of another. Sacks writes of a patient of his who had commented that 'When you walk with me ... I feel in myself your own power of walking. I partake of the power and freedom you have. I share your walking powers, your perceptions, your feelings, your existence. Without even knowing it, you make me a great gift' (Sacks,

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63 Animals, dogs, for instance, may be useful to the Parkinsonian person much like their use by the blind.
The person with Parkinson's Disease can "unlock" a "frozen" state by creating movement of another kind:

[Miss D.] had various ways of 'defreezing' herself if she chanced to freeze in her walking: she would carry in one hand a supply of minute paper balls of which she would now let one drop to the ground: its tiny whiteness immediately 'incited' or 'commanded' her to take a step, and thus allowed her to break loose from the freeze and resume her normal walking pattern (Sacks, 1982: 248).

Patterns (which are designs that consist of rhythmically occurring spaces and places) in the visual field also serve to release a Parkinsonian akinesis.

Miss D. had found that regular blinking, or a loud-ticking watch, or horizontal lines or marks on the ground, etc., similarly served to pace her, and to prevent the incontinent hastenings and retardations which otherwise marred her ambulation (Sacks, 1990: 63).

The neurologist, Purdon Martin (1967) identified a variety of configurations that may serve as effective patterning and impetus to Parkinsonian movement (or impulsors). Martin noted that,

Transverse lines of almost any kind across his path are of some help to the average Parkinsonian patient, and almost the best effects are obtained from bold lines, an inch or more wide, and of a colour contrasting with that of the floor or ground. Thus white lines, one or two inches wide, and eighteen inches or so apart on a dark ground produce a pronounced, and sometimes dramatic, effect, enabling a patient who seemed unable to walk, or the shuffler on short steps, to step out strongly. It may be that strips of light-coloured cardboard or linoleum or merely paper are more effective ... (Martin, 1967: 45).

Purdon Martin found that 'Zig-zag lines are less effective than transverse,
and strips without contrast of colour are somewhat less effective than contrasting ones, though the difference is not great when the patient attends to them." (Martin, 1967: 45). Interestingly, visual patterning of the ground may not provide the only useful impetus; 'obstacles of the nature of pieces of wood, two or three inches high, or bricks, seem to produce the maximum effect' (Martin, 1967: 45). In other words, the trigger to movement may not be just visual, but proprioceptive and vestibular as well. It would be useful to study Parkinsonian blind people and the ways they overcome "freezing". Martin, and in more recent times, Riess65 (undated, internet), does not consider the Parkinsonian response to environmental patterning in any other way than as a factor of visual input in relation to posture and movement. He includes a study of blindfolded subjects - but only in order to see if remembering where obstacles were had any bearing on their ability to move. He found that there was a weaker relationship at work here. Blindness, of course, is nothing like being blindfolded and the visual memory of obstacles will not assist the blind person.66

Height of obstacles, not just environmental patterning within the visual field, is an effective impulsor to Parkinsonian akinesis. Though Sacks does not especially identify height as a stimulus, he does describe the way in which a patient at a chronic care institution on the island of Guam is stimulated to movement by a pile of rocks in a rock garden. The patient, Euphrasia had a Parkinsonian form of lytico-bodig, a Parkinsonian-like disease found on the island of Guam. This disease has been linked to the

65 Riess (undated) considers the problem of akinesia paradoxa entirely a visual pathology. He bases his theory upon the discovery that, as he puts it, 'visually accelerating optical flow above a certain minimal threshold can overcome akinesia, festination, freezing and dyskinetic gait.' He contents that it 'is not the "objectness" of walking over an array of objects which enables gait but rather their role as reference markers on the real world whose apparent motion serves to augment the visibility of optical flow as we walk over them' (ibid.). There are, however, other ways, other than visual perception, to take account of reference markers: proprioception need not rely on vision, for instance. Riess does not consider this.

66 This kind of ocularcentrism is a dominant feature, as Levin (1993) points out, of Western philosophic thought.
consumption of untreated cycad nuts. Euphrasia was being treated (in 1993) by the local doctor with the same dopamine mimicking drug, L-Dopa Sacks had used on his patients with *encephalitis lethargica* (sleeping sickness) in the 1960s (cf. Sacks, 1982).

Euphrasia was between doses of L-Dopa and she was now in a state of *akinesis*.

‘Ok,’ [Sacks] said to Euphrasia, pointing to a rock, ‘climb over this, you’re on your own - go!’ To John’s horror, and the nuns’, I took my hands off her, and let her go. But Euphrasia, who had been almost incapable of movement on the flat featureless floor of the dayroom, lifted her leg high, and stepped boldly over the rock, and then over another one, and another, up to the top of the rock garden, without difficulty. She smiled, and climbed down again, as surefootedly as she had gone up. As soon as she reached the level ground, she was as helpless as before (Sacks, 1996: 165).

This account suggests that the obstacles of the rock garden stimulated Euphrasia into movement. Even though proprioception on its own is not used as an explanation, the relationship between height and pattern of the visuo-proprioceptive field is nevertheless well established. Stairs can similarly afford an impetus to movement, ‘each stair’ provides ‘a stimulus to a step’ but on reaching the landing, Parkinsonian patients (without medication) come to a standstill (cf. Sacks, 1990: 43). Stairs, it will be noted, combine patterning and height: visual and proprioceptive-vestibular impetus.

Purdon Martin observed that transverse lines or obstacles are only effective within stepping distance, that is, so close that the person can step over them. Moving lines, he found, sometimes were not met with a response in some patients. One can only assume that this was because of
consumption of untreated cycad nuts. Euphrasia was being treated (in 1993) by the local doctor with the same dopamine mimicking drug, L-Dopa Sacks had used on his patients with encephalitis lethargica (sleeping sickness) in the 1960s (cf. Sacks, 1982).

Euphrasia was between doses of L-Dopa and she was now in a state of akinesis.

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the distance between the line, and not the movement. Movement, we know, is important, for when a ball is thrown at a patient severely “frozen” in Parkinsonian catatonia, she is able to catch and return it.

The moving ball acts as the *impulsor* which unleashes the participatory response and possibly a sense of joy. The *impulsor* is my term to describe those conditions which *afford* interaction and participation.

A moving ball traverses the gap between people such that instead of perceiving a gap we perceive an opportunity for interaction. In PD, a thrown ball thus proves very useful in allowing - by way of an automatic, yet meaningful response - interactive participation.

Music, with its ongoing immersive patterning of sound in rhythm, also serves to reconnect the Parkinsonian person to movement. Sacks writes of an ex-music teacher, Edith T., who described her own unleashing from *akinesia* as “musicking”. She felt that with the disease her movement had become ‘wooden, mechanical - like a robot or doll’ or ‘like a still photo, a frozen frame’ and that she had lost her former ‘naturalness’ and ‘musicalness’ of movement, that in a word, she had been ‘unmusicked’. Fortunately, as she found, the disease was ‘accompanied by its own cure’. ‘I must be remusicked’, she said. Her remusicking emerged frequently from remembering catchy tunes (Sacks, 1982: 294).

Both music and catching a ball are more complex *impulsors* than lines, a pattern of rocks or steps, but all provide a clue as to what minimum
conditions are necessary for the re-establishment of movement in the akeine Parkinsonian person. They also suggest - at least in part - what normal people respond to in association with the normal production of the neurotransmitter, dopamine (in relation with other neurotransmitters).

I have already suggested Gibson’s theory of affordances as a way to describe the relational “fit” of the embodied self in particular socio-physical environments. I have also introduced the word impulsors (Booth, private conversation, 2001) to describe specific characteristics of the socio-physical realm that are sensuously responded to by the body. This latter term, I believe is more accurate than some of existing terms used by others.

Sacks rather loosely uses the term ‘musicking’ (1982: 98). This attractive and somewhat seductive phrase has its correlates in Luria’s ‘kinetic melody’ - but neither of these terms actually tell us very much. Sacks

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This personal ‘cinema’ may be even more personalized and include what Riess and Weghorst call a ‘cinemarama theatre’, a sound system and other elements. The interaction with these images is quite natural. The movement and orientation of the head provide impetus for the images produced by the technology. The user’s viewpoint within a stored graphical model is calculated and the scene is then rendered accordingly (Riess and Weghorst, 1995). This interactive effect, when performed at 10-30 frames per second, creates a sense of what is identified as ‘presence’.

Another immersive environment technology provides stereoscopic images via the use of video detection and video mixing methods. These achieve their goal by ‘interlacing the viewpoints for the left and right eye and shutting the viewing glasses appropriately’ (Riess and Weghorst, 1995) An ‘augmented reality’ technology has also been invented. This provides both the means for ‘see-through head-up information displays’ which fuse natural scenes with physically registered graphical overlays. The most common of these is a ‘partially reflective combine’ which is a mirror that reflects light from an image source to the eyes to create the image of a scene or displays data graphics. A visual field is created in two ways, visual information may move with the head or be stabilized in the physical environment, thus creating ‘virtual objects’ within the user’s natural world. These technologies are enormously expensive: between $40,000 and $1,000,000. Certainly out of the range of many ordinary people who have lost their monetary reserves over the years of declining health. Two simpler, more cost effective solutions are the use of walkman audio systems with taped music and dogs (like the guide dogs for the blind). Both are in use in some parts of the world.
seems to have developed his idea of musicking from the account quoted above about Edith T. who felt that in her akinetic state she was ‘unmusicked’ and that the cure was to be ‘remusicked’ (Sacks, 1982: 294). The idea of “remusicking” akinetic people with music, while attractive, does not adequately take account of individual differences. Some people, according to a “Parkie” friend of mine, do not respond to music of any kind. That this is the case, suggests that there is more to entering into a relationship with the environment than merely an autonomic nervous response. There is, instead, an interplay of automaticity and social conditioning.69

Shaping space-place through movement
The shapes we sculpt in space-place are dependent on the physical form of our bodies, especially at the global joints that connect our limbs to the trunk, and the degree of our spinal supinality: i.e., how far we can swing our arms and legs and flex our neck and back. The degree of flexion and swing constitutes our personal kinesphere. Kinesphere is a word used by Rudolf Laban to describe the three-dimensional space around the body (its height, width, and depth). Uprightness makes the space of the full three-dimensional kinesphere around the body available to normal human movement; a quadruped must make use of a reduced kinespheric space (at least in walking) - though, of course, this depends on the spinal mobility of the animal. A cat has a great deal of spinal flexibility, while a rhinoceros has very little. The vertical axis of the kinesphere is the combination of gravitational pull and upward reach, the horizontal axis is

68 “Parkie” is a word used by people with Parkinson’s Disease to describe themselves. There are whole communities of Parkies who meet regularly on the internet, as well as face-to-face.
69 At a lecture on the use of music therapy I attended several years ago at a psychogeriatric nursing centre, it was suggested that piped music be used in all the wards to “quieten” the patients. This suggestion from a resident psychiatrist was quite horrifying for he failed to realize that music is not like a drug that has a fairly uniform response. The same piped music for two different patients with the same diagnosis, e.g. paranoid schizophrenia, may elicit completely different responses. This is true for all people. A marching song may “unfreeze” one PD sufferer, but have no effect upon another.
produced when we move our limbs to the side or across to the other side in a wide dimension, and a sagittal direction is when we move forward/backward in a diagonal dimension. Each move, according to Bartenieff, 'elicits a particular spatial experience, the feeling of a pull in space that is delineated by its axis' (Bartenieff, 1980: 25). These positions are not merely 'lines of different design written into space', as she points out (ibid. 29), they reflect the reductions and expansions of body spatial patterns.

To understand how movement proceeds, we need a simple method to illustrate it. Laban (1971) identified body movement as a progression sequentially through upper, middle, lower zones; vertical, horizontal and sagittal zones. Movement in any of these zones may be light, dense, fluid or blocked.

All bodies are different in shape and reach, at least minimally. Some movements are easy for some of us, while hard for others. We tend to move and respond in ways that are habitual, which is not to say that our movements are limited to a sort of personal stereotypy. We are constantly adapting the strength and length of our reach, for instance, according to the nature of the object we are accommodating to. Using, for instance, the image, once again, of catching a ball we are alerted to physiological requirements of this act. We need refined hand movements that are peculiar to our species (using our opposable thumb), unless we are dogs catching the ball in our mouths. The way we lean our bodies to catch the ball and prepare to throw it is likely to be according to the way we habitually use our bodies. Habitual movement is likely to be influenced by a number of things, including the shape of our bodies (which is not
altogether an absolute "given"), the degree of our psychophysical health, our age, our gender, our cultural background and the amount of social and physical room available for catching and throwing the ball. As quoted earlier, Young (1989: 51-60) points out the lack of bodily engagement employed by females in throwing balls. Females deny their corporeality, she thinks. Indeed, our society, with its preference for frail female bodies, rewards females who cannot throw balls. Evidence of this is the considerable media attention focussed on bikini clad female models (bikinis are useless pieces of cloth should serious swimming be contemplated) and, inversely, the difficulty women’s sporting bodies have in attracting sponsorship and media air-space.

Our individual capacity to move and occupy spaces and places determines our experiences, which reflexively determines the way we move and occupy spaces and places. The female throwing the ball in Young’s example not only experiences herself as unable to throw it far - because she’s “only” a girl - but cannot throw it very far because she does not engage her whole body in the action. Her mental attitude is reflected in the way she uses and experiences her body. This is a case where socially constructed ideas of ideal womanhood impact negatively on the individual behaviour of a girl. As such, it illustrates that using a body is a melding of many influences into the very flesh of the embodied self. Using the body is thus not merely behaving in a particular way; behaviour is not extraneous to embodiment, but is the expression of it.

People who are physically incapacitated experience this physical-psychosocial relationship keenly. Often they cannot perform an action because they believe they cannot - even if their disorder does not actually
physically disbar them from doing so and they are conscious that they
look odd. This threefold interference in interrelational activity puts
considerable stress upon them, as Kleinman (1988) discusses in his book
on chronic illness. Restoring movement is less about convincing the
person that there are no physical impediments to doing the action than
creating situations where she engages in meaningful tasks that at once
incidentally use the affected limb, without the conscious intervention in
the moving of the limb, and constitute a socially meaningful act. In this
way, a similar impulsion to move is at work as was identified in the
"unfreezing" of akinetic people with Parkinson's Disease.

The sense we have of agenthood is at once caught up in organic
movement, social meaning and participation. The basal ganglia and their
specific anatomy allows us and other animals to 'orchestrate whole
symphonies of movements in a plan' (Edelman, 1992: 107). This
"orchestration" does not operate with a conductor who acts as an initiator
of the "music"; rather the sense we have of agenthood comes from
participation in the action - which is not the same as saying the sense of
being in control is secondary, but that it is emergent in the process of
action. Thus the idea of control as belonging solely to a psychological
domain is incorrect. The process of engagement in movement en-nests a
sense of agenthood. This idea will be expanded in the next chapter when I
show how some kinds of memory are more bound up in the manner in
which we bodily move around particular milieux than in purely cognitive
performances. In this current chapter, my focus is less on en-nested
memory than the way our physiology itself "captures" experience; holds
moments of being in flesh.
Catching a moment of being in physiology

The body’s "recognition" of impulsons within the socio-physical environment is an active process that embeds itself in the physiology of our being. Past memories are enfleshed and re-enacted in two main ways: when a familiar situation presents itself (I shall develop this case in the next chapter) and/or when a similar physiological state is stimulated in the body. Sacks speaks of the latter when he writes of "moments-of-being" captured in physiology (1982: 18).

Smith Ely Jelliffe, (1932, quoted by Sacks, 1982: 18 -19), the neurologist, writes of a man who had his first 'oculogyric crises' (the first symptom of encephalitis lethargica, "sleeping sickness") during a game of cricket. Ready to catch the ball, this man's hand "froze" in the action and he had to be carried off the field in a catatonic state, ball still in hand. Whenever he subsequently had a crisis, his hand would shoot up as though to catch a ball. The action became part of the expression of the disease.

The interaction of self and ball had entered the "recessive" (the tacit) body, or the "object" body (Merleau-Ponty, 1962: 73) of physiology, and became, as it were, an "outside", behavioural, expression of disordered physiology with every oculogyric crisis. In this case, as, I suggest, for all physiologically embedded action (which is what habit is, after all), the "outside" of behaviour is the "recessive" of the body. The supposed dualism of inner and outer surfaces are only "held apart" by 'a dialectic of division,' as Bachelard (1969: 211), calls it; an artefact of a way of thinking, as the "different" surfaces of the möbius strip are merely a matter of a way of seeing, not of fact.
A moment-of-being, captured in the cricketer's physiology, usefully illustrates a way in which physiology plays a part in the reciprocity of body with environment. In the next part of this chapter, I shall further explore the bodily side of this reciprocal relationship. I shall do this by considering the en-nesting of doing in action. This form of en-nesting has less to do with an embedding of memory content in a domain of ideas (as Neisser, 1988, described associated with his term nesting) than the recognition that the memory content is sensually relational to elements (impulsors) in the socio-physical environment. To distinguish my use of the term nesting from Neisser's - and to give it a greater sense of corporeality - I adopt the word en-nestedness, or en-nesting.

As is my practice in the first section of this dissertation, I shall continue exploring bodily-environment reciprocity by using the technique of deconstruction suggested by bodily disfunction. I shall now examine instances where the perception of bodily parts "slip" from the phenomenological field by way of prolonged non-use. Use and the ability to choose to use are bound up in each other. Doing is entwined in being.

The en-nesting of doing in action
Sacks describes, in his 1984 book, sustaining a badly broken leg, lying inactive in bed with the leg in solid plaster for months, losing the sense of the leg as being part of himself, and gradually regaining that sense, and finally, being able to use the leg again. The actual recovery of the use of leg followed some distance behind the physical recovery of the leg itself: use being clearly a psychological state, but not in the sense that it was merely a cognitive dysfunction. He could not use the leg, because the leg felt alien to him, yet using the leg was the only way it could once more
feel part of him. His doctor observed:

"Now, as regards your walking, and as regards your knee, you walk as if you still had the cast. You hold the leg stiffly, as if you had no knee. Yet you have 15 degrees of flexion already - not much, but enough. Enough to walk normally if only you used it" (Sacks: 1984: 148).

Sacks' doctor sent him to a swimming pool where he hired swimming trunks and a towel and tentatively went to the edge of the water. A lifeguard (who had been prepared by the doctor, without Sacks' knowledge) pushed him in and urged him into a race. Sacks writes,

I was in the water, outraged, before I knew what had happened - and then the impertinence, the provocation, had their effect. I am a good swimmer - a 'natural' - and have been since childhood.... I felt challenged by the lifeguard. By God, I'd show him! Provocatively he stayed just a little in front of me, but I kept up a fast crawl for four Olympic lengths, and only stopped then because he yelled 'Enough!' (Sacks, 1984: 149).

Sacks overcame his disability without even being aware that he had done so. All 'function is embedded in action, and that acting, therefore is the key to all therapy' (Sacks, 1989: 150). This same observation was discovered by the Russian physiologists, Leont'ev and Zaporozhets (1960). They found that the independent performance of the components of action did not constitute whole movement healing. It was only when a person was engaged in a meaningful activity that involves elements of each action in an entire motional way that healing is achieved. Proprioceptive dysfunction-rehabilitation can only occur in familiar or novel whole situations. Leont'ev and Zaporozhets write that,
Motor orientations share the fate of the general motor system, and that activity as a whole with which they are associated. The change in this general functional system both in normal development and in the process of recovery... depends on the tasks confronting the subject, or to use Gelb’s expression, are a function of the task (Leont’ev and Zaporozhets, 1960: 78).

Leont’ev and Zaporozhets note that sometimes it is enough to give the patient a new task and thus to give him a new motive to fulfil that task (Leont’ev and Zaporozhets, 1960: 78). The dynamics of doing something new requires one’s attention on the fulfilment of the task, rather than the bit-by-bit (discrete) execution of it. So in order that a new task is to be effective rehabilitatively, it also has to be “real” and meaningful to the patient; the required movement needs, in some way, to fit into the person’s individual narrative.

The intention of rehabilitation is to extend the patient’s interactive performance beyond merely the possible extent of the movement itself. External changes in movement, as Leont’ev and Zaporozhets note (p. 78), are often insufficient to change the level of whole functionality. To illustrate this they describe a patient, S., who was admitted for ‘treatment for a grenade wound of the soft tissues of the right upper limb.’ (I should note here that their work was done with wounded soldiers during the Second World War.) The ‘immobilization, the difficulty in moving the injured limb, the contractures and some degree of pain in the limb had led to a situation where the patient had completely ceased using it’ (p. 78). They were unable to engage S. in work in which he would actively use his limb, forget about its weakness and disregard his sensations of pain.’ Occupational therapy was unsuccessful, the patient excluded the injured limb from action and no amount of persuasion of the efficacy of the OT had any effect on the engagement of the limb in action. Necessity,
however, came to the rescue.

Leont’ev and Zaporozhets continue,

On one occasion this patient was by chance allotted to a group which was instructed to collect a consignment of sawing timber for use in the occupational therapy workshops of the hospital from a neighbouring factory. For this purpose they had to cross a rapidly flowing river. Since nothing suitable to enable them to cross was available, and since the journey across the bridge was too long, they decided to join the planks together into a raft, and to deliver them to the hospital in this way.

To their surprise, S. undertook this work with uncharacteristic energy. He at once showed himself to be an organizer and directed the operations. As it transpired in the course of conversation with him, he had spent a considerable part of his life on the river, and looked back upon it with particular pleasure.

At the end of the day he agreed to leave the completion of the task until the next day most unwillingly. The next day he continued to ferry the timber across with the same energy. The most important feature was that the change in his behaviour which had appeared on the river persisted afterwards: it was found in the occupational therapy workshops (Leont’ev and Zaporozhets, 1960: 79).

This substantial improvement spread into every area of his life. He continued, each day, to use his injured limb more energetically and expressed obvious unconcern about sensations of pain. Soon he was well enough to return to the war front.

Proprioceptive knowledge allows us to plan and execute motor tasks, but without a belief that we can engage in them, we are less able to. Our full engagement thus is at once part of our own meaningful life narrative and
a finely tuned repertoire of physiological and conscious responses. Agency is an emergent quality of action. Herein lies a very interesting argument concerning the language of agency (will) and action that I will now examine. It is a set of ideas that are identifiable by a sort of "reverse move". The assumptions behind the ideas are located in the language used to describe Parkinsonian akinesia.

The language of difficulty in the initiation of movement

Having difficulty with the initiation of movement (with no sense of agency) used to be known as aboulia, that is, the "absence of will", but now the term "akinesia" is used. Akinesia is a problematic term because it just means "not move". Aboulia, likewise, is also problematic because of its moral overtones: maybe the person could move if they tried hard enough.

In the neurological literature the shift from the term aboulia to the term akinesia parallels that of the method of defining diseases on clinical observation of symptoms to one that incorporates patient experience. This shift follows a revolutionary path that has seen patients increasingly cared for at home. There are, of course, a number of other components to this shift - many of them economic. The development of effective medication and neurotransmitter research also contributed to the change in the way the akinetic were viewed.

There has also been a noticeable increase in the numbers of educated people, sufferers with diseases who, previously would have been institutionalized, able to speak out and publish articulately about their condition. This pattern follows that of a generally greater number of educated people. Many of these diseases, after all, are late-onset, where
the symptoms begin to emerge long after formal education has been completed.

The way diagnosis reflects ideology is well known (cf. Shapiro, et al., 1988; Sartorius, 1990; Goodman, 1994). I examined this point in chapter two in connection with Tourette’s Syndrome. Diagnoses are thus dense fields of assumptions. A diagnosis of *aboulia* versus that of *akinesia* tells us much about the socio-philosophical climate in which this diagnosis is made.

The terms *aboulia* and *akinesia* express two aspects of the same condition and, though they have inherent problems, as noted above, they are both useful in describing phenomenological states. As Sacks points out,

> Patients so affected [by akinesia] find that as soon as they ‘will’ or intend or attempt a movement, a ‘counter-will’ or ‘resistance’ rises up to meet them. They find themselves embattled, and even immobilized, in a form of physiological conflict - force against counter-force, will against counter-will, command against countermand (Sacks, 1982: 10).

Thus the use of the idea of loss of *will* is an important one and the lack of its use actually impoverishes the clinical experience of these conditions. Here is a condition where the absence of initiated movement is not just an absence, but is experienced as a presence of something intruding in the bodyself of the person. The *aboulie* experience of the Parkinsonian may be experienced as introducing a ‘doubleness into life - an ‘it’ (an “otherness”), with its own needs, demands, limitations’ and will, as Sacks describes it (1995: 73).

Both terms, *aboulia* and *akinesia* have problems. *Aboulia* at once speaks of
an existence of will (or explicitly loss of will) and the impingement by a disease or disorder process of "the other" and akinesia looks like the seizing up of movement and the experience of "freezing". Parkinsonians find it difficult to initiate movement, for, as I have already said, the initiation (i.e. sense of agenthood) of movement is an emergent from action. Once people with PD are moving, unless they are interrupted, they move relatively easily. A theory of will may well have more to do with a theory of disease or disorder as "the other" (a disease that takes away responsibility, or will to move) than with a mystical entity called will. Perhaps the vast literature on the nature of will arose from experiences like akinesia. Some "normal" experiences like the hypnogogic state (that state between waking and sleeping), drunkenness, and fever interfere with our capacity to decide to move. It could also be that kinesis and akinesis are not opposites but descriptions of two different states or two parts of the same continuum.

Agency, that is, a sense of initiating a movement is en-nested in already occurring movement. This idea is supported by the literature on the function of the basal ganglia, as already noted (having responsibility for both motor control, timing, emotion and planning). Movement can be stimulated by meaningful encounters. Meaningfulness, as much as significant actions, is embedded in our physiology. Participation in patterning can be disturbed, as in Parkinson’s Disease, along spatio-temporal lines and the restoration of participation is to re-establish a sense of patterning by providing “prosthetic” patterns (affordances) for the akinetic person. Once this participation is occurring again, then the person may have a sense of agency once more.
Our body's response to patterned *impulsors* in the environment is to pattern itself. Pattern is design in recurring form; that is, it is temporally expressed spaces and places. Implicit in our capacity to participate along "lines" of patterning is our capacity to engage and express spatio-temporal dimensions of being. Those relational disorders that distort time and space also deconstruct this fluid balance of those elements that contribute to the whole process that is the tacit domain of interactive participation. When we examine the domain of interactive participation as it emerges from the embodied self, we realize that far from being simple and easily understood, this is an area of great complexity and requiring considerably more work than has been done thus far by anybody. The insights of neurology and behavioural neurology into this area are increasing all the time, but are by no means yet sufficiently able to account for what is going on when we choose to engage in movement, particularly when, through some disordered process, we have "forgotten" how to move.

The body responds to sets of *impulsors* within the socio-physical environment. This is an active process that embeds itself in the physiology of our being. Past memories are enfleshed and re-enacted in two main ways: when a familiar situation presents itself and/or when a similar physiological state is stimulated in the body. The identification by researchers of what sets of *impulsors* act as *impulsors* benefit those prone to akinesia (e.g. Parkinsonian sufferers).

In the next chapter 'Is it necessary to know the date in order to brew tea?' I shall examine the way in which our *en-nestment* in familiar situations assists the memory for action. This will be considered within the disease
process of Alzheimer's Disease which, as a relational disorder that affects the participation of self with others and the objects of the physical domain, reveals itself by a progressive detachment from engagement in the socio-physical world.
Chapter four

Is it necessary to know the date in order to brew tea?

(The en-nested nature of memory)

Through movement, we engage the world. We respond to environmental impulsors that best afford our participation. Certain characteristics of time and space-place provide such impulsors, as revealed in the last chapter. Specific environments permit people with Parkinson’s Disease to move after their poor level of dopamine brings them to an akinetic standstill. Normal movement, I suggested, becomes clearer once we comprehend better a disease like this. Sense of agency (i.e., of being able to do things intentionally in the world) provide further resources for clearer framing our en-nested condition. Agency, I observed (using the ideas of Sacks, and others), is an emergent property of pre-stimulated movement, but it is not a prerequisite nor “first place” promoter of enaction. This strong claim was identified from studies of Parkinsonian kinesia paradoxa where no amount of desire to move is sufficient to initiate movement, but where external (or internalized memories) of patterns and rhythms can unlock akinetic limbs and re-initiate a sense of being able to move at will.

Another theme, first developed in chapter two, ‘Tourette’s and the Sensuous Impulse’, and to a lesser extent in the other chapters, was the observation of a need for clinicians to develop sufficient insight into the lived experiences of others. There is also needed a sense of participatory mutuality so that the peculiar “that-ness” of disease processes and the “it-ness” of bodies (and minds) of patients is recognized not as foreign but part of the continuum of ordinary experience. This argument developed

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"Remembered melody can disengage akinesia and re-establish a sense of being able to do things in the world."
from Leder's observations about the way the body experiences itself. Subjecthood and objecthood are not so much definitions of self and other, for neither are confined to either the inner boundary nor outer boundary of our bodies (which is, anyway, a chiasm). Objecthood can as readily be found in the recesses of our own bodies as can subjecthood. Pain, for instance, can sometime be felt as alien objecthood, and sometimes as throbbing self. My hands have subjecthood; my adrenal glands have objecthood. My hands, however, can "disappear" from perceptual experience (when in deep thought, hands on computer keys, my focus of awareness is somewhere else). They can "disappear" when disengaged through injury or non-use (as I noted in the work of Leont'ev and Zaporozhets: 1960). Other examples may be found in the works of Sacks (1985); Cole (1995); and Cole and Paillard (1995), for instance. Sacks (1985) writes of a patient of his, Madeleine J., a blind woman with cerebral palsy in her 60s, who had never experienced hands, her hands, 'Useless godforsaken lumps of dough - they don't even feel part of me.' (1985: 56), she said. Everything had been done for her and she had never had to engage the use of her hands. Sacks encouraged the nursing staff of the home Madeleine was in to put her food just beyond her reach, to re-activate the manipulation of these appendages:

'Leave Madeleine her food, as if by accident, slightly out of reach on occasion,' I suggested to her nurses. 'Don't starve her, don't tease her, but show less than your usual alacrity in feeding her.' And one day it happened - what had never happened before: impatient, hungry, instead of waiting passively and patiently, she reached out an arm, groped, found a bagel, and took it to her mouth. This was the first use of her hands, her first manual act, in sixty years, and it marked her birth as a 'motor individual' (Sherrington's term for the person who emerges through acts). It also marked her first manual perception, and thus her birth as a complete 'perceptual individual' (Sacks, 1985: 58-59).
This elderly woman later took up modelling clay, revealing great artistic talent. In Madeleine’s case, it was not that her hands were paralyzed, but that she had not “discovered” them. Movement and meaning go “hand in hand”.

This case and those described both by Cole (1995) and Cole and Paillard (1995) were the result of neuropathies. Neuropathies may be marginal (where a small surface of the body “drops out” of awareness), or extensive (where even the whole body is no longer felt). Cole and Paillard (1995) note that in recent years there have been a number of reports of purely sensory, peripheral neuropathies that have resulted from overdosing on vitamin B6 (Pyridoxine).72 Ideopathic illness and those like Guillian-Barre syndrome account for several other cases (cf. Cole and Paillard, 1995: 247).

Subjecthood and objecthood can also be culturally manipulated. Abram’s focus on sensual engagement and disengagement by cultural denial or emphasis illustrates this. There is an interpenetration of social beliefs, theories and praxes in the experiences, and ultimately, the mobility and flesh of selves. Experience, as noted earlier, is enfleshed, incarnated (cf. Leder, 1990: 1), “absorbed” into our very physiology (cf. Sacks: 1995). This sort of entwinement was illustrated by the möbius strip and the “reading” of disorder, as noted in and through the structure of chapter two. In this current chapter ‘Is it necessary to know the date in order to brew tea?’, I shall continue this line of argument. Such an argument, however, is never distant from any other component of embodiment. The way disorder is “read” is reflected in its classification, diagnoses, and treatment.

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72 Vitamin B6 was often prescribed in the late 1970s for the treatment of morning sickness in pregnant women.
The way disorders have traditionally been “read” in the West has been to abstract out certain characteristics of those disorders; to “dis-embody” them, to some extent. But even the process of disembodying components of disorder, is an embodying process, albeit of dissociation and disengagement. In this chapter, I shall focus on the use of mini-assessment tests of mental (and life) competency performed by health professionals based, fairly often, on cognitive abstracted memory\(^7\) dependent questions tested away from their life experience, life engagements (cf. Soukup, 1996). Unfortunately, men and women are taken from their familiar home environments, from their much loved home (their arm chair, the view from the window, their cat, neighbours, kettle, cups) and placed in a nursing home (strange place, strange people, loss of the familiar, loss of everything that mattered to doing things in an ordinary life) on the basis of their failure of such tests. To be asked to recall the sequences necessary to brew tea, for instance, is not the same as to actually perform the brewing of tea. Mini-competency tests often overlook this fact when they ask a person to describe by mere recall the performance of such a task. Cognition uses frames of reference different to sequential action. We need to recognize the differences between the two. This is my aim for this chapter.

I shall suggest that sequential enacted memory bears strong relationship with other enacted processes. Sequential memory is a sensual situatedness in the nuts and bolts of the world. If we are to understand this then we must pay acute attention to ordinary activities as they are performed in situ.

\(^7\) Casey (1993: 177–194) reminds us that the matter of mind, itself, is very much also a matter of memory.
I shall further suggest that such activities as brewing tea actually gives us insight into the "interior landscape" of embodiment, for to embody the world is at once to *en-nest* ourselves in it and to *en-nest* it in ourselves. As a skill, tea-making captures, in our neurophysiological integrity of skin, muscles, ligaments, nerves, and mobility, the practices of our culture as well as our individual expressions of it. Studying what we do allows us to begin to unravel the multiple relationships we have hitherto taken for granted. Knowing how to brew tea is also actually one of the last so-called memories to decay in people with Alzheimer's Disease, while memory for dates, prime ministers, or streets, decay fairly early in the piece. Alzheimer's Disease thus offers us a useful circumstance for situating an understanding of memory, particularly enacted memory.

Brewing tea is a performance enhanced by being present in a tea-making location that contains objects and spaces, and where a sequence of bodily movements (such as swinging around to get the milk out of the refrigerator) actively encourages a sense of what to do next. Performing these tea-making movements is a skill, as much as is riding a bicycle. As much as a bicycle *affords* a sequence of bodily twisting and circular peddling that coincide with staying upright, so being located in a familiar kitchen *affords* the performance of tea-making. As much as the location of the pedals of a bicycle exerts limitations upon the rider's tendency to fall as well the position of the bicycle frame that - in conjunction with gravity - contains and disperses the cyclist's expenditure of energy, so the location of a bench and the weight of a kettle stimulates an interactive response in the tea-maker. It is possible, therefore, that unlike, for instance, the memory for dates, and prime ministers, a person will be able to make tea for quite some time after they have lost the ability to remember, abstractly,
what is involved in tea-making. So, is it really necessary to know the date, if you are still able to make tea?

The move of *en-nesting* enacted sequential memory in its appropriate context is typical of ecological theorizing (Gibson, 1966; Lombardo, 1987; Reed, 1996) and certain accounts of cognitive psychology (cf. Neisser, 1987, 1988; Varela, Thompson and Rosch, 1993). It also bears a strong similarity to the principles of Tantrism and to a lesser degree the strategy of ‘Chinese Body Thinking’ (cf. Wu, 1997). In chapter one, Chinese Body Thinking was described as viewing us as always connected with the world, at the point of bodily engagement - in the midst of things. While Tantrism is more a sophisticated philosophy than Chinese Body Thinking, I shall in this chapter introduce some of the principles of Chinese Body Thinking in order to help us to better understand the concept of *en-nesting*. I shall also situate my argument according to Gibson’s account of *affordances*.

**Contributing another way of thinking: Chinese Body Thinking**

Chinese Body Thinking⁴ (from its Tantric Buddhist, Taoist and neo-Confucian origins) offers us a way into exploring the central relationality of the body with things. It does not, ultimately describe embodying the world, but nevertheless provides us with a useful way of bridging the Western Cartesian emphasis of an “it-ness” of the body to a useful “us-ness”, i.e., a sense of being together in one world (important in a diagnostic embodied phenomenological⁵ approach, as opposed to merely a phenomenological approach). Part of the success of Chinese Body

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⁴ There are some problems with Chinese Body Thinking that will be explored later on.
⁵ The phenomenological approach is a method whereby doctors, by an effort of imagination, use their own life experience to enable them intuitively to grasp what the patient is suffering: such empathetic perception of the patient’s present predicament in living calls on the clinician to attempt a feat of fellow-feeling by which understanding of the patient derived from the other three approaches [description, analysis, and interpersonal] can be extended (cf. Macleod, 1984: 678).
Thinking is its situatedness in place. This situatedness plus a sense of "us-
ness" may be sufficient to break down some of the falseness current in
health assessment practices - which is not to say that this is not already
underway in some sectors of medical practice.  

Chinese Body Thinking (a term coined by Wu, 1997) takes account of the
concrete, situated now, which starts with this body, this per-formative life:
per = "through", "form"; a "through life forming" (cf. Wu, 1997: 17) and
proceeds from the 'grain in the jade-and-wood of things (li- principle)'
(Wu, 1997: 304) into relationality. Li refers to organic order ('asymmetrical,
non repetitive, and unregimented order which we find in the patterns of
moving water, the forms of trees and clouds, of frost crystals on the
window, or the scattering of pebbles on beach sand' (Watts, 1976: 46). As
such, the way of li is quite different to the Western concept of order, that
compares objects to Pythagorean harmonies and Euclidean geometric
forms. Watts observes, for instance, that,

Bubbles do not interest one merely because they congregate in hexagons or
have measurable surface tensions. Geometrization always reduces natural
form to something less than itself, to an oversimplification and rigidity
which screens out the dancing curvaceousness of nature (Watts, 1976: 46).

The way of li goes to the complexity of a thing and thus to its
relationships, recognizing that all these relationships are still the grain of

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66 This is changing in Australia with the introduction of medical education which emphasizes the
partnership model of the patient-doctor relationship. Such changes may be found between certain
doctors and their patients. Anecdotal evidence suggests that some doctors are more willing to
speak about their own health, which facilitates better communication with their patients.

67 Gleick notes of Euclidian thought that:
The shapes of classical geometry are lines and planes, circles and spheres, triangles and
cones. They represent a powerful abstraction of reality, and they inspired a powerful
philosophy of Platonic harmony. Euclid made of them a geometry that over the last two
millennia, [this is] the only geometry that most people ever learn. ... [But] Clouds are not
spheres ... Mountains are not cones. Lightning does not travel in a straight line. The new
geometry mirrors a universe that is rough, not rounded, scabrous, not smooth. It is a
geometry of the pitted, pocked, and broken up, the twisted, tangled, and intertwined
(Gleick, 1987: 94).
things. The interactive network of embodied beings-in-the-environment constitutes the world. Body thinking, as Wu describes it, 'always moves and expands from the bodily centre to the Heaven and earth, corresponding therewith. There is an expanding reciprocity and correspondence between the bodily and the universe' (Wu, 1997: 244). The bodied self is always 'situated, perspectival, contextual, limited, open-ended, and horizontally related, that is, within a horizon which is related to a further horizon' (p.243).

Chinese Body Thinking, while emphasizing the concrete dimension of embodied being, is as structured, careful and coherent as Western philosophy. Its genius, as Wu suggests, 'lies in that it accomplishes the task of understanding for acting and living without the "gift of Euclid"' (1997: 13). It has a logic that is not rationalist, though it has form, structure and symbolism. The concepts and images are abstract, albeit grounded in metaphor (cf. Allan, 1997: 25). Chinese style Body Thinking is a tradition of thought where there is an 'ever emerging and merging of notions and things (such as the yin-yang, the I-Thou, the here-there), opalescent layers of implications in simple facts and descriptions ..., sinuously following things, letting them grow, and thereby itself growing with them,' as Wu puts it (1997, 13-14). Chronological time, as Allan notes, for example, 'is not counted from a single date, like the birth of Christ, but again and again from repeated historical beginnings - from the foundation of a dynasty, or the assumption of a royal reign within that dynasty.'78 On a personal level, Allan continues, 'individual lives are, of course, bounded by birth and death, but the life of each person is also regarded as a link within the continuum of the ancestral lineage' (Allan,

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78 A recent (July, 2000) example of this "rewriting" chronological history, was a Chinese commentator speaking on the radio reflecting on the life of Chairman Mao. Mao, according to this man [with a very shaky understanding of current technological history], had his own web-page!
1997: 12). There is thus a circularity rather than a linearity, a sense of flux and flow, but as with flux and flow (in the image of water, for instance) there is a coherency that runs through the ‘thick and thin of daily ongoing’, there is a sense of partnership in the ‘history of the community, and throughout the skies and the earth. Here natural symbiosis between Nature and humankind obtains’ (Wu, 1997: 14), at least according to this tradition of thought.

There are, however, severe limitations to Chinese Body Thinking. Its strength, for instance, of accounting for the immediate condition and the ease of re-making the past as though it was of this immediate condition (cf. Gleik, 1987: 94), is also its weakness. Those using Chinese Body Thinking exclusively are bound to the immediate moment. Its method of remaining in the here-now soma-specific prevents it moving to the innovational and prospective realm of possibilities. In order to achieve such a thing, Chinese Body Thinking has to perform a curious reverse move (cf. Wu, 1997: 201). Instead of actually achieving the new, Chinese Body Thinking renovates the old. Several examples of this may be given. Taking, for instance, the philosophy of Tao, where nature is observed in its “is-ness” (its flux and flow; its lack of stasis), attempts are made to make nature reflect Tao (to hold nature to the ideal of perfect nature). In other words, there is an attempt to “out-Tao Tao.” I observed that the young trees in Nanjing in China were bound in rope and the branches uniformly trimmed in the fourfold manner. Women’s feet used to be bound to conform to the size of perfect womanhood. The “out-Taoing of Tao” is illustrated by an inscription (thus held in bronze) on the side of a royal bathtub: sheng sheng pu hsii. These ironical words appear in the Classic of Four Books and, translated, mean being ‘reborn, growing,
maturing; being renewed day after day again and again’ (Wu, 1997: 205).

Western-style abstract thinking with regard to the human body (as in medical science), in its emphasis on universals and systematic observation of phenomena, by contrast, is open to development, change and innovation. The tradition of Chinese Body Thinking cannot readily accommodate future oriented possibilities. Both traditions, however, can prove very valuable in the clinical situation. Later on in this dissertation I shall suggest that Tantric Buddhism provides us a better map for understanding flow and relationality than Chinese Body Thinking. For the moment, Chinese Body Thinking serves to introduce the concept of li in relation to the en-nested activity of brewing tea.

Li, as noted above, describes an organic order in the denseness that is the field of relationships. Li is a valuable concept as it allows us to recognize the degree of complexity of en-nested interaction - given that Western thought still labours under the belief that little can be said about our engagement with our environment, or that it is, at most, a very simple uninteresting matter. This prejudice is evident in many spheres, including that of clinical assessment.

The li of brewing is en-nested in not one field of relationships, but many. There is a social history of silver services, of polite etiquette; a kindness to a neighbour; a practice of a lifetime; a thirst quencher after a morning of shopping; a part of a meal; an accompaniment to watching television; a remedy for sleeplessness; a performance of competency for a social worker, etc. Any one of these is a world in itself. The act of making tea is also a li of multiple actions and a density of skilled achievements. I shall
explore the latter in what follows.

Tea-making as the ‘grain in the jade-and-wood of things’ (li)
Making tea is a multidimensional organic activity, consisting of many parts and tacit knowledges (a thing obscured by recipe books?): identifying ingredients, knowing when to use them in the right order, having a body “knowledge” for sensing when there is enough liquid in the various vessels, when something looks right, the sense of distance between objects, and so on. As such it is more than an action that requires remembering the ingredients, the serial order and location of the ingredient; it requires physically performing these actions. Tea-making is situationally dependent (a situated activity) where the doing of it actually stimulates its own performance: ‘motor information contributes to the enactment effect’ (Engelkamp and Zimmer, 1995: 242) and, as such, the mimicry or verbal recall of these actions does not accurately measure actual competency as Rusted, Ratner and Sheppard (1995: 398) point out.80 Tea-making is also depended upon present desire (“I would like a cup of tea”; “I would like to give my guests cups of tea”) and/or habit (“It is eleven o’clock, time for a cup of tea”). Tea-making can be used as a marker of time (“It is 7 o’clock; time to have a cup of tea and breakfast”). There are culturally different ways of making tea, also. An Anglo-Australian would probably put milk, or a slice of lemon, and possibly sugar in their tea; a

80 The Golden Wattle Cookery Book (circa 1940s: 39) has this list of instructions:
1. Use freshly boiled water.
2. Heat teapot with boiling water.
3. Empty teapot, put in tea, allowing 1 teaspoon for each person and 1 extra.
4. Pour on boiling water.
5. Allow to brew 3 to 5 minutes.
6. Too much brewing draws out tannic acid.

This account does not include much detail, and unless the maker already knows how to boil water, the task would be very difficult indeed. (Note the stern warning regarding ‘too much brewing’. I imagine an admonishing no-fun pale faced aunt rapping me over the knuckles for brewing the tea too long.) Further, there is no indication of how to prepare the cups. The tradition of putting the milk in first might not be known, for instance. The tradition stems from the recognition that porcelain cups break when hot water is poured into them unprepared.
80 It is therefore disturbing that measuring competency by verbal recall only is still regularly practised.
Tibetan would put in rancid butter; while a Japanese would make a light green brew and drink it without accompaniments. Individual tastes would also dictate how the tea would be made. My method may well be quite different from yours, even though certain elements of the process would have to be consecutive and therefore universal. For instance, I might add the milk after pouring in the tea, or I might put the milk into the cups first and then pour the tea. Which goes first is a matter of the ownership of fine china versus the sturdy mug (perhaps, thus, also a matter of social status real or pretended). Pouring milk first into a fine china cup is supposed to protect the china from breaking. Boiling the water and placing it into another vessel already containing the tea is not optional. [But, as I write this, I think of all the other ways I might proceed. I might boil tea and water together, as is the custom in some parts of the world.]

For the sake of simplicity and for the sake of situating this account, I shall consider making a pot of black tea as I might do it. I shall endeavour to include as much detail as I can, which is a lot harder than one imagines (in this case, it is easier to do than say). Making a cup of tea for myself is, though, different from making it for visitors (another consideration for those measuring competency). With visitors present I might well be nervous and I would be keen to present the tea and its process well because I might want to present myself as a competent tea maker; to have, as an enduring characteristic, all the characteristics of an orderly, capable person (cf. Goffman, 1971: 28). I might well make a pot of tea for visitors (after offering them coffee), but pour hot water over a tea-bag in a cup when on my own. I may well use my best porcelain china cups for visitors, but a mug for myself. The status of the visitor would matter: were
they people I knew well, or kindly (or stern) strangers? If they were good friends, I would probably make tea more like I do for myself - in mugs, with tea bags. I would also probably offer them a variety of herb teas. Their status of being good friends allows me the opportunity to not have to perform quite so much; they are like me, therefore I do not have to pretend a normal competency I may or may not have. For strangers, however, (who, perhaps, have come to assess my mental competency), I am more likely to present a more socially idealized pattern of processes than on my own (cf. Goffman, 1971: 44). I am also less likely to indulge in extraneous things, like playing the piano while the kettle boils. In what follows, I shall prepare a mug of tea for myself only.

Making tea
I have begun making a cup of tea. I reach up and get out a mug from the hooks above the bench, weigh the kettle to determine how much water is in it, side step to the sink, turn the cold water tap on, add a little bit more, swing around 180° back to the powerpoint and turn on the electricity. Then I swing around and take a single step to the refrigerator to get a carton of milk. I know precisely how to do this. My movement is more like a dance, because I've done it thousands of times before. I take the milk carton from the refrigerator shelf. I swing back to the bench. I reach up above the line of hooks to the shelf to a packet of tea, take it down and put two teaspoons of tea leaves in a large glass teapot and, while the kettle boils, I do something else. I hear the kettle whistle and turn itself off. I pour the boiled water over the tea leaves, let it colour the water a little, I realize that to hold the pot to permit the release of exactly the right amount of tea for my mug, I have to hold it at a certain angle and adjust it as I pour. Once I enter into this exact relationship, the discomfort I initially
felt goes and pouring is easy. I momentarily lose track of time and the separate distinctions of hand and teapot\(^{61}\) - but then I finish pouring. Then I add milk. I carry the mug to the table where I work, sit and begin to drink.

**En-nested in situ**

Making tea is series of situated knowledges (cf. Haraway, 1988). These are knowledges obtained from being in situ, on location, present in the act, as it were. They are not information ascertained at a distance, from some universal point (cf. Haraway, 1988: 575 - 599), separate from being in a time. Being in a body in a time, in a history, is interacting from definite, if hard to articulate, perspectives. As Wu says,

> The body is always specific - if not here, then there, if not meditative, then dynamic - now. And the body can move - in location, in temper. It changes, if not now then soon. Finally the body can retain and modify (“grow”) what it has (experienced a while ago). It can also purposely wipe out what it has gone through. These bodily traits enable the body to reject, retract, revise, and replenish its various previous stages of experience, which is forever from a perspective upon another perspective, and then upon another one (Wu, 1997: 246).

Being in a time, in a history, a place, in flux, in interaction and being intelligent allows us (and other animals) to be in other places also, other than where we currently are by the capacities of imagination and memory. Yet even these “not being present in the here-and-now moment” activities of imagination and memory are stimulated by present-moment locales and times and histories. Imagination and memory, as much as any other embodied activity, are situated knowledges that reflexively alter the course of how we interact in the present. The recollection of things past

\(^{61}\) I enter into what Csikszentmihalyi calls ‘flow’ (1988).
are usually loaded with emotion - which gives them power to transmute present conditions. ‘Our stretching back into the past in memory remakes and enriches our bodily life; our recollection re-collects our life’ (Wu, 1997: 247).

To study memory, or any other embodied function, we have to “go inside” our own bodies. We need to do this in order to break the spell of discussions of interactions that depend entirely on perception or language (most analyses of intersubjectivity are linguistic). While it is ‘through the bodily surface that I ... engage the world’, as Leder says (1990: 11), our actions of touch, movement, olfaction, sight, taste, proprioception, etc., originate within our bodies. We do not, in the main, experience the perceiving organs as they participate in the perceptual act (there is a “disappearance” of the perceiving organ and a highlighting of the thing perceived). We only experience the perceiving organ when it is attacked in some way by the thing it is perceiving, e.g. a noxious gas that is at once tasted and smelled and tears at the mucus linings of the nose and mouth. Being in the world is engaging with it with our bodily surfaces - and the organs within - in a largely unbroken interactive way. Most parts of the body “appear” and “disappear” as they engage and disengage in self-perceptual interactive encounters. The brain, however, does not know itself; has no means of self perception. Leder speaks of “the organs within” as composing the ‘recessive body’, and the brain as the most recessive of all. Yet we still need to understand it, even though it is beyond its own reach, as it were.

Unlike the other hidden organs, the brain has no capacity for experiencing its own existence, knowing its own pain; it is a non-self disclosing organ.
Its properties allow everyone, except neurophysiologists, to ignore it. The brain appears only in autopsy, brain surgery, diagnostic imaging techniques, and is depicted in textbooks. Indeed, any attempt to draw it into phenomenological discussions usually attracts the response that such an enterprise is reductionist - as if we cannot learn anything about being in the world from such an organ. Such an exclusion, as Leder points out, perpetuates the idea that human mentality is 'immaterial, disembodied, as if of another order of things' (1990: 115), thus continuing a Cartesian mind-body dualism.

Mentality, however, cannot solely be equated with brain function. It is ultimately distributed throughout the body and, as Connerton (1989), Jackson (1996), and Abram (1997) point out, throughout society and our technologies.\(^8\) After all, as Leder (1990) reminds us,

> It is not the brain alone that formulates speech, turns a discerning eye upon the environment, moves intelligently to accomplish its projects. For this, mouth, eye, and limbs are needed as well, our entire corporeal presence taking in and acting upon the world. The lived body is mentalized through and through, all of its organs participating in a uniquely human intelligence (Leder, 1990: 114).

>'The whole body thinks and knows' (Jackson, 1996: 34), yet it does so because of its co-inherent relationship with the brain and nervous system. We do not have a body and a brain; we are a united entity. Our brain is not an isolated organ housed in a skull separate from the nether regions of our body; there is here rather a far-reaching network of nerves spreading out like branches of a tree interweaving into muscles, organs and flesh.

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\(^8\) Connerton (1989), thinking about writing, observes that it 'has an irreducible bodily component. ... Everyone who can write proficiently knows how to form each letter so well and knows so well each word they are about to write that they have ceased to be conscious of this knowledge or to notice these particular acts of volition. Each of these acts, none the less, is accompanied by a corresponding muscular action' (pp. 76-77).
Brain, neurones, and flesh form a Möbius strip, where inner and outer become one. The brain and nervous system participate in the whole body, visible and invisible.

The process of learning and remembering what is learned is likewise a knowledge that extends throughout the whole embodied self. ‘It is in action... that knowledge is both gained and given expression,’ says Kensinger, quoted by Jackson (1996: 34). When I need to put milk in my cup in the tea-making process, I swing my body round to get at the door of the refrigerator. I have done this many times before and know precisely how far I must extend my reach and body swing. This learning has become part of my movement repertoire and, according to Edelman (1992), has established a definite pattern of the neural pathways in my brain such that what is learned and remembered reinforces those pathways. These pathways establish ‘maps that “speak” back and forth’ (Edelman, 1992: 29), contact “addresses” for accessing all the distributed, multimodal components of memory. These pathways are flexible and plastic, and very receptive to minute changes in the body, different choices, and novel encounters. They are not fixed maps and there are no absolute remnants of experience engraved, as it were, in the flesh of the brain.

There are areas or “organs” in the brain, however, with fairly definite functions. This is not to say that other parts of the brain cannot do not take over certain functions should a designated part be injured by trauma or stroke. As I have already done in other chapters, I will here incorporate neurological data (an act that embodies a theory of the brain) in order to

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63 There is here relationality. ‘Every identifiable change reaches consciousness already loaded with its relations to what has preceded it, as on a taximeter the distance is given already converted into shillings and pence. At every moment, previous attitudes and movements provide an every ready standard of measurement’ (Merleau-Ponty, 1962: 140).
point to the specific areas that are associated with memory. Much of this account will be taken from Bradshaw and Mattingley's (1995) book on neurology. This account will, of necessity, read in a somewhat dry manner. The reason for this is that, as I have already noted, the brain, because of its entirely recessive nature, is only known through neuroscientific means: scans, surgery and autopsy. To discuss areas of the brain using this information is to engage in an essentially unemotional exercise.

Memory is associated with the regions of the brain known as the medial temporal lobe, hippocampus, amygdala, its associated limbic regions, the thalamus and mamillary bodies (called the diencephalon), and the basal forebrain. This is a parallel, distributed, associative network which sorts and consolidates new memories and retrieves old information, by cueing associated responses, partial or otherwise (cf. Bradshaw and Mattingley, 1995: 211). Long term memory, important for integrating present experiences with a continuing sense of continuity of past and present (or what is known as working memory), is thought to be located in the medial temporal cortex. The less plastic, more consolidated, quality of long term memory is thought to be located in the anterior temporal cortex.

The medial temporal lobe (which contains the amygdala) a limbic structure, is said to be important for other kinds of memory including emotive responses such as conditioned fear, feeling-type memories and a continuity of stimulus valance. The cingulate regions which connect to the amygdala and hippocampus are important in both emotional responses and memory, and have a bearing on a continuing sense of self (the personality).
The diencephalon is thought to connect the temporoparietal “addresses” of verbal and non-verbal information to a sort of executive function responsible for controlling attention, planning, and the selection of strategies, goals, and action sequences (Bradshaw and Mattingley, 1995: 213). Damage to this area would have a strong detrimental effect on the ability to make tea. Another area, the basal forebrain (a primary source of cholinergic nerves which release the neurotransmitter acetylcholine, implicated in communication between the parasympathetic system and muscles) contains the media septal nuclei, the diagonal band of Broca (the zone associated with language) that projects into the hippocampus and the nucleus basalis of Meynert (within the substantia innominata), which projects into the front, parietal and temporal lobe. The basal forebrain relates to the medial temporal cortex. Damage to this area causes not only memory loss for names and locations but also personality disorders.

From this brief neurological account it can be seen that many parts of the brain implicated in the capacity to remember things, also have a bearing on the control of muscles and nerves throughout the body. Remembering is, therefore, not as much purely a mental process as we have collectively been led to believe. Further, there is no mentalism that is not associated in some way with the rest of the body. This insight has a bearing on how we assess memory loss; what tools we use in our assessments. Such an account also directs us to see that memory for action (that is, enacted memory) as intricately linked with other kinds of memory, such as memory for names and location, and yet enacted memory has other components as well - components we are only now beginning to understand. Alzheimer’s Disease research provides us with a useful way
of understanding the components of enacted memory.

Alzheimer's Disease
Identified by Alois Alzheimer in 1906 as a separate disease from the normal ageing process (cf. Woodruff-Pak, 1997: 110), the degenerative process of Alzheimer's Disease permits us access to an understanding of the memory for actions, such as making tea, as seen holistically and in situ with the sociophysical environment. Alzheimer's Disease is a progressive disease of 'dementia characterized neuropathologically by extensive loss of neurones and the presence of amyloid-containing senile plaques as well as neurofibrillar tangles' (Woodruff-Pak, 1997: 113). Memory loss, an impaired learning capacity and inappropriate emotions are the dominant features of this disease. Indeed, in Alzheimer's patients, it is possible to observe the unravelling of the memory process.

The diagnosis of Alzheimer's Disease has been, until recently, largely a matter of guesswork. The only way a definitive diagnosis could be made was by way of autopsy! Now the diseased brain may be observed using neurotechnology, but even this is not sufficient. Other tests, of serum, blood, hormone and behavioural tests are required (cf. Woodruff-Pak, 1997: 114).

Neuropsychologists usually identify a seven stage progression in the onset of AD. In the beginning the person becomes unexpressive or responds inappropriately and there is a 'mild impairment in memory and semantic knowledge capacities' (Woodruff, 1997: 115), and spatial abilities. Often they will write notes to themselves, but over time, as the disease progresses, these notes become indecipherable - which increases
the distress of the person involved (Woodruff-Pak, 1997: 115). In Stage (2) of the disease the patient is forgetful of where familiar things have been placed and the names of well known faces and places. Stage (3) is the onset of confusion and readily distinguishable deficits appear. Other people begin to notice a decline in work performance, things get lost and the patients cannot remember what they have just read. In stage (4) the patient may deny cognitive losses are occurring, declaring their lack is due to loss of interest. The question, “Who is the current Prime Minister?” might be responded to by “Who cares; I’m not interested in politics.” Confabulation is another characteristic of this stage. AD patients not only forget current events, but their own personal history. They are unable to perform simple serial subtractions and they have difficulty looking after their own finances, travelling and managing their daily affairs. The hardness of it all results in such patients withdrawing from situations that are too challenging for them. People at Stage (5) can no longer do without assistance. This is designated the dementia (Latin: demens = ‘without mind’) stage. Where they live, what their telephone number is, what the names of their extended family are - these are forgotten. The ability to remember their own name, and those of their immediate family, are retained. Remembering the order of clothes to be put on may be forgotten, but remembering how to eat is retained. Stage (6) heralds the loss of memory of the name of the spouse or child responsible for their daily care. Memory for recent events disappears along with much memory for past experiences. They become unaware of time and place, night and day; and have difficulty counting to ten (seriality crumbles). They also become incontinent. In stage (7) there is the loss of verbal abilities, cognitive functioning, the ability to walk. The patient must be hand-fed and toiletted. The brain no longer controls the body, and the patient
eventually dies in this extremely deteriorated state' (Woodruff-Pak, 1997: 117).

As noted before, the ability to make tea is one of the last so-called memories to disappear in Alzheimer patients (Rusted, Ratner and Sheppard, 1995: 398). Why would this be the case? What is involved in enacted memory, and thus, by extension, parts of the skill of tea-making? It is important we know this in order that we do not continue to assume that enacted memory is the same as cognitive memory. The use of mini tests for measuring life competency depends on this differentiation.

Assessing memory in the light of Alzheimer's Disease
What is memory and how do we assess other people's capacity for remembering things? I shall attempt to explore these questions firstly by briefly examining a frequently used and abused tool for measuring cognitive memory. I shall then examine the first question a little further by thinking of it more as an embodied activity, than a purely cognitive one, using tea-making and Alzheimer's Disease as a backdrop.

Psychologists, doctors, social workers, and community nurses commonly and mistakenly use a single tool to measure mental competency. This is the mini mental status test (cf. Soukup, 1996). Only designed as a screening device, it is not a particularly accurate tool for mental competency, and is even less suited for measuring competency in elderly people. A psychologist particularly critical of the widespread use of the test, Soukup notes, in his account of what the test aims to assess, that it is inordinately unfair in its attempt to measure people with AD. The administration of the test takes from ten to twenty minutes. The subject
must identify the ‘year, season, date, day, and month’ and one point is
given for each correct answer (Soukup, 1996: 47). Subjects who are elderly
and have spent a long time in institutions inevitably achieve poor scores.
(If everyday is the same and you rarely go outside, how can you know
such temporal things?). Elderly subjects are also likely to be very anxious
and so do poorly as a result of this. They may also have speech and
hearing difficulties which further confound their scores. Subjects in the
second task must identify the state, country, town, name of the place they
are living in, the floor, room number or their home address. One point is
given for each right answer. Again, this test overlooks the possibility that
the subject may have moved many times in a short space of time and is
confused about their location. Soukup points out that if a subject has
difficulty answering questions from tasks one and two, they will lose ten
points, which places them in a mild to moderately impaired dementia
category. The third task requires the subject to repeat three words such as
‘chair, ball, and blue’, one point being given for each correct answer. If the
subject fails to hear a word, the word may be repeated, but points are not
awarded. Another test is then given. This requires the subject to subtract 7
from 100 and then continue subtracting 7 as far as possible. This test
requires the subject’s attainment of a certain educational level and the
presence of language difficulties (even a poorly fitting dental plate) can
result in poor performance. Interestingly, an alternate test is to spell the
word ‘world’ backwards - which requires quite a different set of skills to
the numeracy test. The next test is worth three points. The subject must
repeat the three words previously given, ‘chair, ball, and blue’. A
language test follows, where the subject must name two objects, such as a
pencil and a watch; then they must repeat a statement such as ‘no ifs,
ands, or buts’; follow a three stage command; write a sentence; and read

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and follow a command, such as ‘close your eyes’ (Soukup, 1996: 48). The final task on the mini mental status examination requires the person to copy a design. This exercise is worth one point (Soukup, 1996: 48). This latter exercise may be confounded by a number of things: the person could be on medication, such as antidepressants that interfere with fine motor skills; the person may have had a stroke; or she could have poor eyesight - for instance.

The mini mental status tasks - interesting though they are - are not really equipped to accurately determine whether a person can look after herself in her own environment, at least at a minimal level. Is it necessary to know the date in order to brew tea? Counting backwards from 100 may well be difficult for a person, but if they are able to put two spoonfuls of tea leaves in a pot, then a good cup of tea is to be had. Certainly, making tea in a familiar surrounding is quite different from the ability to care for self outside the home. Stepping outside to shop is a very challenging thing to do especially for an AD sufferer who easily gets lost. If food and other supplies are regularly provided, though, such a person may well manage to function fairly well.

Mental competency tasks are designed by studying non-elderly people with normal functioning. This means that there are no adequate tests developed especially for elderly people that take account of their very special needs. It may be, after all, that as we age we utilize skills very particular to our level of interaction and changing bodily shape and degree of flexibility.

The mental status test does not recognize non-cognitive memory skills,
nor the *en-nested* nature of memory. It is designed, supposedly, to 'evaluate cognitive abilities such as memory, orientation, attention, concentration, and language function' (Soukup, 1996: 82) and as such cannot be used in the way it is frequently employed, i.e., to diagnose disorder at an organic level that involves the whole body, not just cognitive skills. Soukup says that a much better account of a subject's competency levels can be ascertained from the use of the clinical interview. The clinical interview is a lengthy procedure which may last between one and three hours and thus it may be considered too time consuming. Unlike the mini mental status test, the clinical interview is a situated activity that employs normal and familiar interaction as part of its being. The mini mental status test is a highly abnormal social interaction that is situated in a "place" where the assessor is in a position of power and the subject in a position of powerlessness. The mini mental status test assumes that knowledge is an abstract thing disconnected with everyday reality. The clinical interview connects knowledge to situations, places, contexts, and ideas in such a way as to allow both participants some degree of equal access to such knowledges.

Making tea is similarly an enactment of situated knowledges in a real place, space and milieu. Like the clinical interview, where the subject might be drawn into a conversation about her family and favourite pastimes, the action of making tea as a clinical tool for testing competency, is a familiar action that demonstrates a number of memory capacities which might not be accessible in the disjointed context of a mini mental status test. As Merleau-Ponty (1962: 140) puts it, 'Our bodily experience of movement is not a particular case of knowledge; it provides us with a way of access to the world and the object, with a 'praktognosia', which has to be
recognized as original and perhaps as primary.’ Our doing is our knowing through doing (the meaning of the word *praktognosia*). To be able to say, “This is room number 45, and it is 10 past 3 in the afternoon”, is to be able to locate oneself in a place and time; to have an experiential link with such things. If my experiential link is complicated by my anxiety of being in a strange room with a, perhaps, unfriendly clinician, I may have great difficulties being able to identify places, times, and other - to me - unrelated things. Tea brewing connects me to this time, this place, these ingredients. As I engage with them, I do not need the symbolic, objectifying functions that I must employ when performing a mini mental status test. ‘My body has its world, or understands its world’ (Merleau-Ponty, 1962: 140) in the doing of making tea. Making tea connects me with the ‘grain of the jade and the wood’ of here-now somatic things. By this is meant a sense of being part in both complexity and organic order.

Tea-making, an enacted memory, does, however, incorporate some of the tasks measured by the mini mental status examination, such as naming, locating, performing serial permutations (like the “serial seven” test), and intention. It also requires the subject to direct her attention for not insignificant periods of time. Despite the obvious benefits of situating the measurement of these memory varieties in a functional test (that is, getting the subject to actually make tea), many tests require the subject to mime or give a verbal account of the steps to be undertaken when making tea. A verbal account or a mimed performance does not grapple with the weight of the kettle, the faucets at the kitchen sink, the texture and quality of the tea leaves, the smell of the milk, and the delicacy of the porcelain cups. Those who use approximate accounts, like verbal recall and mime, seem to be asserting that there are ‘pure’ forms of action or that action is
no different from cognitive process; that recall of action is as good as getting one's fingers hot on the side of a cup and knowing by sensing.

Enacted memory research

Enacted memory research has received considerable attention since the early 1980s (Engelkamp: 1997). Many of these studies have mostly examined the memory for the performance of simple actions (subject-performed tasks: SPT). Subjects recall and recognize more action if they have participated in that action, than if they have only heard about it (cf. Arar, Kolic-Vehovec and Molander. 1997). This SPT effect, as it is known, is attributed to non-verbal encoding. Bäckman, Nilsson and Chlom (1986) suggests that this encoding is a very rich multimodal one, consisting of motor and sensory input. Zimmer and Engelkamp (1985) ascribes the SPT effect as mainly due to motor encoding, as they claim to have found the same results from studying people performing the tasks symbolically, i.e., overtly but without real objects. From this they went on to ask the question whether the SPT effect is due to the actual performance or the plan to perform the action. The results of their 1984 study suggested that both planning and enacting led to better recall than planning on its own. Koriat, et al. (1990), and contradicted by Ratner, Padgett and Bushey (1988), found that planning to perform a verbal task and remembering that task was easier than recalling the task verbally without planning. In other words, planning an action by going through the task verbally may help in the performance of that task. Enacting the task, as well as planning it, facilitates the good performance of it. Arar, Kolic-Vehovec and Molander (1997) extended this work to include the effects of familiarity and emotionality on memory for actions (SPTs) and found a positive correlation with these variables. They also confirmed that SPT encoding
was stronger than VTs (verbal encoding conditions).

The actual bodily movements are thought of as actually permitting much of the fulfilment of the requirements for the recall of each segment of the activity, as well as the whole process. As Rusted, Ratner and Sheppard note, action memory ‘benefits from the hierarchical nature of action which provides a structure for organizing recall of individual actions required to achieve a predetermined goal or outcome’ (1995: 398). This structure offers an impetus to recall; something that has been frequently demonstrated in memory research studies. Adults more reliably recall actions from a structured event than an unstructured one. Rusted, Ratner and Sheppard (1995) also note that ‘subordinate events are,’ likewise, ‘better recalled, and make better cues for recall, than do subordinate actions’ (p. 398). In terms of tea-making, a person is more likely to remember the subordinate events in the tea-making process, such as how much tea to put in the teapot than the angle of hand movements necessary to execute such an action. This is because the position of the hand movements of that action have no meaning except as part of the action. How much tea may be poured during this performance cannot be known in any way except as part of this performance. The position of hand movements belong to the tacit dimension of doing tea-making, and as such do not, of themselves, stimulate recall of the whole action. The event of putting tea in the pot, on the other hand, is tied to the meaning of the whole action. Whether or not, in this example, the event and the action can be truly separated, is debatable - but in terms of giving a verbal account of what is required in making tea, the event of putting the tea in the pot is more likely to be mentioned than the way in which the hand is held in order to do it. In other words, such an account permits us some insight into what is
considered cognitively important in the recall process, and what is most likely to be overlooked. As such, the memory for actions, as in this account, or in remembering how to ride a bicycle, is not - at least in our society - a valued thing (an exception being the movement repertoire of sports people).

Rusted, Ratner and Sheppard (1995), like many other researchers, were not interested in the actual performance of making tea, but only in the recall of the process of tea-making. Amnesiacs were asked to recall the steps involved in activities such as making tea (Rusted, Ratner and Sheppard, 1995). Motomura (1994) required his subjects to play-act tea-making. Yet recall for action is not the same as performing the action. Taylor (1994), for instance, used an earlier devised test devised by Kertesz and Hooper in 1982 (cited by Taylor, 1994) to measure motor apraxia where the subjects mimed several performances of the tea-making type of serial action. The substitution of pantomime for actual action (which is a whole body interactive process complete with touch, capacity for determining weight, etc.) is an abstraction that is probably too far from a genuine active performance, as I have already observed.

Engelkamp, Zimmer, Mohr, and Sellen (1994) noted that verbal recall and motoric recall are different and that the former is less accurate than the latter. Engelkamp and Zimmer (1995) also found that recalling previously performed motoric actions is easier than recalling verbally delivered instructions for those actions. Tests for dementia, such as that of Alzheimer’s Disease, to determine, for instance, whether they should go into care, should therefore be carried out in situ, rather than be measured by verbal account only. Testers should be aware of what they are
attempting to measure.\textsuperscript{4}

Tea-making as physical performance

Making tea is a series of skills to be learned through doing. Unlike certain other skills, such as playing the piano or performing gymnastics, making tea is learned in situ and in toto. Even when making it for the first time, there is usually an end result: cups of tea. When preparing to perform at the piano, an inordinate amount of time is spent learning small movements in the musical score from the first time as a beginner and even as an advanced player. Chains of movements are learned and "strung" together. The final result is a smooth, accurate performance of the whole work. This is played without hesitation or going back to the beginning of a melodic phrase (to do so interferes with the 'realization of the score' (cf. Bensman and Lilienfeld, 1991: 51). Making tea is not learned in "phrases" of movements, but as a whole - even if isolated parts of the activity may be performed separately and in other contexts.

Making tea is not like gymnastics in the main, in that in the performance of gymnastics (unlike playing the piano) many movements once proceeded with cannot be interrupted, 'the individual commits himself, for that moment, to final and irreversible activity' (Bensman and Lilienfeld, 1991: 52): a back somersault from a pole-vault cannot be halted mid-air. Most points along the path of tea-making may easily be interrupted without detrimental effect to the actor, even when a feeling of \textit{flow}\textsuperscript{5} has been established - yet there are some "irretrievable" movements that once begun cannot be stopped. These "irretrievable" movements are those that may once have operated within conscious awareness, but now

\textsuperscript{4} That testing continues to be logo-dominant suggests, as Connerton (1989: 94) observes, a sort of 'cognitive imperialism' that still dictates much of our social practices.

\textsuperscript{5} Flow, as Mihaly Csikszentmihalyi (1992) identifies it, is an optimal experience gained through an unimpeded smooth performance of an act enjoyed for itself.
operate automatically. These movements are now "knowledges" 'bred of familiarity in our lived space' (Connerton, 1989: 95). Doing tea-making is also getting caught up in the serial movements necessary to perform all the action. Perhaps there are some movements, such as the automatic ones, that function in much the same way as catching a ball does for an akinetic Parkinsonian patient. It will be remembered from the previous chapter that when such a person is thrown a ball, they are able to catch it because they enter into a kinetic relationship with the moving ball. In terms of tea-making, the rhythm of the exercise stimulates the person with Alzheimer's Disease to move further along in the full performance of the act.

Orientation decisions are also part of the tea-making process. How far from the bench is the refrigerator? How far must I swing my body around to be in situ for opening the refrigerator door? The sensory basis for making spatial inferences are based on 'three sets of cues: (a) 'figural' visual cues, the objects attended and fixated; (b) 'background' visual cues, the remainder of the field' and (c) 'movement' cues, sensations arising from our own eye, head and body movements' (Osgood, 1953: 249). Illusions of orientation arise, he suggests, 'when the same inferences are made from exactly the same combinations of retinal and motor cues, but we have additional evidence that the inferences are erroneous.' Osgood cites this example: 'The train on the next track seems to start moving backward, but this inference is corrected when we become aware of the sounds and pressures that accompany acceleration of our own train' (Osgood, 1953: 249).

It is difficult to predict which orientation illusions are likely to show up in
people with Alzheimer's Disease, for this an area of function that has individual characteristics. AD affects mobility and proprioceptive skills, and since these depend on the uniqueness of individual shape and history of use, perceptual differences are also impaired. We 'perceive ourselves acting within the environment'; we perceive 'objects, events and people' and we encounter them proprioceptively (Reed, 1994: 280). 'To perceive the world involves actively obtaining stimulation in which there is information' (Reed, 280). This correspondence is noted by J. J. Gibson (1966) who thinks of proprioception as active perception, i.e. a result of a person doing things in the world.

Doing memory
The recollection of how to do something is a situated activity. Trying to ride a bicycle after many years not riding one may actually be hindered by thinking about all the elements required in order to ride. Getting on a bicycle and allowing the body to "remember" how to ride is more effective.\textsuperscript{6} Cycling is like habitual tea-making for they are both performed at an autonomic level (this is physiologic memory), in a particular space and place. Remembering how to make tea after many years of drinking nothing but coffee, on the other hand, incorporates both physiologic memory and a situated knowledge; a knowing that comes through doing it in the midst of things. The ability to recoup an old skill also requires concerted concentration upon the necessary elements of the act (at first we deconstruct, as it were), at least until we regain our confidence. The attainment of confidence is part of our ability to enter into flow (an absorption in the process of doing memory) (cf. Csikszentmihalyi, 1992).

Cognition is also situated; indeed it is a panoply of functions and

\textsuperscript{6} Note that the concept of "remembering" how to ride a bicycle is not to be thought of as "the knowing/ conscious/ thinking body"; the use of the word "remembering" is purely literary.
processes embedded in relationships with the surrounding milieu. 'Cognition in the ecological sense,' as Reed (1996) points out, 'is thus not only knowledge of what already exists but also knowledge of one's encountering the world, of imminent changes and possibilities. This kind of prospective knowledge,' he continues, 'is not some derivative, "higher" form of cognition added on to basic skills of sensing and moving; it is itself fundamental' (Reed, 1996: 172). It is thus more than an internal state within individuals. The act of remembering is likewise not merely a 'rearousal of internal states, but is a special form of encountering the environment' (Reed, 1994: 278). Memory, whether cognitive or not, is embodied encounter. It has not only a past, rather it acts as a bridge to making sense of the present environment. Memory also shapes and identifies a sense of selfhood for a person.

**Framing the concept of memory**

Some parts of memory seem more cognitive than others, but this is only an apparent truth. Naming, for instance, looks to be solely a cognitive act — yet as we break it down we realize there is much more to this apparently simple act. This "much more" incorporates the whole of ourselves (the whole of the central nervous and its "tributaries"). Naming is not just attributing a label to something (a linguistic act performed by the left hemisphere of the cerebrum: "these are tea leaves, that is water, this is milk") and understanding what that something is in a literal one-to-one association (a semantic function performed by the frontal lobe of the cerebral cortex: "I understand what the word 'milk' is and I know what it is for" as well as knowing what is not milk); it incorporates an en-nesting of encounters: of present things, past things, emotions, etc. To have an understanding of it means literally standing underneath its mere
appearance. We require a "feel" for it as well. This "feeling" is a complex of things and embraces all of the functions of the central nervous system. Having understanding incorporates emotional elements (frontal lobe, cerebral cortex and limbic system), semantic elements, a sense where the object is to be found (cerebral cortex and cerebellar functions), temporal elements, that is when the object may be found (substantia nigra, thalamus, and the striatum) and so on. In this way naming something correctly (as might be a requirement of mental facility in psychological assessment tests) may mean nothing more than an ability to attribute a correct label to something, without any attendant understanding of what it is for, or it may represent a vast array of encounters.

Naming something requires us to recognize it and recognizing something usually requires the "something" to be en-nested in a recognizable context. Thus, naming also means locating. Locating something means sensing something in relation to physical space ("this is where the tea leaves are to be found"). The act of locating something utilizes the whole body at a tactile, vestibular, proprioceptive, visual, aural, and/or olfactory level, as we move around that space. In a circular fashion, locating also requires naming it even if only by description, not nominally ("here is the vessel thing - the thing that contains things - that you put the tea leaves in and cover with water - that wet stuff"). Neurologically, locating is a function of both the cerebral cortex and the cerebellum (the latter monitors and regulates movement, cf. Houk, Buckingham and Barto, 1996).

As noted earlier in this dissertation, the performance of serial action (i.e., a "B follows A; C follows B; D follows C" sequencing of events), at a neurological level, appears to be a function of the basal ganglia (a group of
grey matter structures found in the cerebral cortex, in the substantia nigra, and the thalamus and hypothalamus where the neurotransmitter dopamine is manufactured), sharing these with body movement. The basal ganglia are also associated with short-term memory, timing (cf. Meck), and 'the rapid selection of perceptual, cognitive, and motor operations that allows for good performance and skill learning' (Gabrieli, 1995: 281), thus linking perceptual sequencing skills, timing, motor activity and a capacity to make sense of impressions encountered in here-and-now events. This is critical when making tea. A person needs to judge the length of time taken to brew a pot of tea, before pouring it. While this is visually checked, and even taste checked, the idea of brewing it a minute longer indicates guessing a length of time.

The activity of making tea is *en-nested* in situ and engaged in actively (a view supported by Gestalt psychologists such as Koffka who saw, as Osgood (1953: 551) puts it, 'the memory trace [as] a dynamic affair, existing in fields of stress set up by conditions of perception and motivation'). As such, it is a learned activity activated (to a certain degree) by the time of day, items for tea-making, the desire for tea (Lashley's affective quality, cf. Lashley, 1960: 497), and the location (the 'domain of place' is a site for 'several distinct types of memoria', Neisser, 1988: 76, where 'Memoria' are the 'things we remember', Neisser, 1988: 68). Being in the kitchen may itself trigger the desire for tea. All these activate the memory for tea-making; there is a stimulus-response mechanism at work here (cf. Lashley, 1960: 497). Neisser suggests that the elements listed above operate as 'orienting schemata' (Neisser, 1988: 77). This idea fits well with Bradshaw and Mattingley's notion of brain regions that act as "addresses" and Edelman's "plastic" brain theory. It is an evolutionary
approach which speaks against the existence of a fixed cognitive map⁶⁷ - where remembered skill elements are "compared" with a internal chart (an old, yet prevailing theory).

The evolutionary approach attempts to en-nest memory in a definite locale. This move is related to Neisser's earlier attempt to described the nestedness of memory (Neisser, 1988). Neisser meant, however, nestedness in cognitive space. It is interesting, therefore, that he did point to the possibility of memory sharing characteristics of spatial perception. He writes that personal memory and a sense of place indicate a relationship springing from a 'common use of a single underlying mechanism' (Neisser, 1988: 76). Neurologically, this appears to be correct. The hippocampus is implicated in both memory and the sense of space. Mnemonic devices for remembering disparate things are, as Neisser observes, dependent upon a 'method of loci' (1988: 78). Here the disparate elements are placed in some sort of context, a locale of associated ideas. In this way a spatial dimension is employed to recall non spatial images.

Temporality, like space, is important in the performance of serial actions. Neither are merely objective to the experiencing of things (as noted in chapter three) . 'I am not in space and time, nor do I conceive space and time; I belong to them, my body combines with them and includes them' (Merleau-Ponty, 1962: 140). As such the view that ideation is critical to memory cannot wholly be supported. Identifying something because we have remembered what it looks like from one aspect alone cannot account for our proficiency in identifying it when it is inverted. We would have to

⁶⁷ The cognitive map idea is an interesting one. On a personal level I have noted that when I try to reorient myself in an environment I once was familiar with but which I haven't visited for awhile, I often recall some sort of visual map and try and orient myself according to it. Such an approach often leads to my getting lost. The inner map is often not particularly accurate and I would be better off not trying to remember it, but proceed according to clues in the geography. Signs, such as a door or a tree, a set of stairs or a gentle hill, a bright display or a clump of grass trees - all provide such clues.
have a multiplicity of internalized images if the ideational view of memory was to prove true. Such an idea requires us to believe in a static view of the world, and the idea that the world is understandable only in a static, objectified way. Gibson thought of the problem differently. He suggested that to have a sense that a multiplicity of images constitutes the same thing seen from different angles is what allows us to identify the thing in the first place. As he observes, ‘the identity of a thing, its constancy, can emerge in perception only when it is observed under changing circumstances in various aspects. The static form of a thing, its image or picture, is not at all what is permanent about it’ (Gibson, 1982: 178). Lashley suggested that we determine the identity of something by the way we physically deal with it:

Every stimulus has a space setting. When ... [a] rat is trained to react to a triangle, he fails to respond if the figure is rotated through more than 10 to 15 degrees. This means that the memory trace of the figure is tied in with the space co-ordinates of the animal’s postural system. This system of space co-ordinates is part of the postural reflex system which pervades every aspect of behaviour. There is scarcely a memory which does not have spatial orientation, either with reference to the planes of the body or to external space in addition (Lashley, 1960: 497).

A picture of a bucket seen from the top may not be identified unless we have already experienced multiple views of buckets. Every perspective gives a very different view of an object. The transformation, ‘the flow of stimulation’, ‘reveals,’ as Gibson says, ‘the activity of perception better than the unchanging form, the picture, that we generally use as stimulus’ in tests of memory (Gibson, 1982: 175).#n

Memory is embodied recall of things once learned, and learning is that

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#nThis has ramifications for the use of stimulus pictures by psychologists. Pictured stimuli are devoid of a sense of use. Image is no substitute for opportunity of praxis.
which is understood, as Merleau-Ponty says, ‘when it has incorporated’ (the action) “into its “world”” (1962: 139). To remember something is to engage with it and to engage with it requires us to “see” it as meaningful for us. This “understanding” need not be a cognitive process. An engagement with it may be at an impulsor level where our bodies fall into the flow of a physical participative act, such as when we learn to play hopscotch (that is, hopping on one foot with the boundaries of boxes drawn on a pavement). We get to know the pattern of movements - they make “sense” - and so we are able to play the game. “Making sense” of the movements we make also functions much in the same way as does memory: it facilitates in integrating our sense of being a self.

Conclusion

Embodiment is an on-going process where the nature of our engagement is also a process of integrating the sensual reactions and responses in our very physiology. Learning and remembering how to brew tea, while not “set in stone”, allow this knowledge to be enacted without, necessarily, full cognitive functioning nor awareness. The enactment of tea-making knowledge, however, needs, in people suffering dementia or other memory loss (and to a much lesser degree in normal people) to be performed in situ: in a proper tea-making facility, where not only the familiar tea-making objects are present, but where “tea-making appropriate” movements may be performed. If we are to measure the competency of such people (to determine their ability to remain fairly independent and self-sufficient), then we need to take greater account of the en-nested nature of the performance of such skills (i.e. think upon this performance as integral to a receptive, reactive interaction with the impulsors of an environment that best affords this performance) and not
depend so heavily upon a measurement of the mental recall of such a performance.

People suffering the frightening disease of Alzheimer's (where there is a decline in all aspects of interactive life), surely need to be assured of some degree of dignity and independence for as long as possible, and to be comforted by familiar surroundings (their own home), even if supported by community nursing care. The apparently simple act of brewing tea is more than a "feeding" activity; it is a social, situational, enactive, and meaningful one that locates the maker in a familiar space-place, framework and tradition. All of us need the density of such a field of experiences in order to retain some degree of sense of who we are. It is recognized, of course, that the devastating nature of Alzheimer's is that the "inner core" of selfhood is alienated from possible relationships with the "core" of worldhood in the fibrillization of the entire brain.

Memory 'serves an integrating function, helping to keep more or less united an individual who has engaged in numerous diverse encounters, experienced many different situations, and suffered and enjoyed a whole host of feelings' (Reed, 1994: 278-279). It connects us with the practices of our social group and our personal history, and it connects us relationally, one with another. Memory is thus an important part of embodying the world. Memory, however, should not be thought entirely confined to individuals: social practices, as various accounts of tea-making remind us, are one way in which a culture re-members its sense of community.

All memory is en-nested, including cognitive memory. Neisser’s understanding of the nestedness of memory within a cognitive framework
remains important. We cannot measure all memory in the same way, however. Sequential enacted memory, as explored in this chapter, is en-nested in space-place and actually triggered by objects and object relations probably more than might be suggested by actual cognitive recall. This becomes important when a clinician seeks to measure another person’s life-competency. We need to fully understand what we are attempting to measure and what the nature of the field actually is. It is the exploration of field that is the concern of Part Two.

The nature of field is one of dense complexity. The embodied consideration of field has both objective, particularized qualities and a relational embeddedness in spaces and places. In the next two chapters I shall explore ways of entering this field of complexity. Field is considered both conceptually and somewhat literally. I shall suggest that the bardo realm, as seen by Tibetan Buddhism, is another word to describe this field. Both terms of bardo and field signify density and complexity. Both arise from our participation in milieux. As such both resonate with our input of thoughts, memories, emotions and sensory perceptions.

In chapter five, I enter the bardo realm/field by way of exploring the Chinese concept of being and non-being as clearing (wu), a concept also explored by Heidegger. This is done within the Japanese art of ikebana (flower arranging) and Zen Buddhism. Clearing a field, or throwing a ball (bardo means “throwing”), or arranging flowers, or making tea are actions in process. They are sequences of activity relational upon previous sequences. By moving through space-place they simultaneously reveal presence and absence.
Chapter six explores the *bardo* in terms of the sensory perceptions, thoughts and feelings that arise all the time in all human life. This *field* may be broadly considered psychophysiological. I shall do this by way of an artistic performance that was designed to describe and immerse an audience in a graphic representation of the *bardo* realm. This participation at once reveals *sensory abstraction* and complex states, memories, and sensory perceptions.

Another theme examined in Part Two is a proposal for an approach that employs the insights of Western thought, especially those regarding particularity, and those of Tantric Buddhism, especially that of relationality. I both suggest and critique the strengths and weaknesses of these dominant ideas. Particularity and relationality, it will be said, are not absolutely exclusive to either tradition, but are shared characteristics that arise in the experiential body.
Bardo

The ball’s trajectory

A ball is thrown by one and caught by another in a game of more than one player. During its flight, it is changed in encounter which influences its speed, trajectory, and distance. The ball’s surface interacts with a thin layer of air. This is called the boundary layer. As the ball flies through the air, this peels away from the ball’s surface creating a wake, or low pressure region behind the ball. The difference in air pressure between the front and back creates a backward force on the ball, slowing its forward motion. This is known as aerodynamic drag. The ball proceeds in its motion by interacting with the surrounding air pressure. Its trajectory is influenced by the way the ball is thrown (spun, pitched downward, fast, etc.), the roughness of the ball (furry, pitted, smooth, stitched, etc.) which influences the drag (a very low drag, such as may be produced by a dimpled ball, increases the range of the trajectory), the shape of the ball (perfectly spherical, bulged, biased, etc.), air density (in higher altitudes where the air is thinner, the trajectory of the ball tends to curve less), the temperature of the ball (a warm ball travels further than a cold one), and so on. A perfectly spherical smooth ball does not travel far because it lacks drag and the front-to-back pressure differences actually create a backward force, slowing its forward motion.

* Dimpled golf balls fly further than non-dimpled ones. Normal golf balls have either 330 or 336 dimples in regular rows. Such balls do not fly as far as hexagonally dimpled balls. These, by contrast, have 290 hexagonal dimples and 12 pentagonal dimples (cf. ‘Golf ball Trajectory Simulation Applet’, internet).
Part Two

Introduction to Part Two

This short introduction signals a change in direction, a point of crossing, a chiasm. In the two chapters of Part Two, I shall explore embodied participation through two cultural practices: the Zen Buddhist art of ikebana, and experiencing the bardo (by way of an artistic performance of the Bardo'i-thos-grol, better known as The Tibetan Book of the Dead). This is a strategy for studying embodiment that need not directly speak of the body at all; instead it may examine a threefold relationship of bodyself, culture and the physical environment as expressions of hands-on philosophizing. In other words, what I do now is enter the spaces and place and times that readily give rise to naive philosophic ideas of participatory engagement as we participate in them. I need to make clear here that highly sophisticated philosophies are responsible for the expression of the praxes of ikebana and the practices of Bardo'i-thos-grol. The notion of a naive philosophy is, to reiterate what I wrote in the introduction to this dissertation, a reflexive act of the “doing” of embodiment: a case of self-scrutinization or focal self-awareness, reflective intersubjectivity, and the impulse for such thinking. It is a philosophizing that is seen to arise as it unfolds in the course of an exploration of embodied reciprocal encounter.

Looking back to Part One, my previous way of exploring the embodied self in its milieu was to deconstruct identifiable components of relationality (the capacity to empathize, the sensual impulse to mirror and to touch, space-place and time perceptions, and sequential enacted memory) within the bodily self using certain neurological disorders

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50 This kind of philosophy is not necessarily well formulated nor structured according to the discipline of Philosophy. It arises from the experiential body.
(Asperger’s Syndrome, Tourette’s Syndrome, Parkinson’s Disease and Alzheimer’s Disease). These disorders, in themselves, deconstruct relationality, allowing us to understand more fully that which we, in health, generally take for granted. Throughout Part One, I directed the reader’s attention to the importance of recognizing situatedness (en-nesting, as I term it) in interactions. I wrote of the situatedness of active engagement and, quoting recent research, suggested that time perception, for instance, is at once a neurological process and one influenced by social processes. Our creaturely search for a sense of being part of something is also an element of an urge to mirror others and touch our surroundings. Situatedness is vital for the performance of skilled enacted memory as is needed in knowing how to brew tea. It is a physiologically felt sense of being here in this place and knowing how to reach for things; it is having a sense of bodiliness. Gendlin (1992: internet) speaks of a "..." in interaction where the "..." is Gendlin’s way of indicating that we have no word for a sense of being present, sensing things in bodily ways beyond the so-called "five senses". "Kinesthesia" and "proprioception" are inadequate terms for the very familiar bodily sense, according to Gendlin. "The "..." is interaction. It is the body’s way of living its situation and you are not two things, as if the external things were a situation without you’ (ibid.). In the Introduction to this dissertation, I noted of the parable of witnessing an elephant while blind that we do not experience bits of reality, but wholes. Individual perceptions of an elephant are not confined to the bits we touch, but to the whole sense of being in the presence of a very large beast with a strong smell, a snorting, a warm body, a gentle or impatient nudging, for instance.

\[n “...” (double quotes plus three dots plus double quotes) is literally Gendlin’s expression for that sense of being we have.\]
In chapter four, I elaborated on what I had said of Chinese Body Thinking in chapter one. To reiterate, Chinese Body Thinking starts in the midst of things, from the organic order of the natural process (the meaning of *li*). Such a strategy differs from the typical position taken by those in the West. A reason for this difference is that we take our commencement from a system of thought that is linear and based upon a concept of order that compares objects to Pythagorean harmonies and Euclidean geometries. The way of *li* (‘the grain in the jade and wood of things’) goes to the relational complexity of a thing recognizing that all relationship is *li*. We, in the West, are beginning to recognize this. Chaos and complexity theories in physics work from this perspective. Hall and Ames (1995: 196), noticing this epistemological shift, speak of a ‘decline of “logocentric” thinking’ which better allows us to understand Chinese thinking. They connect this change to a decline in an onto-centricity for more cosmological concerns (i.e., bringing in a sense of environment, and a “one-earth” ethic). I would like to argue that onto-centricity need not be abandoned for cosmological concerns; indeed, my thesis argues that the two (ontology and cosmology) are entwined. I recognize that understanding my position requires the same epistemological shift as that required by moving from a thesis of onto-centrism to cosmo-centrism. I merely take the argument one step further. By moving this argument one step further I also suggest that rather than mindlessly embrace Chinese Body Thinking, or any other Eastern system of thought (as Macy, 1991 seems to have done), we integrate elements of Western Thinking with elements of Chinese Body Thinking, or more accurately, Tantrism. Over the final two chapters and Conclusion I shall sum up what I consider useful for a study of embodiment from these two traditions.
We should not be confused by nor wax lyrically on the thesis of relationality implicit in Chinese Body Thinking however (e.g. "Tao is all about relationship"). For Chinese Body Thinking is as highly structured, its images and concepts are as abstract, albeit captured in metaphor (cf. Allan, 1997: 25), as Western Thinking. Chinese Body Thinking, unlike Western Thinking, lacks the ability, as noted in Part One, for accounting the immediate condition and experience of what the body itself teaches us of its engagement - even though it purports to centre its argument in the here-now moment of being. In Chinese Medicine, for instance, the experience of disorder is understood as an experience of plethora or emptiness, heat or cold, dry or wet; in other words, experience is understood from within an existing paradigm of the nature of the human body. Leder's direction from Merleau-Ponty's phenomenology of perception, points us another way: to what the experiences of the body tell us of the nature of conscious awareness and also to the philosophizing process itself, at least naively.

Chinese Body Thinking should be thought of as a partial albeit stylized subset of a broader system of embodiment (i.e., Tantrism), though being a subset does not mean it has all the characteristics of this broader system. Indeed, as I shall now suggest, Chinese Body Thinking is less a philosophy of embodiment than a philosophy of the relationality of the

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8 This assertion is supported by Hansen (1992: 75 - 123) who, working from a linguistic point of view, suggests that written Chinese language reveals a practical abstraction (the notion of the concrete, as asserted by Wu, is thus false). His thesis is that the view that Chinese Body Thinking lacks abstraction arises out of our Western belief that all languages mirror the mind and the mind mirrors language (cf. p. 84). 'Our theory of consciousness and sense experience both mesh with our theory of language in the same way,' he says. 'Experience leads to the internal conscious states we call beliefs and we translate these into the sentences of our respective language. Conscious beliefs,' according to this view, 'are constructed from ideas and concepts just as sentences are constructed from words' (p. 85) Chinese has no "words" and no "sentences"; just pictographs. Therefore we assume they cannot think abstractly. Hansen counters this idea by pointing to the dao (Tao) and the way it is conceptualized. According to him, the Chinese concept of mind 'more resembles the Western 'will'. Their heart-mind directs the body. Its function is guidance and its content is derived from language or practical intuition, not abstractions from conscious experience' (p. 85). The Chinese concept of mind is thus merely a different one from the Western mind concept. It is one based on pragmatics, not semantics (ibid.).
body as part of the cosmos.⁶

That Chinese Body Thinking may be thought of a partial subset of Tantra is supported by history. Cleary, noting the passage of Tantric thought throughout the world, writes,

In modern times, Tantrism is the principal mode of Buddhism in Tibet, Nepal, Bhutan, Ladakh, and Mongolia, as well as a major tradition of Buddhism in Japan.

In the past, Tantric Buddhism was also practised in India and China, and probably in what are now Afghanistan, Indonesia, and Malaysia. Tantrism was absorbed by Taoism in China, by Hinduism and Sufism in India, by Sufism in Afghanistan, and by Hinduism and Sufism in Indonesia and Malaysia (Cleary, 1998: 1).

Tantrism is not “all about sex”, nor is it a degraded mode of Buddhism. Guenther (1972: 1) traces our misunderstanding to the 18th century (a time of both great exploration and social inhibitions). He writes,

When in 1799 the word Tantra was introduced into the English language, it was used with reference to a certain kind of literature that in many ways has remained baffling to those who have tried to fit it into the general, highly idealized and therefore utterly misleading, picture of Indian philosophies, which were assumed to be of one piece. Since the word Tantra occurred in both Hindustani and Buddhist book titles, these writings were first lumped together and then dismissed as inadmissible of ‘clear’ statements. The alleged obscurantism of this literature, however, was but a reflection of the shocking parochialism of those who had access to it and who assumed that what was not of Western origin consisted merely of a welter of myths and poetry, religion and superstition, and hence was negligible and contemptible. Moreover, since this literature included topics which were excluded from the ‘respectable’ domain of ‘philosophy’, assumed to be a repository of deep, clear and high ideals with little bearing on the harsh realities of actual life except in so far as it concealed them, a curious ambivalence resulted. Either the literature was said to reflect a sad state of intellectual and moral degeneration, or it was believed to contain the keys to

⁶Hall and Ames (1995) point out that cosmos, at least as understood in the West (i.e., having a beginning) is not appropriate for Chinese Thinking.
a world of power and sex, the two basic notions that haunt all those who are lacking in the one or the other and especially those lacking in both. Although the degeneration theory has been largely abandoned, the assumption that power and sex are the primary concern of Tantrism is still widespread, for it is easier, and possibly more lucrative to perpetuate ignorance than to gain and disseminate knowledge (Guenther, 1972: 1).

Further cultural exchange and cultural upheavals, including the disastrous takeover of Tibet by China and the resulting diaspora and openness of Tibetan Buddhists to the West, has meant that these prejudices are now being shown to be based on myth. We can now value better the enormous insights of Tibetan Buddhism and the Tantrism of this body of thought and praxis.

The beauty of Tantrism is that it uses the materials of everyday life: 'the inner resources of the mind and body as well as the outer resources of the intellectual, cultural, and material environment' (Cleary, 1998: 6-7). As an embodied philosophic practice, Tantrism is diverse in expression because it - like water filling the holes in stones on a stream floor - takes on the cultures in which it dwells.

As a lived philosophy, Tantric Buddhism is a very valuable source for thinking through embodied participation. Its harmonic melding of sensuality and spirituality is designed to situate and develop our psychological capacity so that we can understand what it means to be here and now (cf. Guenther, 1972: 2). This manner of thought closes dualisms. Mind and body interpenetrate, as do male and female, light and dark, subjectivity and objectivity, etc. It is an interpenetration of being that depends on viewing the body as something very valuable. There are, however, limitations to Tantric thought, which I shall explore further in
this second part of my dissertation.

Some might suggest that its limitations are its foreignness. I shall argue against this. We have always lived in 'a sea of influences' (Buckley, 1996, internet). Tantrism, Buddhism, or Taoism are not as exotic as we might imagine. Human beings have travelled and traded since we have sought food and clothing beyond our homes. There is no clear divide between East and West (whatever these terms actually mean). Our enculturation and thus embodiment of our spaces and places and local selves, though, seems to act as if a division of kind does exist. Perhaps, though, this is more a division of convenience than fact. Bridging the so-called gap between traditions is less difficult than one might imagine. Cross-cultural philosophizing is, I suspect, less a case of bridging than of understanding from whence the philosophic urge arises. I have suggested throughout this dissertation that it arises out of the experiential body. Ranly (1991: 65) takes a contrary view suggesting that cross-cultural philosophizing begins when we become conscious of the degree to which we are subject to our own cultural conditioning. He asserts, in other words, a belief that philosophizing needs a conscious act of self-reflection. 8 There are, though, many levels of philosophizing, much of it unconscious. The production of porcelain ware, for example, is a philosophizing through praxis. Maybe the artist aims for a transparency typical of the chinaware produced in Shanghai, maybe the green glaze is meant to simulate jade. a symbol of wholeness (cf. Chung, 1997).

Becoming aware of various droplets from the sea of influences in which we live our lives may have little to do with our ability to engage in cross- or multi-cultural philosophizing, but this awareness does allow us to

8 One is reminded to a degree of Plato’s contention that all people, except philosophers, are doomed to deal with the shadows cast in a cave.
recognize where our thoughts come from as well as provide an entrée to better value our own tradition as much as the apparently exotic. In what follows, I shall endeavour to examine, through two chapters on cultural practices, what this might mean for those of us who study embodiment. Our 'sea of influences' is a sea of multiple philosophies that are exposed as such when we reflectively participate in them.
Chapter five

Flowers in a clearing

Silently a flower blooms,
In silence it falls away;
Yet here now, at this moment, at this place,
the whole of the flower, the whole of
the world is blooming.
This is the talk of the flower, the truth
of the blossom;
The glory of eternal life is fully shining here
(Shibayama, 1970: 205).

The Zen° Flower Master begins at the midpoint of her arrangement, for
this place symbolizes the still point of Nothingness, from whence all
creation springs.° Her art is as much an embodiment of nature as the wild
flowers growing in the field, so her art emerges where nature begins. I
shall likewise start in the middle, for the creation of a theoretical argument
is in continuum with Creation itself.

Whole and art

The monk's entire body is present in this great circle
Xutang's true face and eye emerge from it.
The blind singer's love song delights
flowers for ten thousand springs
(Ikkyu, in Tanahashi and Schneider, 1994: 139).

° The word Zen is Japanese for the Chinese word Ch' an, which is a transliteration of the Sanskrit
word Dhyana, which means “meditation” (cf. Tanahashi and Schneider: 1994: xii). Zen Buddhism
is, like Tibetan Buddhism, part of the Mahayana tradition which emphasizes meditative practices
rather than reading the scriptures (the sutras). Theravada Buddhism emphasizes the latter, by
contrast.

° This midpoint also illustrates being in the midst of things (where I am now, as I write these
words: fingers on the keys of the computer on the dining room table, scarf around my neck, with a
personal history and a pile of books). As Bachelard puts it,

The evening lamp on the family table is also the center of a world. In fact,
the lamp-lit table is a little world in itself, and a dreamer-
philosopher may well fear lest our indirect lighting cause us to lose the
center of the evening room (Bachelard, 1969: 180).
The enzo, a brushed circle, is interpreted by Aniela Jaffé (cf. Jung, et al. 1964: 241), in her discussion on the mandala, as an essential form in art, symbolizing wholeness. "Mandala", itself, simply means "circle". Jaffé sees the drawing (the "figure") as this symbol, and not the space identified by it (the "ground") as the critical measure for interpretation. As such it is only the drawn enzo (which means "circle"), the frame around the space, that is taken account of. The rest is nothing, a state of Not-being. Heidegger (translated by R. F. C. Hull and Alan Crick, 1949) describes in his paper 'What is Metaphysics', Not-being (Nichtseiendes) as 'unformed matter which is powerless to form itself into "being"' and cannot therefore present an appearance. What has "being", he says, 'is the self-creating product (Gebilde) which presents itself as such in an image (Bild), i.e., something seen (Anblick)' (Heidegger, 1949: 375). This idea is nothing more than a presentation of the opposite of what "is".

Heidegger proposes that Nothingness, rather than being 'powerless to form itself into "being"' (Heidegger, 1949: 375), and thus not a state of 'Not-being,' is - paradoxically - Being. This is not because they are 'one in

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*Sartre, for example, sees Nothingness in a nihilistic way - a nihilism where only an observing ego can be present. Only an ego, he thinks, can observe the nihilism of the abyss. The realization of nihilism allows the human being to experience existential freedom, for from this nothingness of all else, there is nothing to rely on (cf. Sartre: 1973: 44). 'Man is nothing else but that which he makes of himself' (Sartre: 1973: 28). It could be said that for Sartre, the enzo represents the void.
their indefiniteness and immediateness' (1949: 377), but 'because Being itself is finite in essence and is only revealed in the Transcendence of Da-sein* as projected into Nothing.' Such a confusing statement as this only becomes sensible in the context of Zen Buddhist thought. May and Parkes show that Zen Buddhism and other Eastern ideas influenced Heidegger greatly (cf. May, 1996). May (1996: 30), for instance, directs our attention to a Lao Tzu reading concerning the nature of a container such as a pitcher, or jug: 'The work of pitchers consists in their nothingness.' Heidegger, in his lecture 'The Thing' (1950, cited by May, 1996: 30), speaks of a jug as, 'The jug is a thing as container' and then 'The thingly character (Dinghaftige) of the thing, however, does not consist in its being a represented object, nor can it be determined at all in terms of the objectness of the object' (quoted by May, 1996: 30). In Gestalt terms, the jug is defined as the thing it is by its open capacity for bearing other things, or simply being empty. The analogy of the jug contains within itself 'the thing itself' and 'the possibility for being a receptacle for other things'. When a jug filled with milk, for instance, is tilted, the jug is cleared of its contents. It is this process of clearing that is brought to the reader's attention by both Heidegger and Chinese-Japanese thought.

Clearing (wu)

In Chinese the single word wu conveys being and non-being ('nothing', May, 1996: 32, or 'non-being', Fischer-Schreiber, 1996: 201) - though this is to be understood in a way to which we are not accustomed. Wu literally 'refers to a place that was originally covered in luxuriant vegetation, as in a thicket in a wood, but where trees have been felled so that there is now

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*Da-sein, sometimes written as one word, is, as Heidegger (1998: 121) puts it, 'a being that finds itself situated in the midst of beings, comporting itself toward beings.' By separating the two syllables, da from sein, we get a sense of more than merely being, or existence (two words often used to interpret Da-sein), but a located sense of being, a there-ness by virtue of having been 'thrown' like a ball. There is, in this sense, a character like wu where presence and absence are simultaneously implied.
an open space, a clearing.' Wu thus means "there, where there is nothing", a place where formerly there were trees' (May, 1996: 32)." Also implied is encounter; someone or something has been through there and made space for someone or something else to visit that place. In wu, a path has been laid down in walking. Wu is a clearing, an opening up, a lightening, as Heidegger notes,

To clear [lichten] something means: to make something light, free and open; for example, to make a place in the woods free of trees. The open space that results is the clearing [Lichtung] (Heidegger, 'The End of Philosophy', quoted by May, 1996: 33).

The thing, the jug or the drawn circle, would be, for Heidegger, on which other things, or functions, may be added; it would be a Gestellen. Heidegger's term Das Gestell, most often translated as "enframing" thus suggesting the idea of "putting a frame around something", is better thought of as "framework on top of, or in which something might be added", e.g. clothes on a clothes horse, or flesh on a thin, rack-like body. Heidegger uses the term Das Gestell to mean "to set in place" something; it is the making of a representation or technological object. It is here that we in the West have the most difficulty. For us, a representation or technological object is not seen as having continuity with the surrounding milieu. The attempt to pin Das Gestell to mean" enframing", also confuses things. The idea of that which is framed gives rise to a perception of things that are 'eminently spatial and visual', as Hwa Yol Jung (1987: 236) puts it, and ultimately, empty of meaning. (Baudrillard's extreme statement on things as a 'demon of images' springs to mind here, 1984.) The restoration of Das Gestell to the multiple possibilities of "en-rackment" at least allows for a richer density of meaning that can be attributed to objects. In terms

*Watts, similarly, writes, 'Form is not different from emptiness; emptiness is not different from form. Form is precisely emptiness; emptiness is precisely form' (1962: 84).
of the *enzo*, the space around it and in it becomes, once again, part of its potential reading. I should note here, however, that such a generous reading of Heidegger may be misplaced. Nishitani (1982)\(^{100}\) seems to think so. The problem, as I see it, is that associated with all translations between languages. In this case, Heidegger did not read Japanese and thus was dependent upon texts translated from that language into German, and conversations with Japanese students of German. The problem is also there for those reading English translations of German texts, and also for those German texts translated into Japanese. Subtlety of meaning is inevitably lost.

The idea of the *enzo*, though, as a symbol for wholeness (as suggest by Jaffé) barely accounts for its Zen meanings. Schneider observes that for the Zen Buddhist it means, ‘enlightenment, the present, completion ... Just as one Zen philosophical tenet would be nowness, one important Zen aesthetic bias would be space. Sometimes you need a mark to point out space’ (Schneider, in Tanahashi and Schneider, 1994: x). To this I add, figure, ground, act of making the circle, brush, paper, hand, eye, heart, history of circle making (personal and cultural), the thing itself, the nothing itself; presence, absence; being, Nothingness. ‘All things are “empty” because none has any essence or being of its own, everything being dependent on everything else’ (Loy, 1997: 260). The *enzo*, made in the midst of things, is Nothing and it is complete.\(^{101}\)

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\(^{100}\) Nishitani (1982) thinks Heidegger’s understanding of Nothingness is finally a statement about nihilism. He points to Heidegger’s reference to Nothingness as an *abges*, a place of dread, as his argument against Heidegger’s true assimilation of Zen thought. Dallmayr (1992: 46) argues that these critical observations of Nishitani cannot be sustained and Nishitani’s presentation of *sunnys* is as flawed as Nishitani claims is true of Heidegger.

\(^{101}\) The principle behind *you* is also the principle behind the Buddhist concept of consciousness. I shall explain this further in the next chapter. There is here a fundamental notion that there is nothing outside reality which, as Guenther says, ‘is not one thing among other things, but is everything, there can [thus] be no unknowable’ (1977: 86).
construed as all that "outside the circle" and all that is contained "inside the circle." The two simultaneous messages of "inside" and "outside" - because the page is blank in every way except for the presence of the circle - also contain two other messages: there is nothing in either and yet these two nothings are made so by the presence of a round, connected line. 'There is no centre, or, perhaps, if there is one, it is everywhere' (Cook, quoted by Loy, 1997: 260). Unfilled spaces are as essential to the art of flower arrangement. Spaces between flowers represent the expression of 'carrying Nothing in the heart' (Herrigel, 1958: 69) even while they mark the presence of flowers (as for the enzo). The Gestalt in both cases is unframed; indeed, open (cf. Levin, 1989: 200).

Living flowers

Ikebana is one branch of the Zen art of flower arranging. It is a formalist art which aimed at a classic idealism (cf. Okakura, 1964: 58). The word ikebana, where ike means "to breathe or to live", while hana or bana means "flower", may be translated as "living flowers" (personal communication with a Japanese language scholar). Herein lies an entwining of such-ness; an enzo of presencing and absence I have described above. These "living flowers" are cut, thus putting them in a state that is, by nature, pre-death. Cut flowers thereby represent wu and non-wu. Wu, as noted above, 'refers to a place that was originally covered in luxuriant vegetation, as in a thicket in a wood, but where trees have been felled so that there is now an open space, a clearing.' Wu thus means ""there, where there is nothing", a place where formerly there were trees' (May, 1996: 32). Non-wu, paradoxically, points to the presence of flowers. I shall develop this argument later. First, though, I wish to describe what is entailed in

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arranging flowers, according to *ikebana*.

Three methods are employed by practitioners of *ikebana*. The method known as *seikwa* simply describes the use of cut flowers and, as such has the same meaning as *ikebana*. Herrigel (1958: 50) notes that the word *seikwa* is derived from the Chinese word for *ikebana*. The method of *nageire* adopts a loose style of arranging flowers, while *moribana* attempts to depict landscapes. The fundamental principle with all of these methods is the Principle of the Three: a trinity of heaven, earth, and the affairs of humankind (a principle that underlies Chinese Body Thinking, also). All three are united in the creation of the arrangement - a microcosm of all creation - and the three symbolize the interrelationship of all in human life, including the very act of creating this arrangement. I should note here that though I use the translation of the Leading Principle as the word *heaven*, this translation is inaccurate and misleading (cf. Hall and Ames, 1995: xiv). “Heaven” is not to be understood in Judaeo-Christian terms, for the Chinese word *tian* (anglicized) does not have a transcendent nor spiritual dimension. Wu’s (1997) translation of *tian* as “cosmos” is also misleading. As Hall and Ames notes, the word *cosmos*, originating from the Greek verb *kosmos* (anglicized), means “to set in order,” which implies a “first thing”, and a *telos*. In Chinese thought and language, however, there is no “first thing”; rather a sense of “things as they are encountered.” Hall and Ames try to recapture this sense with the use of the word *acosmos* (cf., e.g. p. 236). This is, to my mind, somewhat clumsy. So— at the risk of being misunderstood and also in order to be able to follow Herrigel’s text on the Zen art of flower arranging - I continue to use Herrigel’s translation of *tian* as *heaven*. I ask the reader, however, to keep in mind the following poem by Zhuangzi when I write of *tian* as *heaven*.
for this poem captures the Chinese understanding of the idea very beautifully (for tian cannot be readily translated but can be tacitly understood),

A path becomes a path by walking it.
A thing is made a thing by being so-called.
Why are things so?
They are so because they are so.
Why are they not something other than what they are?
They are not something else because they are not.
(Zhuangzi, quoted by Hall and Ames, 1995: 181)

Taking a three piece branch: the top branch symbolizes the Leading Principle - Heaven, the bottom branch, the Subordinate Principle - Earth, and the midbranch, the Reconciling Principle - Humankind. Okakura (1964: 58) notes that any flower arrangement that does not conform to the dynamism that is the representation of the Three is seen as barren and dead. This dynamism is the Zen harmony of balance, which - according to many Western eyes - is off balance. To achieve this Zen harmony, branches are chosen and trimmed to conform to this principle - an act, that in itself, reflects an understanding of the presencing and absencing of the enzo, and a phenomenological thesis on embodiment where the artistic representation illustrates the Flower Master’s participation and psychological state during and after the performance of the act. As Herrigel (1958: 38) puts it, ‘[The asymmetrical structure illustrates] the reciprocal action of fullness and emptiness, vitality and detachment; it encloses the whole cycle within it.’
Participation in entwinement

As noted above, the Flower Master begins at the midpoint of her creation; the still point of Nothingness; the germinal place of all creation. Thus the very act of arranging is no different from any other creation, whether of humankind or not. As such, the Zen artist-practitioner describes a relationship that is relatively foreign\textsuperscript{103} to what we think we do in mainstream Western thought. We are accustomed to seeing our creative acts as plastic artefacts of aesthetic interest only and separate from the activity of the natural world. We are most unaccustomed to the idea that what we do has any bearing on any other human action and much less on the mystery of non-human creations.

We Westerners tend to have a hierarchy of interest in the natural world, where those elements of creation which more closely resembles our

\textsuperscript{103} Although this is not strictly true. We think of this kind of relationality as foreign - not recognizing much of what we actually take for granted within the language of, e.g. science. This relationality is tacit for us. I point here to the \textit{bandes} incorporated in this dissertation. Here there are splices of a ball game illustrating intensely relational elements.
definition of neomorphic\textsuperscript{104} (baby) cuteness (big open eyes, big round heads and small chubby bodies) receive the greatest input of concern. Things outside this cuteness category hardly receive any respect at all.

The minimalist use of the plants symbolizes the particular focus and recognition that Zen Buddhism bestows on every part of the universe. This intimacy with flowers is something we need to recoup in Western society. Our lack of sense of being of the earth leads to our abuse of it.

The flower and the heart

Realization of mutual interrelationality brings with it certain responsibilities and expression of compassion. Herrigel says of the flower arranger:

He should be like the flower heart, radiant, giving itself lavishly and yet at the same time serenely self-contained. And what he learns by listening to the flower heart and taking into his own heart, he communicates freely and without ulterior purpose to others (Herrigel, 1958: 72).

The Flower Master's heart and the heart of the flower are one, and from the one, compassion for everything in creation is expressed. A Cartesian self-other dichotomy is closed: 'A flower on a twig is I-myself embraced by the Absolute, and an ear of millet is I-myself breathing in the divine light' (Shibayama, 1970: 231). This is no mere poetic expression: it is the essence of the Zen intent. All other dualisms dissolve: 'A grain of wheat is as heavy as Mount Sumeru,' and 'Out of a blade of grass, a golden Buddha sixty feet high is produced' (Shibayama, 1970, 231). At the bottom of the object, at the foot of the action, there is, so to speak, deep philosophy and the 'person', that is the Zen Master (who is Master only

\textsuperscript{104} The current trend of fascination for neomorphic toys among Japanese youths points to the kind of intrinsic distancing of human lives from the natural world that I am pointing to in this chapter. There is, in playing with neomorphic toys, a nostalgia and longing for relationships.
because she recognizes the entwining). In Buddhism, this reciprocity, through which the self emerges in 'a deepening relation with other beings', is usually called "dependent co-arising" (Abram, 1997: footnote 57).

The act of flower arranging is participation in the act of creation. As Watts says, 'the work of art is considered not only as representing nature but as being itself a work of nature' (Watts, 1962: 193). Thus the heart of the artist becomes the heart of the flower, the universal heart. She gives the flowers 'a new living form and composition, and - without willing it - has put this form outside [herself] and inside [herself] simultaneously' (Herrigel, 1958: 77). From this point of mutuality comes an expression of compassion and single mindedness.

Being fully in the presence of flowers allows us to be fully in the presence of all other things, at least according to Zen Buddhist ideals. The humanly creative act of arranging flowers is no different from the wild act of nature for the Zen Flower Master. Indeed the birth of the art of flower arranging, according to Okakura, came about by early Buddhist saints who gathered flowers strewn by a storm and, 'in their infinite solicitude for all living things, placed them in vessels of water' (Okakura, 1964: 57). Our actions are understood as inseparable from other expressions of world-realms. The selection and that act of cutting flowers imprints upon the bushes from whence the flowers came. Inside the flowers are stamens, ovaries and seeds in the making. These are taken from their source and natural habitat. The Flower Master's act, her communion with herself, leads 'in a straight, harmonious line to the outer world' (Herrigel, 1958: 75). Our creative act from the centre of our own humanity is joined 'to the all-
uniting being, taken up into the whole of the cosmos' (ibid.). This continuity, once realized, allows us to love the whole world as if it were our own body.

The narrative of flowers

The art of ikebana involves both a journey from inner to outer, from symbolism to visible presences, and visible presences to spiritual enlightenment. The Flower Master uses the plant matter itself to speak of elements of the creation of nature and, through this, the essence of the creative act. New buds are present to represent promise and new hope, and the shrivelled to show things past. Thus the art tells a story: a narrative\textsuperscript{96} in form, and a narrative that urges us beyond the flowers themselves to a sense of all things. Within this all-enveloping sense, there is also the sense of the particular: stories of the specific.

Different flower types embody human narratives, as Okakura notes,

\begin{quote}
We eat, drink, sing, dance, and flirt with them. We wed and christen with flowers. We dare not die without them. We have worshipped with the lily, we have meditated with the lotus, we have charged in battle arrayed with roses and the chrysanthemum (Okakura, 1964: 50).
\end{quote}

We make the flowers speak the language of humans:

\begin{quote}
Branches from berry-bearing bushes have a symbolic meaning. When, in old age, a man gives up his profession in order to devote himself to another kind of life, this transition is symbolized by berry-bearing branches. They are meant to indicate how a life of another kind, dedicated to philosophy or philanthropy or art, is not idle, but can bear much fruit (Herrigel, 1958: 97).
\end{quote}

\textsuperscript{96} Herschock (1994: 692) says of narration that it is more than mere telling, it brings to 'intimate connection, of healing or making whole' through the weaving of the threads of the tale.
We know this in the Anglo-Saxon West. In the Britain of Queen Victoria hundreds of plants were used to symbolize emotions, desires, and hopes. Forbidden emotions had a veritable *materia medica* in flowers. Narcissus (that god who drowned in the pond reflecting his own image) represented egotism, amaryllis symbolized pride and splendid beauty, orange blossom indicated purity and loveliness, and violets represented shyness; the gift of red poppies spoke of consolation, roses, love (and thirty three other meanings, see Cowles, 1989: 10); the simple daisy, innocence. the forget-me-not, fidelity, honeysuckle, devotion, and so on. It would have been possible to live an entire life without speech, just signalling intent through flowers.

**Learning ikebana**

The apprentice flower arranger is taught how to choose the flowers. She learns in this art, which takes many years to perfect, that choice is not only dependent on colour and shape harmony; what is far more important is that the flowers should express ‘the inner form in which the artist experiences the world’ (Herrigel, 1958: 91).

In tune with the demonstration of nature as art, the flower stem forms are kept in the way nature intended them. No plant is distorted, mangled, or manipulated outside its own nature, though minor bends are persuaded from nubile stems. Simplicity and minimalism of form and intent in this
art serve the same function as in the art of Haiku.\footnote{\textit{Haiku}, rich in symbolism, has the following structure: three lines, five syllables in the first line, seven in the second, and five in the third, a total of seventeen syllables (Buchanan, 1973: 7). Here is an example of \textit{haiku}:

\begin{verbatim}
Ochizama ni
Mizu koboshi keri
Hana tsubaki.
- Basho
\end{verbatim}
Falling upon earth,
Pure water spills from the cup
Of the camellia

According to Buchanan (1973: 19), this poem has at least three levels: the image itself; the camelia symbolizing the life of a samurai (like the flower which lasts a short while and drops in one piece to the ground, so the samurai’s life is beautiful, but short); and indirect references to the Zen teaching on the shortness and uncertainty of life.}

Becoming a moderate person comes with maturity. It is significant that when young apprentice flower arrangers, like flower arranging practitioners from the West, prepare for an exhibition of their growing skills, they show with brilliant coloured extravagant flowers and desire to see them put in the foreground of all exhibits. Intermediate students are less exhibitionist and seek the midground area, while the true Flower Masters place their perfectly harmonious art inconspicuously in the background (cf. Herrigel, 1958: 85). The master’s art is not a showy one, as her mastery of herself is likewise modest. With the mastery of the self there is mastery of everything that person does, and with this mastery, a profound simplicity and humility. At the end of an exhibition, the Flower Masters bury their flowers.

The art emerges from conscious awareness of the entwining of spirit and form. The training of the Flower Master is the training of a whole way of living.

For the Zen Buddhist, harmony is the innermost form underlying nature, life and the world, and art can have no other task than to portray this
harmony, to confirm it through varying degrees of ‘unconscious awareness’. The artist will draw it into herself as if with a deep breath from an infinite distance, exalt it, and body it forth (Herrigel, 1958: 90).

As the artist is of the universe, so her art is continuous with the universe. Nothing is extra, all is One and each production is returned to the elements of the cosmos from whence it came. In the Zen way of seeing, there is no beginning, no middle, and no end.

- Numinosity of existence, life and death
  - Spring has come round.
  - A thousand flowers are in their lovely bloom.
  - For what? For whom?
  - (Heikigan Roku, quoted by Sekida, 1975: 161)

Among the deep mountains and steep ravines, flowers come out unknown to humans, and pass away unnoticed. Existence does not exist for others. It is of itself, for itself, by itself (cf. Sekida, 1975: 162).

As soon as we encounter the flowers that grow in the deep mountains and steep ravines we enter a relationship with them and when the flower arranger cuts a flower for an arrangement she prepares it for death. While those of us who mindlessly cut down vast numbers of flowers for thick displays in vases, the Zen Flower Master practices minimalism. She picks economically, for she ‘respects the economy of nature, selects [her] victims with careful foresight, and after death does honour to their remains’ (Okakura, 1964: 52). Such an act reveals more than concern for other living things, it also expresses a Gestalten recognition of the inexpressible unity of the One as continuous with the many.
In the Principle of the Three in flower design, the interpenetration of Heaven and Earth in an act of reconciliation by the affairs of humankind, is apparently paradoxical, for each branch symbolizes all the branches growing on the face of the earth (the One is the Many), and death (the One with All). Kobo Daishi (quoted by Okakura, 1964: 55) describes this apparent paradox, thus: 'Flow, flow, flow, flow, the current of life is ever onward. Die, die, die, die, death comes to all.' Thus there is no paradox at all.

The selection of a single flower is another way in which the inexpressible is presented. A particularly ordinary flower numinously shines the way of tranquillity by drawing attention to its plainness and, simultaneously, to its great beauty (the representation of the One in the Many).

The single flower, like the Threefold branch design, also plays with the figure and ground of life and death. Okakura relates a story to highlight how this might be understood.

In the sixteenth century the morning-glory was as yet a rare plant with us. Rikyu had an entire garden planted with it, which he cultivated with assiduous care. The fame of his convolvuli reached the ear of the Taiko, and he expressed a desire to see them, in consequence of which Rikyu invited him to a morning tea at his house. On the appointed day the Taiko walked through the garden, but nowhere could he see any vestige of the convolvulus. The ground had been levelled and strewn with fine pebbles and sand. With sullen anger the despot entered the tea-room, but a sight awaited him there which completely restored his humour. On the tokonoma, in a rare bronze of Sung workmanship, lay a single morning-glory - the queen of the whole garden! (Okakura, 1964: 60).

By this example we see the representation of the flower sacrifice in

*If I pluck thee, my hand will defile thee, O Flower! Standing in the meadows as thou art, I offer thee to the Buddhas of the past, of the present, of the future.' Thus sang the Empress Komio (Okakura: 1964: 55).
somewhat excessive terms, but it, nevertheless well describes the Zen understanding of how an abundance of messages can be presented in a single act and how a sense of tranquillity can be coexistent with a multitude of brutalities.

In the act of flower arranging the Flower Master appears to point at life and death, presences and absences, but, in the final analysis, she does neither; in fact the only thing she can point to is Existence. Cut flowers\[^{108}\] is just there in the midst of things in the period of time set aside for arrangement and exhibition. We can know nothing of its life nor indeed of its death in this moment. We only have its "is-ness." In its life it 'is of itself, for itself, by itself' (Sekida, 1975: 162).

**Chiasm: continuum**

Heaven and earth and I are of the same root. All things and I are of the same substance (Jo Hoshi, quoted by Sekida, 1975: 174).

A member of the Kyoto School of Philosophy, Yamaguchi (1969: 90-108) compares the Zen concept of continuum with Bergson's thesis of Pure Duration (*Durée*), saying that, at an analytical level, these two continually share several fundamental characteristics: 'both are non-substantial, ultimate, supra-categorical, and vital' (Yamaguchi, 1969: 90). Of the non-substantial characteristics, he points out that no thing is distinguishable from any other thing on the basis of separate individuality or specific nature. There is 'no being with its own substance' (Yamaguchi, 1969: 90); there is no thing which stands outside the continuum of all things. Even the continuum is non-substantial. There is no difference between the

\[^{108}\]Pot plants are preferable, according to Okakura (1964: 53) 'The man of the pot is far more humane than he of the scissors.'
Buddha and the rock and the flower arranger. There is no distinction between the perceiving subject and the perceived object; likewise, there is no "core of the self" (the psyche), or a stable material self (the body) that remains constant (that is, outside the continuum), both necessary beliefs for a philosophy of dualism and a scientific materialism (a stable self held to the mobility of all else). Bergson says, 'there is neither a rigid, immovable substratum nor distinct states passing over it like actors on a stage. ... There is simply the continuous melody of our inner life - a melody which is going on and will go on, indivisible, from the beginning to the end of our conscious existence. Our personality is precisely that' (Bergson, La Pensee et Mouvant, quoted by Yamaguchi, 1969: 94). There are changes, Bergson says, 'but there are underneath the change no things which change: change has no need of a support.' Movements exist, he continues, 'but there is no inert or invariable object which moves: movement does not imply a mobile' (ibid.: 93).

While both Zen Buddhist philosophy and Bergson (at least as Yamaguchi describes it, and I have deliberately quoted Bergson according to him, to get a Japanese reading) agree that duration, or continuum, is indivisible and that this does not imply chaos, or cacophony of events (a collision of past, present and future), Bergson attempts to separate out an idea of duration from the events around which a sense of time is known, while Zen does not. The image of a river is useful here. The river, like the enzo, is at once its banks and water. Without either there is no river. Duration cannot therefore be said to be just water. Yamaguchi, I believe, is thus incorrect in suggesting a similarity that is not there in practice. Zen never disengages any experience (of time, duration, anything) from the "is-ness"

\[\text{Yamaguchi's reading of Bergson is important here; therefore, his translation of Bergson is also necessary. Indisputably, problems with translation, or readings of another language through foreign eyes matters to meaning. We do not know whether Yamaguchi read Bergson in French, English or Japanese. His paper is in English.}\]
of experience and the *li* (organic order) and *wu* of things. Time, that is, duration, or continuum, is, as I have said throughout this dissertation, known in the situated, incarnate, now of encounter. As Hakuin observes,

Yesterday at dawn I swept the soot of the old year away,
Tonight I grind and knead flour for the New Year’s sweets.
There is a pine tree with its root and an orange with its leaves.
Then I don new clothes and await the coming guests (Hakuin, quoted by Nishitani, 1982: 217).

This perspective highlights the fundamental difference between mainstream Western ways of seeing and the Zen way of doing. Herein lies an important point. A theoretical philosophy of existence is quite different from a lived naive philosophy, even though the impulse may well be the same. The Taoist concept of *wu-wei* (also part of Zen thinking, although *wu-wei* is a Chinese Taoist term) is relevant here. As *li* describes ‘the grain in the jade-and-wood of things’ (Wu, 1997: 304), that is, the organic order that is inherent in all existence, so *wu-wei* is the life-style that follows the grain in the jade-and-wood of things (Watts, 1976: 76). We have a popular expression that recognizes this, “Going against the grain” means going against the flow, our pattern of life. *Wu-wei*, according to Watts, is not only a going with the flow, but a sort of intelligence, that is, ‘of knowing the principles, structures, and trends of human and natural affairs so well that one uses the least amount of energy in dealing with them’ (Watts, 1976: 76). This is bodily intelligence (a term, I use advisedly), and not an intellectual exercise. It is ‘a combination,’ thus, ‘of this wisdom with taking the line of least resistance in all one’s actions’ (Watts: 76). *Wu-wei* is thus living and recognizing the patterns or *impulsors* that best afford smooth interaction in life. It is living intelligently in the midst of things.
Yamaguchi’s suggestion that Bergson’s *Durée* (Bergson, 1910) is similar to Buddhist ideas of duration must also be contested in that Bergson insists that memory is essential to its perception, that without memory, we would have no means to assert that it occurs. The Zen system of awakening us to a sense of “this-ness”, on the contrary, is to deliberately break with memory. Memory, they assert, holds mindful awareness back because it requires the experience of Now to be interpreted by previous experiences.

A means to cut through the habitual way of understanding (via remembering) is the use of short phrases, or *koans* that appear quite incomprehensible by normal standards. The koan turns the fact of memory as a meaning maker upside down. It is used to shock the student into enlightened insight. *Koans* are paradoxical. They disrupt a sense of identity as separate from the continuum for there are no right answers. The famous *koan*, “What is the sound of one hand clapping?” must be approached anew; no amount of recalling old responses from famous Zen masters will help the student. The right answer is the answer of liberation and recognized as such by master and student alike. In this sense, koan and flower arranging are alike. Flower arrangement by imitation, albeit incorporative of Buddhist principles, would not be approved by a Flower Master. The activity must be contextually receptive: ‘when you climb, it is the mountain as much as your own legs which lifts you upwards, and when you paint it is the brush, ink, and paper which determine the results as much as your own hand’ (Watts, 1962: 194).

The act of making Zen art is the act of artlessness, so that ‘paintings are formed as naturally as the rocks and grasses which they depict’ (Watts,
1962: 174). The germ of the artist’s creation is the germ of all Creation. This does not imply, as Watts points out, an art of pure chance (one hundred and one monkeys with one hundred and one computers rewriting Shakespeare’s sonnets), or, as he says, graphically, ‘as if one were to dip a snake in ink and let it wiggle around on a sheet of paper’ (Watts, 1962: 174). Zen sees no opposition of the natural elements of chance and the control of human beings.

There is in Zen no sacred-profane distinction. Everything is now and the river of duration is experienced as distinctionless. There is no place to go and nothing to attain to. Everything is in continuum. To the Flower Master, everything is flower. ‘A seat is a flower, a vase is a flower, a board and a stand are flowers, the arranging person is a flower, and the mind, too is a flower’ (a saying of the founder of the Misho School of Flower Arrangement, quoted by Shibayama, 1970: 249). There is virtue in this way of seeing, but there are problems also. I shall discuss these further later on in this dissertation.

**The Zen art of ending dualities**

The way we philosophize is the way we see the world, for structured philosophy as much as naive philosophy shapes and is shaped by our interpretation of the world. The Zen way of being is quite different from the mainstream Western manner. All acts of participation for the former are, in some respects, sacred - but they would not consider it in the way we might assume. Division into sacred and profane could be said to be artificial and emerging from our Judaeo-Christian heritage, which emphasizes the separation and alienation of the temporality of creature-kind from the transcendence and eternity of the creator god, but,
possibly, it is not merely an imposition of a cultural idea. The West’s
greater interest in the experiential body has given greater emphasis upon
a perceived separation of self and other, sacred and profane, thus instilling
a dialectic that is inherently spatial and visual. Such perception sets
apart\textsuperscript{10}, seeking to ‘capture the essence of reality by means of
representational metaphysics, that is, an anthology of images’ (Hwa Yol
Jung, 1987: 236). Such a ‘Sisyphean task’ is always “on the move” for
images have ‘only a semblance of knowledge, subtraction of reality, and
an appearance of participation’ (Hwa Yol Jung, 1987: 236).

The exclusion of creature-kind from a transcendent god is, however, not
universally held by Christians. There is a parallel tradition in mystical
Christianity where the presence of God is known in the sacrament of the
present moment, as Jean-Pierre de Cassade (1975) has put it. In this way
all creation is considered a \textit{sacramentum deo}. This all-embracing
understanding is revealed at daily meals where family members
(Christian and Jew) gather around the food-laden table and partake of it
as a celebration of God’s gifts to his people. So the very act of eating is
understood as being present with God. The eating of the eucharistic meal
is also a recognition of a sharing in a divine embodiment. This tradition of
coidherence (“co-inherence” is a term used to speak of the Trinitarian
relationship of God as Father, God as Son, and God as Holy Spirit: three
persons in one godhead) is not, however, one that is popularly recognized
by many practising Christians. For these there is a non-co-inherent
account that sees redemption as a future-oriented event and religiosity
from the standpoint of alienation from the holiness of God; an account of
designated areas of “where God is” (the sacred domain) and is not (the
profane domain). The separation out of the sacred from the profane,

\textsuperscript{10} Such setting apart is due to an understanding of space and vision as that which is held apart,
objectified, from the engaged embodied self (cf. Levin, 1993).
indeed, defines a whole series of social structures. The designate "profane" refers to that space outside the tabernacle, outside where God has his throne, the domain of the sacred. These two accounts illustrate well that there is no one Western way of seeing, at all, but that - for the probable sake of cultural simplicity - we agree that the latter version is more compatible with other cultural ideas and practices, such as positivist empiricism.

A problem for many Westerners, who attempt to describe Buddhist beliefs, emerges from a sacred-profane dichotomous way of seeing. If we define the sacred as having to do with God, and separate from everyday life, then it becomes practically impossible to conceive of a respectable spiritual practice that does not refer to a God, and does not separate out the practices of everyday life. Thus Frazer is able to say that Buddhism is really animism, and 'simply a common savage dogma incorporated in the system of an historical religion' (Frazer, 1922: 112).

The psychologization of religious ideas brought with it the suggestion that a clean distinction between the sacred and the profane is not only intrinsically true, but that it is also necessary. This way of seeing emphasizes the need to separate out State and Church, science and religion, Sundays and the rest of the week; that it is unhealthy not to. Thus, Carl Jung, physician and son of a Protestant minister, pleaded with his listeners and readers to rediscover the sacred. Jung thought that the 'illness of the masses' was the neglect of the sacred. Eliade (1959: 10-13) is likewise coming from a firm belief in the existence of a sacred-profane

111 Much of religious participation in what is considered sacred proceeds from a declared profane position; a journey from "outside" to "inside". Schmemann (1965) makes this point in his descriptions of Orthodox liturgy. The liturgical procession, he says, begins in the domain of the profane and moves slowly, with dignity, into the sacred space of the Church, seen as the sacramentium mundi, the point of verticality, of transcendence.

112 I should note here that this psychologization paralleled the socio-economic push for the separation of Church and State.
split. His base-line definition of the sacred is that it is opposite to the profane. This he connects with what he considers real. 'The sacred,' he decides, 'is equivalent to a power, and, in the last analysis, to reality' (Eliade, 1959: 12). The profane, on the other hand, he sees as pseudo-real and lacking this transcendental power (cf. 1959: 203). The sacred is believed to make real the manifestations of this world, and thereby transcend matter. This neo-Platonic idea of the "real" is not the "is-ness" of things (life 'is of itself, for itself, by itself,' as Sekida, 1975: 162, says), but the realm of powerful ideals. Pseudo- or illusory-reality, accordingly, is the world of ordinary being. Even the discussion of real and not-real has no part of Zen thought. Here again, many accounts of Zen Buddhists assert that they believe reality is not-real. I think this misses the point. Reality, per se, is not a concern of Zen Buddhism, or Buddhism in general. The realization of the "is-ness" is what matters.

Dogen Zenji (1200-1253), founder of the Soto sect, describes this non-dual "is-ness", thus,

When a fish swims, it swims on and on, and there is no end to the water. When a bird flies, it flies on and on, and there is no end to the sky. There was never a fish that swam out of the water or a bird that flew out of the sky. When they need just a little water or sky, they use just a little; when they need a lot, they use a lot. Thus they use all of it in every moment, and in every place they have perfect freedom (Dogen, quoted by Bancroft, 1979: 21-22).

What we are, we are. We do not stand "in" a relationship to the world, thus establishing a "this" versus "that", a position of dualism; we are, more exactly, "the world" (cf. Loy, 1997: 250). What, though, of a sense of individual self? Contrary, again, to mainstream Western thoughts on the matter, the Zen practitioner does not lose this necessary positioning of self
as the starting point of encounter, this "I here now". This place of encounter is the point of recognition of the entwining of self and cosmos. Herrigel, as noted earlier, wrote that the Flower Master ‘should be like the flower heart, radiant, giving itself lavishly…” (Herrigel, 1958: 72). The germinal mid-point of the flower arrangement is the germinal place of all Creation. The presentation of the one, is the representation of the all. And so on. To reiterate, here is not an idea of self in relationship with the world, but self continuous in world.

Arranging

The art of ikebana is an art of arrangement. The word “arrangement” is literally the placement anew of given elements. It is this fresh process, planted, as it were, in ‘the limitations’ of the arranger’s ego that further unfolds ‘in visible unity and symbolic form’ the entwining of the Principle of the Three: heaven, humankind and earth (Herrigel, 1958: 38-39).

The Flower Master is concerned that the student does not deviate from the Zen path, that the student treats the flowers properly, and in the way of tradition in order that the student does not go astray (Herrigel, 1958: 75). This paying attention to tradition is important in that the art of arranging concentrates the mind according to the precepts to be learnt. It is thus less about doing things in traditional ways for a traditional product. The desire for “product”, indeed, is not the aim of the art.

Such an attitude stands in contrast to mainstream Western ways of thinking about creativity, art, and freedom. Cowles (1989), as an English flower arranger, expresses disgust at the tradition of ikebana. She says,

\[\text{What we think we do is, however, not always what we actually do.}\]
Ikebana, the Japanese art of flower arranging, calls for an attitude towards flowers that I, as a Westerner, find impossible to accept. It is not my nature to abide by any strict laws such as those of the Ikebana school, which depend upon oriental mysticism, oriental regimentation, oriental religion and the Oriental’s disciplined patience. Although I genuinely respect its artistic commitment and ancient origins, Ikebana is too abstract and too intellectual. I prefer the emotional approach (Cowles: 1989: 14).

Freedom to do what one wills, to express oneself, in a fight against conformity, respectability, middle-class consciousness: ‘a studied absence of coherence’ is more the Western attitude to artistic endeavour,¹⁴ as Suzuki (1962: 372) observes. This is a position of disjuncture, of self against the world. The Western flower arranger is more likely to see her arrangement as an example of self expression. She feels constrained only by the selection of flowers at hand (and, maybe, not even then, given the diversity of hot house blooms and silk flowers available on the market) and perhaps by the context under which she is to design her arrangement (perhaps a wedding, dinner party, or a baptism).¹⁵ The expression “free will” may exercise itself as a deliberate parting from current fashionable modes and practices. Cowles, in this way, says of herself:

I am an admitted renegade. Professional rules bore me to tears - especially the pompous ones. There are few Do's-and-Don’ts I follow. I don’t care whether or not a butterfly can fly between each flower in a bouquet (since I like them tightly clustered, it would in any case be impossible), I disagree that stems must never cross each other in arrangement bowls - why not, since they can entwine naturally in gardens? ..... Are rules everything? No! ‘Making Things Up’, in my view, is much more fun (Cowles, 1989: 7).

She might choose, for instance, to imitate Japanese flower arranging and

¹⁴ This studied lack of coherence is odd against the backdrop of Western-style flower arranging, which give the appearance of formalizing order, harmony and coherence. As an aesthetic impulse such individualism would seem more in tune with the “off-balance” Zen three-fold design illustrating dynamic relationality. This disjuncture of artistic form and intent is interesting and requires further investigation.
¹⁵ ‘In the West the display of flowers seems to be a part of the pageantry of wealth - the fancy of the moment' (Okakura: 1964: 52).
might integrate the Principle of the Three (Heaven, Earth and Humankind) as the basis of her design, but this bare imitation, without the accompanying meditative practice, may well show itself in mimicry, not integrity. As such, she is not practising *ikebana*.

The following of tradition for the Zen Flower Master is, as already observed, not in order to diligently and unflinchingly follow the way of previous arrangers. It is merely to establish the ordinary so that the practice becomes a meditation and a clarity of expression. As Gustie Herrigel says, ‘Only through patient practice and continual inner transformation does habit gradually wear away, until the work manifests the ‘pure form’ (Herrigel, 1958: 122). The “wearing away” of habit is what gradually gives form to originality. It is like a stone made smooth by the continual splash of water upon it.

*Zen Buddhism recognizes that we are always doing something, so the art of flower arranging, or whatever, is not to impose something onto something else, to do something special, to attain to something, but simply to do something as an ordinary act (Suzuki, 1962: 43).*

I went and I returned. It was nothing special .... (from a Chinese poem, quoted by Suzuki, 1962: 43).

Or as Chögyam (1973) puts it, ‘Zen practice is an ordinary Japanese life-situation in which you just do your daily work and sit a lot of zazen [meditation]’ (1973: 55). The tea ceremony in its formal simplicity is also merely a statement of “is-ness” performed in an ordinary hut (Okakura, 1964), as is Zen in the art of archery. Eugen Herrigel (husband of Gustie) describing his struggle to learn this art was told by the Master,
‘Stop thinking about the shot!’ the Master called out, ‘That way it is bound to fail.’ ‘I can’t help it,’ I answered, ‘the tension gets too painful.’ ‘You only feel it because you haven’t really let go of yourself. It is all so simple. You can learn from an ordinary bamboo leaf what ought to happen. It bends lower and lower under the weight of snow. Suddenly the snow slips to the ground without the leaf having stirred. Stay like that at the point of highest tension until the shot falls from you. So, indeed, it is: when the tension is fulfilled, the shot must fall, it must fall from the archer like snow from a bamboo leaf, before he even thinks it’ (Eugen Herrigel, 1953: 67-68).

The form of the act of arranging ‘finds, in the essential nature of the artist, the theatre in which it takes on visible form’ (Gustie Herrigel, 1958: 123).

The Zen Flower Master places her art as an act in the world; a Western flower arranger (like Cowles) places hers as an act outside the world, as artefact. The way the latter treats her flowers is evidence of this. These colourful sexual gestures of the plant (as Loy puts it, 1997: 269) - the petals encase the plant-form reproductive organs - are stuffed thickly into vases and the left-overs cast into rubbish bins with old tea bags, wastepaper, wire and other refuse. ‘Nothing is more pitiful than to see a faded flower remorselessly flung upon a dung heap,’ says Okakura (1964: 53).

Or she may decide to cut off the flowers’ heads:

I have a passion for ‘faces only’ on a table, which means using little more than the flower heads. There is nothing wrong with enhancing the flowers by close-ups of their heads. Looking down on them in low containers means there is nothing to distract you from the beauty of the flowers. They are my favourite form of low-life ... although I suspect that the too-traditional florist or flower arranger would pale at the thought of decapitating flowers so near their heads ... I prefer to look down into the face of a flower. A huge

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sunflower head in a shallow soup plate is absolutely stunning (Cowles, 1989: 26).

Here is a graphic representation of a sense of self as felt to be distinct from the world. The Zen Flower Master, by contrast, is a world participant expressing the "is-ness" of being in the midst of things, tending to them from the heart of the flowers. The Flower Master pledges an ethical stand, indeed as Herrigel say, the art itself 'pleads one to love the flowers as living things and to tend them with kindly feelings' (Herrigel, 1958: 100). As for flowers, so for everything. How could it not be so, for,

Being together with flowers sensitizes the whole atmosphere. It is as though people could not behave meanly in the presence of flowers, as though their nature were refined by having to do with them (Herrigel, 1958: 74).

Yet clearly this is not all, or enough (if it were then non-flower masters would be more careful with their flowers); the doing of a meditation in and on the midst of things as part of daily practice opens the heart to the heart of flowers.

From the centre of his being, from his inner self-collection, the way leads in a straight, harmonious line to the outer world. His eyes are filled with the wonder and beauty of the plants lying before him. Joined to the all-uniting being, taken up into the world of the cosmos, he can create from the centre of his own humanity (Herrigel, 1958: 75).

In the next chapter, I shall continue thinking about encountering spaces and places and one's own experiential self; this time by way of

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*Imagining Salome found John the Baptist's decapitated head likewise appealing. Her art form, like that of the Western flower arranger, would be admired, for a time and then thrown out.*
considering the Tibetan Buddhist thesis on the dense field of the “between” state. Imagine once again a game of ball. The ball is thrown; we prepare to catch it. A time elapses and we wonder how we will handle the ball when it and we meet. We watch its course over a ground we hardly know and an atmospheric dynamic we are having difficulty judging. This is a dense and complex field of tacit and focal knowledges, as well as impulsors, obstacles, patterns, spaces and places, the interrelation of which may be exposed in a number of ways. It is also a field of particularities.

Unlike the present chapter, the next chapter ‘Embodying bardo’ is more bodily in content and thus conforms to more usual understandings of what embodiment entails. I need to reiterate here that a study of embodiment does not need to be about “the body,” per se (contrary to most opinion), for if we correctly understand embodiment we will realize that “the body”, as discourse, need not be visible. To embody something is to take it into all that we are; into our practices, beliefs, and philosophies, because it is in-corporated (embodied).
Chapter six

Experiencing bardo

Experience builds to something more than a transient, episodic succession of events. The intransience of experience ties into the fact that it effects a lasting and memorable impression on the person who undergoes it. “To undergo an experience with something,” Heidegger writes, “- be it a thing, a person, or a god - means that this something befalls us, strikes us, comes over us, overwhelms and transforms us” (1971: 57). By undergoing an experience, a person picks up something new; “experience means eundo assequi, to obtain something along the way, to attain something by going on a way” .... Experience is fundamentally transformative.... (Jackson, 1996: 75)

Bardo means thrown between (cf. Sogyal, 1992: 102) in Tibetan Buddhism, but as a thrown ball is tempered by air pressure, temperature and buffeting winds, bardo is a dense subjective experiential realm where mental and feeling states arise and where we can choose to recapitulate old patterns of behaviour or awaken to something new. The bardo realm is thus not a strange place, but part of everyday life: from this moment to this, to this, to this, to .... Sogyal alerts us to this fact that life ‘creates gaps, spaces in which profound chances and opportunities for transformation are continuously flowing’ (Sogyal, 1992: 105). It is in everyday life that the bardo can be explored. Cleary (1998: 6 - 7) writes in this regard that ‘both the inner resources of the mind and body as well as the outer resources of the intellectual, cultural, and material environment’ provide materials with which to explore this realm. We need first, though, to know it is there; to be prompted into the awareness of it.

When we become aware of the bardo realm, though, initially it is a very strange place indeed. To capture some of this strangeness, I thus situate my discourse within the context of a week-long seven night theatrical
performance of the *Bardo'i-thos-grol* I attended in 1995 as part of the annual Festival of Perth, Western Australia. Undoubtedly, this performance presentation was somewhat bizarre and apparently not at all like everyday experience. This will be difficult to overlook, but I note here that by concentrating on particulars of experience, my exploration of it will adequately illustrate that the particulars of the dense field of the *bardo*, albeit strange, is knowable and shareable and, thus open to intersubjective validation.

Tibetan Buddhism has a vast literature that is designed to graphically present the perceived characteristics of the *bardo* realm. This literature, collectively known as the *Bardo'i-thos-grol*, or ‘The Tibetan Book of the Dead’, is very insightful and valuable. It describes, albeit in colourful terms, what we in the West have difficulty acknowledging. We have sidelined the subjective state as inherently private and not open to scrutiny of any value. As Varela and Shear (1999: internet) note, however, this is not necessarily so. Subjective phenomena is ‘open to intersubjective validation, if only we avail ourselves of a method and procedure for doing so.’ The *bardo* literature is an attempt to provide intersubjective validation of subjective states. It also serves as a map or a guide to arising experiential states and a way to pass through them without psychological injury.

**Buddhist theory of consciousness**

An underlying principle to how these experiential states of the *bardo* realm

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117 Also written as Bardo Thödol (Evans-Wentz, 1927/1960), Bardo Thodol (Rhoe and Thurman, 1991), Bar-do-tho-dol (Mullin, 1986) [Mullin adds that in Tibetan the title is transliterally, Bar-do-thos-grol-chen-mo], Bar-do Tödrol Chemmo (Sogyal, 1992). The writing of Bardo'i-thos-grol comes from the programme notes (Domenico de Clario and Lim Swee Lyn) to the presentation as part of the 1995 Festival of Perth.

118 This experience transformed my understanding of relationality and particularity and gave rise to my method of studying embodiment. Understanding the richness of the experience, though, in some ways, continues to elude me.
are to be understood by the Tibetan Buddhist is a theory of consciousness that may, perhaps, be foreign to Westerners. Consciousness, as understood by Buddhists, consists of a fading out and re-arising of the previous moment’s consciousness. The present mind is seen as a ‘unit born from the last moment’s mind’ (Mullin, 1986: 10). The bardo is thus an important concept because it means that in the gap between the last moment’s consciousness and its re-arising is a chance for enlightenment (spiritual awakening). The bardo allows an instant for recognizing the primordial nature that underlies all mental processes. Awakened consciousness is to be free of suffering (struggle) caused by grasping, desire, illusion, and thereby awakening to compassionate being. Compassion is defined by Yeshe (1987: 160) as ‘the wish for all beings to be separated from their mental and physical suffering’. It is a prerequisite for compassionate being, or as Samuel says, ‘a state of the total patterning of cognitive, emotional and motivational aspects of consciousness... in which one desires to achieve Enlightenment (bodhi), not merely to relieve one’s own sufferings ... but in order to free all sentient beings in the universe from their sufferings’ (Samuel, 1989: 198). If a bardo state is, instead, full of longings and old memories, the old moment is dragged back and freedom is, yet again, delayed.

Awareness of the bardo states release us from the cycle of samsara. Samsara, which is the circularity of experiences, arises from a failure to recognize the true nature of the ordinary mind. The recognition of the ordinary mind and its monkey-like scattered behaviour frees us to a state of awareness, or rigpa. Rigpa, or Buddha mind, is a ‘primordial, pure, pristine mind that is at once intelligent, cognisant, radiant, and always awake’ (Sogyal, 1992: 47). This primordial, or original mind, is that which
engages in the act of mindfulness, which observes the slippery chaotic rising of mental and feeling states and the vicissitudes of the body (e.g. during meditation). It is a state of being which can observe, without clinging to the ego, through the bardo. The awakening of the nature or essence of mind is the recognition of the Buddha within, i.e., that the awakened state is already present within. The awakened mind is thus not acquired but revealed.

Ordinary human awareness or mind (sens in Tibetan) is an element of the skandhas. Sens is the discriminating, discursive mind which can only function in relation to a ‘projected and falsely perceived external reference point’ (Sogyal, 1992: 250).119 The skandhas are the aggregates of the mental and physical existence which fill the dense field that is the bardo. There are five skandhas: form, feeling, perception, intellect, and consciousness. They are also related to experiential blockages of various kinds: spiritual, material, and emotional (Sogyal, 1992: 250).

We are not merely minds, but minds in bodies. Contrary to a popular view concerning Buddhism, not all Buddhists ignore the body. Tantric Buddhism, of which Tibetan Buddhism is part, values the body as a teaching tool for the process of enlightenment.120 An appreciation of this is very important for the understanding of the bardo literature.

119 This is the objectivity that we seek. Objectivity, as Varela and Shear note, ‘cannot be characterized as dealing with things-out-there, as independent of mental contents-in-here’ (internet: 1998). The objective position is never an absolute depiction of reality.
120 The parallel Sutra tradition, by contrast, views the body as a hindrance to enlightenment; an object to be disregarded and shed as soon as possible: a decaying thing ‘prone to sickness’ and attracting ‘misery’ in the way a magnet attracts pieces of iron (Yeshe, 1987: 117).
Tantric Buddhist understanding of the body

Far from being a hindrance or obstacle, the human body is regarded [by Tantrism] as something most precious because it contains all the necessary equipment for reaching enlightenment in one lifetime. ... We are fortunate to have this type of body and should not waste the precious opportunity it gives us to realize our full potential. We should not be like those people who do not know how to use their natural resources properly (Yeshe, 1987: 11).

To be sure, the human body, as Tantric Buddhists see it, is not merely the nuts and bolts body of Western medicine, but a body of energy as well. There is here envisaged both inner and outer architectures; a subtle body and a material body. The subtle body, they think, connects our individual bodies with the universe. The subtle body is an experiential body connected by nodes (chakras) and channels (nadis). Samuel cites Alex Comfort’s suggestion that these structures may be considered ‘as a kind of map and guide to the human central nervous system as seen from the inside’ (Samuel, 1989: 201). The subtle body may thus been seen as a phenomenological body. Though considered an experiential body, the subtle body is not solely a subjective entity; it is quasi-matter where particular loci can be objectively identified and, as such, experienced as both subject and object. The practice of acupuncture identifies this character, according to practitioners. As quasi-matter they are not, however, ‘definite physical structures within the body’ and do not correlate ‘with specific anatomical structures’, contrary to popular New Age ideas (Samuel, 1989: 201). Though there is no direct relation between chakras and specific anatomical structures, anatomical areas are influenced by the stimulation of the chakras, because the experiential body consists of mental and physical processes. In art the chakras are depicted as wheels, or even more elaborately, as lotus flowers. Hinduism
recognizes a basic six chakras while Buddhism generally considers only four. Each chakra is associated with a different colour. From culture to culture there is a variation on the "right" colours of the chakras. The colours that we perceive, however, as Yeshe (1987: 90) points out is related to our internal world. Internal states are coloured by our experiences of the world, our physical states (which are influenced by environmental health), our landscape, air quality, atmosphere, altitude, cultural attitudes, and so on. The psychic visualization of subtle bodies must surely be influenced by these as much as ordinary vision.

Tantric Buddhists envisage the body as a city and as the universe. The image of the city, first, is visualized as a patterning of roads representing the channels of energy, or nadis. Seventy two thousand subtle nadis are identified. Of these, the three principal ones are the central channel, running parallel to the right and left channels, which run either side of it. The right and left nadis coil around the central one at a number of points to form a series of "knots". These are points which are targeted in various healing techniques, such as acupressure. Down these channels the wind, or chi (in the Chinese system) blows. Each of these winds is responsible for an element (earth, water, fire, air, and space - in the Tibetan Tantric tradition, and wood, fire, earth, metal and water in Chinese tradition ). The branch winds are said to enable the senses to function. The winds that flow through all the nadis except the central one are thought to be impure and to 'activate negative dualistic thought patterns' while the winds that circulate the central nadis are identified as 'wisdom winds' (Sogyal, 1992: 248). There are said to be two kinds of 'winds': red and white. 'The principal seat of the white essence is the crown of the head, and of the red essence at the navel.' The red suggests a more primal sexual energy, while
the former a spiritualized one, an expression of the ‘luminosity or “Clear Light” of the nature of mind’ (Sogyal, 1992: 249).

Death is believed to be the dying of the ‘winds’. When the winds disappear, so bodily functions and the senses fail. The energy centres collapse at death, and ‘without their supporting winds the elements dissolve in sequence from the grossest to the subtlest. The result is that each stage of the dissolution has its physical and psychological effect on the dying person, and is reflected by external, physical signs as well as inner experiences’ (Sogyal, 1992: 250).

Tantric Tibetan Buddhists compare the subtle body not only with a city, but with the universe. They visualize a whole geography of an expanding universe with Mount Meru as its axis, surrounded by Jambudvipa with its continents, rivers, seas, planets and constellations, as illustrated and identified with the centre of the inner subtle body through which runs a subtle vessel called ‘Merudanda’ or ‘Susumna’ down the spinal column (Rawson, 1973: 139, 155). This cosmos is gathered into a single phenomenological imaginary and when meditated upon becomes a single contemplative act.

Tantric doctrine is concerned with the integration of opposites: of male with female, of body with spirit, the sun with the moon, the visible with the invisible, but more essentially, it provides powerful methods for getting in touch with our essential wholeness (Yeshe, 1987: 31). Tantra itself means “continuum.” It is an integration that does not meld the two into an amorphous blob but a union which generates powerful energy.
Like energy, other “essences” are given graphic form; even the principles of Buddhism such as compassion, anger, and so on, as Cleary (1998: 7) notes. Supernal beings are often represented by letters or abstract images. Thus the esoteric and exoteric are joined. When non-initiates view such graphic representation, wrong conclusions are often made. Tantric practitioners do not practice idolatry. (Catholicism, in its use of icons, is often similarly charged with idolatry, but, as with Tantrism, the text of scripture, too, joins esoteric meaning with an outward form.)

Supernal beings are also illustrated in vibrant coloured paintings and statues. A central deity consort for the bardo tradition is Lha Mo and Mahakala. Depictions of these deities appear in both peaceful and wrathful forms. Lha Mo, or Kali (in Hinduism), the goddess of time, combines pure ecstasy with wrathfulness. She has many manifestations. As horrible: 'Her face, with its three eyes, wears a terrible grimace of laughter, and her hair is in a single matted braid. She stands on the funeral pyre in which 'the world' is reduced to ashes' (Rawson, 1973: 132). As desire: In 'joyful sexual intercourse' with her consort Mahakala, as 'golden as the rising sun... offering gifts and comfort; her breasts are swollen with the milk which feeds objectivity into creation' (Rawson, 1973: 132).^{21}

Mahakala, known as the 'Great Black One', is the chief of the seventy-two (or seventy-five) forms of Mgon-Po. His character and powers are equivalent to the Hindu God, Shiva, the Creator and Destroyer and he may be viewed as demonic or as the giver of blessings. A blessing is something that can be read two ways: a good thing, if the gift is desired, or a bad thing, if the gift is not desired. Together Mahakala and Lha Mo

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^{21} Lauf, in contrast to Rawson, identifies these again as polarities, even though he also says that these presentations serve to illustrate how ordinary human awareness manifests itself (Lauf: 1977: 53).
form a union, expressing, as de Clario notes (in the programme notes to the presentation of the Bardo'i-thos-grol), 'the Tantric concept of the indivisible male-female principle' manifested as the deity Mahakala embracing his female energy, or shakti.  

Mahakala has many manifestations: Protector of the Tent, Lord of Riches, Protector of Science (Kaufmann, 1975: 31) and is most often shown with one head and six arms in the colours of black, blue and sometimes white. Lha Mo is the head of female deities, Goddess of the Four Seasons and special guardian of the Dalai Lama and of Lhasa (the holy city). In art she is depicted in dark blue and seated upon an elephant (Kaufmann, 1975: 31).

This deity consort epitomizes the entwining of sexual arousal and liberation, life and death, ecstasy and annihilation, properties implicit in both partners. The Taoist symbol of yin and yang represents this also. Yin and yang are never represented as totally female or male/ dark or light, rather they incorporate both in a single representation. Yin, represented by the dark sector of an orb also contains a light part and likewise for

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22 Mahakala and his retinue indicate how Tibetan Mahayan Buddhism embraced and incorporated the ancient Bon cult with its horror deities, sorcerers, and strange sacrifices and its magical practices in an effort to adopt Buddhist doctrine against the common practices and beliefs (Kaufmann, 1975: 4). David-Neel (1971) points out that serious Buddhist practitioners are not diverted by such a panorama of deities and adhere to the orthodox Buddhist doctrine of no-mind.

2a There is only one word for blue and black in Sanskrit language. Masson (1980: 57) connects these colours with the colours of the ocean and a return to the womb. He notes research on another blue god, Krishna and a close associate, Caitanya, where Caitanya leaps into the ocean because 'the dark blue color reminds him of his beloved, and is later found washed up on the shore by fishermen.' Blueness and the ocean, according to Masson, support his view that desire to return to the ocean of oneness is a desire to return to the womb. An equally valid (photocentric) explanation would be to note that blueness and blackness symbolize mystery because when it gets dark at night it is difficult to see.

2a Hang notes yin and yang 'denote every relationship between active and passive, between giving and receiving under any aspect. In fact, one thing can be actively giving and operating in one respect and passively receiving in some other respect at the same time. Since every individual unit is actively giving and passively receiving under innumerable aspects and on different levels, the universe is actually interwoven through countless yang and yin connections' (Hang, 1986: 78).
yang. Men and women, light and dark, black and white, night and day, wet and dry, outside and inside, esoteric and exoteric, etc., are thus entwined; what is expressed are not opposites, per se, but relational complements.

It is clear from these descriptions that Tantric Buddhism gathers together mythological narratives with what can be called "kitchen sink" realities. To the Western mind, these seem incompatible, even incomprehensible. I suggest, however, that what we have here is an insightful rendering of subjective experience translated into graphic account. There have been numerous attempts to capture subjective experience in text. William James' stream of consciousness idea gave birth to James Joyce's *Ulysses*. What these fictional accounts lack is a sense of body. In the Tantric account there is a simultaneous recognition of qualia and so-called objective, clinical fact presented from within the experiential interactive self. Here is a philosophy (and thus a method) for exploring subjectivity that starts in the midst of here-now embodied self. We might contrast this with the approach of Husserlian phenomenology which notes the importance of subjective experience, but leaves the interactive domain untouched. Merleau-Pontyian phenomenology moves closer to a philosophy exploring being in the midst of things. I shall expand on this later in this chapter.

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25 If we imagine the *yin* and *yang* symbols as slices through a sphere and then imagine an uncut sphere with the symbols intact, then the image we have is very similar, if not identical, with the topological figure of the Möbius strip stretched out into a spherical shape.

26 Samuel (1989: 206) urges us to realize that there are manifest differences in the Tantrism of Hinduism and Tibetan Buddhism, and in the social practices that have developed around them. He says that male-female symbolism in the Buddhist Tantras equates the male as the "active pole of compassion and skill-in-mean", whereas the female corresponds to the "passive pole of wisdom ... and voidness."
of EVOS Music and ELISION employed improvisatory music based on Tibetan chants and coloured light installations to explore the space "between". It was interactive theatre, to a degree in that it required the audience to walk between sites, to reflect on life between performances, and to be present to fill spaces (and change acoustics). This presentation was conducted at disused railway workshops built in at the end of the 19th century in the outer industrial suburb of Midland. These workshops were constructed not so much with bare necessity in mind; existing building are quite grand, albeit crumbling away into decay and a graveyard desolation. The name 'Midland' is also appropriate, referring to some in between place, an edge of civilisation and "knowing", announcing a stopover point in long-time past stock journeys made between Perth and distant stations throughout Western Australia' (Buckley, 1996: internet). The presentation, lasting a period of 155 hours and 34 minutes, and spread over seven nights in two hourly performances per night at seven different sites, demanded a certain degree of audience participation and resilience. We walked (I attended alone) to each new site in almost complete darkness, apart from half-concealed sulphur lights. This meant crossing an unknown landscape of bitumen and concrete strewn with piles of iron and small huddles of people wrapped in blankets. A security guard with his German Shepherd dog strolled about, like guardians to the dead. Fortunately we had been given a map and programme with copious notes so we had some clue about location and intention for each night.

The first presentation was at sunset. Sunset, with its darkening countenance, represented the fading of everyday consciousness or death. The next presentation began at 9 pm; the next at 11 pm, midnight, 1 am, 2
am, and the final presentation, at the predawn time of 4 am, representing
rebirth with the new dawn.

The utilization of both lights and music helped the artists transcend the
limitations of a singular monocultural experience that might have resulted
from a straight presentation of Tibetan chants. The techno-play of lights
allowed the musicians to respond to, dialogue with, 'spark a
reconceptualization of musical thought and extend the reach and form of
available documentation, thereby creating a labyrinth of influences further
"individuating" the role of the ensemble' (Buckley, 1996: internet). The
musical group, ELISION, explored an 'apprehension of sound' (ibid.),
eerily beautiful, and sometimes frightening. Indeed the music played on
one's imagination; on one's capacity for enfleshing one's fears with
phantoms.

The music of the presentation was guided by seven Tibetan chants (for
each night of the week), which allowed for the investigation of the world
of audible and inaudible vibrations (sounds and colours), and provided
by voices, two celli, saxophone, clarinet, bass clarinet, and contrabass
clarinet. The voices sometimes employed a method of singing called rising
which is, according to Kaufmann (1975: 2) a 'deep, roaring, throaty sound'
achieved when a certain low note is sung in unison with other singers.
Then two or three harmonics of this strongly reverberated note may be
heard as a kind of halo effect (Kaufmann, 1975: 32). The seven Tibetan
chants were drawn from a ăbyangs-yig377 or songbook, originally written

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377 The musical notation in this songbook is written mostly in two, sometimes three, horizontal
lines across the page from left to right. These function, more or less, in the same way as neumes of
the medieval West. Curving up refers to a rise in melody, curving down, to a drop in the melody.
Some symbols, Kaufmann thinks, are rhythmic features. Next to notational symbols are
annotations: the longer ones give information concerning the name and meaning of the song, its
composer and the use of drum beats. Other annotations suggest the melody 'move like a flowing
river, or that it should resemble the calls of birds, that it should be chanted like the sound of the
wind, like the gurgling of flowing water, and so forth' (Kaufmann, 1975: 6-7). Some annotations are
thought to have religious significance.

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from memory by the Lama Senge Norbu (an exiled master of chant born at
the turn of the 20th century) of the Karma-Kagyu-pa Buddhist sect. These
chants were written as a single voice and not as they would have been
performed, that is, for choirs; which means that when traditional Tibetan
choirs perform using the transcriptions, they must improvise from the
single line of music. The music texts by the ELISION ensemble at the
Midland Railway Workshop served as impulses to creative, rather than
traditional, improvisation.

The title of the dbyangs-yig may be translated as: ‘The diamond song
melodies give rejoicing to the Glorious Great Black One (Mahakala), his
Consort and Retinue; by clearly seeing and understanding them, magical
rites will succeed and bring blessings’ (de Clario, programme notes).
When the songs in the dbyangs-yig are performed in succession they begin
at midnight and end seven days later (the most appropriate time for the
invocation of terrible deities!).

I have tried to identify the chants used in the presentation from the
songbook (Kaufmann, 1975): see footnotes. I cannot say whether this
selection was random, or based on some undisclosed piece of reasoning.
Here is the plan of the presentation.

<table>
<thead>
<tr>
<th>Day</th>
<th>March</th>
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<tbody>
<tr>
<td>1</td>
<td>Sunday 5</td>
<td>6.47 pm- 9 pm</td>
</tr>
<tr>
<td></td>
<td>Invitation Song to Mahakala²⁸</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Monday 6</td>
<td>9.00 pm- 11 pm</td>
</tr>
<tr>
<td></td>
<td>Invocation to Lha Mo, Goddess of the four seasons: 'Dance at the time of the Young Moon'²⁹</td>
<td></td>
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</tbody>
</table>

²⁸ Song 8: an 'Invitation Melody' to Mgon-Po': 'Om; Sri Mahakala..come here, come here...as heat' (Kaufmann, 1975: 103).
²⁹ Song 56: an 'Invocation to Lha-Mo' (p.309)
<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>7</td>
<td>11.00 pm- 1 am</td>
<td>Invocation: Intensely Sad Song to All</td>
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<td></td>
<td></td>
<td>Protectors of Religion[^20]</td>
</tr>
<tr>
<td>Wed.</td>
<td>8/9</td>
<td>12.00- 2 am</td>
<td>Song of Compassion[^21]</td>
</tr>
<tr>
<td>Friday</td>
<td>10</td>
<td>1.00- 3 am</td>
<td>Song invoking Demons &amp; Devils; Prayer Song to Mgon Po Suppressing Evil[^22]</td>
</tr>
<tr>
<td>Saturday</td>
<td>11</td>
<td>2.00 am- 4 am</td>
<td>Mantra Song concerning offerings[^23]</td>
</tr>
<tr>
<td>Sunday</td>
<td>12</td>
<td>4 am- 6.13 am</td>
<td>Mantra to Sri Mahakala: Song of Intense Sacred Contemplation[^24]</td>
</tr>
</tbody>
</table>

(Expanded from the programme notes of the presentation, 1995; using Kaufmann, 1975).

The Festival of Perth presentation required the audience to visualize the sites we walked as parts of our own bodies. From the programme notes, we read:

The entire workshops can be perceived as the physical body: the steel mesh compound in which the Bardo takes place can be perceived as the 'essential' body within; the specific workshop buildings and their associated former functions act as the chakras - [Root Chakra/ red/ generators; Spleen/ orange/ water towers; Solar Plexus/ yellow/ coppershop/ hearth; Heart/ green/ panel shop; Throat/ blue/ sand shed; Brow/ violet/ steel shop; Crown/ white/ powerhouse]; the performers as the Indestructible-Drop that carries 'clear-light of awareness-transmitting substances' (transmutation[^25])

[^20]: Song 49: 'In Praise of the Protectors of Religion'. There are five verses: 1. Hum; Keep your vow with the spiritual lineage, Lama and personal Lamas, 2. Bhyo; the shining wave of the female sign, 3. the female organ gives birth to the Buddhas of the past, present and future, 4. By the blessings of keeping the oath which is a treasure, 5. Please reverse the wrath of the angry female (p.276).
[^21]: Song 73: 'Song about Compassion' 'In true existence is (can be found) immovable compassion' (p.358).
[^22]: Possibly Song 31: 'Invitation to the Fierce Man-eaters, Srin-Po and Mgon-Po' (p.200).
[^23]: Possibly Song 9. A mantra on the gifts bestowed on Buddha. The offerings are: pure fresh water for washing the feet, flowers, incense, lamp butter, perfumed balm for anointing the body; sacred food and music.
[^24]: Song 79: 'Melody of the Victorious Voice'. There are five verses: 1 - 3 represent Sanskrit syllables derived from the name Mahakala. 4. Hum; Lord of the Southwest come here. 5. With the son of beauty come here (in your) splendour. This mantra is to Mahakala. It is 'a song of intense sacred contemplation. It is called the Voice of the Great Drum, Achieving Victory over Evil' (p. 383). 243
point energies). The chants/sounds/colours carry the manifestations of this indestructible drop\textsuperscript{18} through their vibratory rates as they increase in frequency from chakra to chakra, from the red (lowest in frequency), to the white (highest). Finally the audience provides the Ida-Pingala current energy as they walk through the Chakra pathway (de Clario, programme notes, 1995).

In this way the presentation was in keeping with Tantric Tibetan Buddhist practices. As I noted in the introduction to Part Two, the many forms of Tantric practice use the materials of everyday life as well as the ‘inner resources of the mind and body as well as the outer resources of the intellectual, cultural, and material environment’ (Cleary, 1998: 6 - 7). Consider the performing of the sand or butter mandala where intricate symbols are drawn in a circle by monks who, in the case of the sand mandala, fill small metal funnels with coloured sands and painstakingly rub the funnels with a stick so that small quantities of sand are deposited in designated areas of the mandala. The mandala itself is seen as a sort of architectural plan of a deity’s house; that is, the two dimensional is meant to be meditated upon and visualized as a three dimensional form.

The layers upon layers of meaning achieved by incorporating everyday objects into elevated symbolization of spiritual and relational practice is part of many cultural practices. Christian churches are traditionally designed around a cross, symbolizing simultaneously the death and resurrection of Jesus Christ. Other incorporative practices may be employed. The Chinese village, as Knapp (1998: 110 - 127) notes, may be “textualized” into architectural plan so that the built landscape is “scripted” to represent in concrete terms the superiority of the learned classes (p. 110). In a very graphic example, Knapp shows that the very design of a village common area represents the calligraphy tools of a

\textsuperscript{18} The “drops” (Sanskrit, binda) are a constituent of the vaja body (the subtle body, i.e., the system of channels, energy-winds and drops existing within the human being’s ordinary physical body) used in the generation of great bliss (Lama Yeshe, 1987: 161).
scribe (p. 122). Other messages are likewise conveyed in architecture. For example, the building of pavilions may be used to ‘narrate a lesson of mutual fraternal love, the reciprocal caring and loyalty of brothers as a basic kinship bond’ (p. 114). The Kuranko tribe in West Africa, before the building of a road between villages and the rest of the world, designed their buildings in a circle around a common area. The word \( (k\text{île}) \) for the interconnecting pathway was the same for “walking” and “social relations” (Jackson, 1989: 145). Built structures and narratives are probably universally interconnected.

I now to allow the reader insight into my experience. My experience is counterpointed with - *en-nested* in - the programme notes and other readings. These notes, etc. are not mere add-ons, for they contributed to my experience of the ELISION performance; gave extra meaning; entered my personal narrative of the experience.

**My journey along the road of the body, city and universe**

At the base of the spine in the anal region and including the sexual organs is the Root Chakra. This is comparable to the world-wheel on its axis, the Merudanda. Hindu Tantra calls this the Muladhara, or ‘root support.’ As a root support it may be compared with the root system of a tree: in contact with the earth and receiving elemental energies from the ground. The first performance showed how the male and female energies of this chakra interweave by setting it by the two condensers at the Workshops. The location was lit in the colour red (with its extra long light wavelengths) and the music welled up from a deep harmonic chant (two celli, bassoons, clarinets, voices, saxophones). It resonated with the Root Chakra in my own body (space, harmony, location, visual description, and
sound became an inner/outer perception). This warming bodily sensation contrasted strangely with the cold deck chair on which I sat and the icy wind that blew down the pathway.

The water towers lit in orange were used to describe the Spleen Chakra. In Tantrism the spleen is believed to govern the transportation and transformation of the essence of water and grain which is the basis of the formation of blood and energy. This night I was more accustomed to the format - almost comfortable, but the next night at the location of the representation of the Solar Plexus chakra at the hearth of the coppershop and lit in yellow light, I was filled with an uncomfortable wave of fear. I looked around me, frightened. Shadows in the half-light seemed menacing. This chakra corresponds to the Hindu Manipura chakra (mani = ‘jewel’ or ‘phallic principle’, pura = ‘city’). This is the region of the mystical fire and in Hinduism its devatas look after the cremation ground. The charnel ground combines decomposing corpses and burned remnants (cf. Mullin: 1986: 69). Here the world ‘is consumed and transformed through the agency of flame generated by the upper and lower psychic energies in combination’ (Rawson, 1973: 166); something that was captured in the smells of a nearby rubbish dump and the musical sounds of that night: discordant horrible wailing that seemed to represent disparate urges - like an argument between mind and body felt, in my body, as unbearable tension. Interestingly, this bodily insight is reproduced in medicinal theory: the solar plexus is said to be responsible both for rational thought processes and clairsentient and other psychic energies and, at a physical level, to assist in the assimilation of nutrients for the body (cf. Clifford, 1990).
The green light-filled panel shop, where old things come in for repair and new things leave, represented the Heart Chakra. With this performance the arrangement of pipes and cases and the like were contrived to look like the heart - almost too contrived. Unlike the previous locations this building was big enough to allow all of us to move from the cold night air to a more welcoming setting, as though the Heart was the compassionate zone (indeed this is said to be the function of the chakra). Chairs had been provided for most of us. For the first time I looked closely at my fellow bardo-travellers and found many elderly people among us. We were all wrapped in an oddment of warm coats and blankets and carried pillows and cushions: a funny, motley crew.

On walking to the next site, a sand shed, I and several member of the audience had to walk past a security man holding a meek and mild Alsatian dog. Some protection from the demons of the bardo realm!

The sand shed, a more open place where the communication between arriving trucks and departing vehicles used to be continual, was lit in the ultra short wavelengths of blue light and represented the Throat Chakra. This chakra is responsible for respiration and communication (both physical and telepathic). The performance used a single saxophone to illustrate this. The music was eerily beautiful and alluring. I lost my fear and felt at home. Too comfortable, perhaps. Maybe I had become accustomed to the idea of these nightly performances and the sense that they were nearly finished, maybe this was why I had become a little detached from the whole exercise.

The steel shop bathed in ghostly violet light represented the Brow Chakra.
This is the location of the ‘third eye’, and traditionally the place for discerning the psychic realm, or as the Chinese say, ‘knowing a thousand things.’ As Andrews writes, ‘This is the centre for higher clairvoyance and the entire magnetism of the body (the feminine aspects of our energies). It opens one to higher and clearer perceptions. [It facilitates] the process of imagination and creative visualization’ (Andrews, 1992: 45). At a physical level, the Brow Chakra influences the immune and endocrine system and the functions of the pituitary gland.

The powerhouse, appropriately, represented the Crown Chakra and was illumined in white light (which is the combination of all wavelengths).\(^{56}\) This chakra influences the nervous system and, at a spiritual level, is said to align us with Transpersonal energies of the universe. As the music that resonated to the top of the head welled to a climax, the sun began to rise: another day. The week-long bardo state had been lived through, participated in, and celebrated. The experience was enormously uplifting; indeed it felt as if the top of my head had lifted off with the energy of the new day.

Beyond the Crown Chakra is the region of the Transpersonal. We were boosted from the safety of our ordinary awareness into this realm (the realm that serves to bridge the evolutional spiral to the next birth).

The Midland Workshop compressors once furnished the entire 78-hectare site with high pressure air for use in various workshops. At the site of the compressors had been placed a large antenna on an inaccessible balcony

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\(^{56}\) Reanney (1994: 59) connects the frequency of the wavelengths that are experienced as colour with the the various planes of human existence: physical reality, waking reality, dreaming, and ‘unitary reality’ with various levels of consciousness. Low frequency wavelengths correlates, he thinks, with physical reality and with ‘all sub-human states of consciousness’; a combination of all frequencies (ie white light) he sees as correlating with unitary reality and a no boundary consciousness. This assessment seems to me rather too esoteric.
serving to represent the Transpersonal realm. Beyond a locked iron gate, a chandelier was placed to light the way into the subterranean passage that descends into the earth back to the Root Chakra - thus signifying both rebirth and the interconnectedness of all energy forms.

Throughout this bardo journey, with its repeated oscillations of fear and release, were presentations, through illustration, of an infinite number of choices. After awhile what happened at night began to impinge upon what happened during each day: the reality of performance began to shift into the domain of ordinary life as much as ordinary life entered the domain of the performance.137 In this way the presentation cycle took us through the whole of seven days and seven nights, activating reciprocal meanings back and forth night and day. Thus we, the audience and the musicians, sound and light play, dogs and security guards, sheds, gates, aircraft flying overhead, etc. were as much of the presentation as its content.

These presentations of the Bardo'i-thos-grol performance cannot simply be left there. Every moment is a bardo; every moment is an opportunity to traverse across the experiential abyss of dread and clinging. If this is so, I must give (brief) account of my ordinary life between performances. Unfortunately, and wasting a very good opportunity, I did not keep a diary of this time so what is below is diluted by non-attention and time. Thus I fail to provide a true autobiography, which as Grumet (1995: 38) notes, is 'embedded in its detail, not its generalization.'

137 Of course as the day ate into the night (staying awake later and later), day became night. Tiredness brought a heightened state of awareness, a clarity that, perhaps, may not have been present if the performances occurred at the same time each night.
Between: recollections, March 1995

In March 1995 I was house-minding in the Perth suburb of Mount Lawley. It is a little brick cottage with a pagoda in the backyard. The garden is full of lavender and roses. The house has wooden floor boards that creak. I lived there alone for nearly six months. Each night of that week I set off in my little car to Midland by myself to attend the bardo performances. At first it was easy, but as the sessions began later and later each night, fear began to infiltrate my consciousness. I was living in a strange suburb, travelling to an even stranger outer suburb in the “ghosting hours” when only shift-workers and (possibly) criminals drove the streets. Because I practice the art of self-observation, I used the nightly excursions to observe my fear, to renounce my attachment to it. My fear had to do with a feeling of vulnerability, exposed, of being “got at”.

During the day in March that year I did two things: I researched my doctoral thesis and tutored first year linguistic students. One of my classes was held at 8 am on Thursday morning. The performance for Wednesday had ended at 2 am Thursday morning. I remember my class well that day. I had the strong impression that I didn’t really wake up until half way through my lesson. Seems my autopilot was running well that day. [Reminds me of a cartoon where drunk Russian pilots about to land their plane, heard traffic control say “Taxi” and said to each other, “Well, we shertainly can’t drive home.”]

On Day 1, Sunday, the performance began at 6.47 pm and ended in good time to go home and spend a little time in the evening before going to bed. The next night was a bit similar. I waited until 8.15 and then set off for the Midland Railway Workshops. The third night, I had a little nap before
setting off with about half an hour to spare. The fourth night, I napped until 11 pm and set off about half an hour later. Day 5, Friday, 10 March began with a nap and a thirty minutes past midnight trip and a journey home at 3 am. The next day began at 2 am and a journey home in the unfamiliar darkness of predawn Saturday. Sunday began at 3.30 for me and a trip home after the rising of the sun. I was so exhausted by the whole exercise that I went straight home to bed.

While it is true to say that I participated in the performances by being there and interacting as I did, it was not until some time afterwards (and still, now) that the meditations of then and all the bardos (including those of dreams) between 1995 and now (and this is a continuous now) began their teaching. Reflections on the Bardo'i-thos-grol, with all its seeming appearances of supernal beings - through music and light and imagination - has continued to reveal my 'reflexes of inner processes, experiences, and states of mind', as Govinda puts it (1969: 122) and facilitated the development of my understanding of the self, myself, as an interactive emergent being. The hearkening of beings may be a 'charmed consciousness' (Govinda, 1969: 122-123) that circle around the adept, protecting her from the horrors of death and the dangers of sinking into lower states of or a threat to the ego, so profound as to either liberate the self or torment it by the ego's self clinging, It is this sense that continues long after the bardo week.

**Arising states in the bardo**

The really interesting thing about the bardo tradition, is that it identifies in a sort of psychological map the journey through oscillations 'between,' as Sogyal says, 'clarity and confusion, bewilderment and insight, certainty
and uncertainty, sanity and insanity’ (1992: 104). It is a dense state (or states) where ‘wisdom and confusion arise simultaneously, or, as we say, are “co-emergent.” This means that we face a continuous state of choice between the two, and that everything depends on which we will choose’ (Sogyal, 1992: 104-105) from this moment to the next, the period between birth and death, the dream state, the period between wakefulness and sleep, and so on.

The bardo literature populates this realm with personifications of arising feelings and states of mind that might be felt as a person moves through the realm. Attachments (positive and negative) are given form. The negative forms and their delusionary attachments are: the hell realm (root cause: anger), the realm of the hungry ghosts (root cause: avarice), the animal realm (root cause: ignorance), the human realm (root cause: doubt), the realm of demigods (root cause: jealousy), and the god realm (root cause: pride) (Sogyal, 1992: 306-307). Any of these may be stirred to life in the bardo. Purification of the six realms is achieved by imagining that all the karma (a ‘seed placed on the mind by any action - good or bad’, Mullin, 1986: 17) accumulated by that particular emotion dissolves entirely into the light.

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138 The negative forms are countered by positive ones, but only by practitioners of bardo yoga.
139 An example of the horrors of these realms is this description of a painting:

The expression of passion or rage which the horrific devatas wear signify an inconceivable degree of energy; their immensely swollen bodies, violent gestures and copulations demonstrate their limitless libido; while their aureoles of flame and smoke refer symbolically to supernatural energies released in the cremation ground (Rawson, 1973: 136).

140 The six realms present the world in different ways, as well as personifying human desires, greed, illusion. A typical Tibetan story illustrates this. Six different beings meet by the banks of a river. The human being sees the river as water in which to wash or drink from; a fish sees its home; a ‘god sees it as nectar that brings bliss; the demigod as a weapon; the hungry ghost as pus and putrid blood; and the being from hell realm as molten lava (Sogyal, 1992: 114). Each has ‘a private world: these private worlds are “worlds” only for their titulants; they are not the world,’ says Merleau-Ponty (1968: 10). I need to point out here that Merleau-Ponty was not writing on this Tibetan story, but on human perspectives.
The arising of attachments in the ordinary bardo realm (that is, during life) are stimulated, I suggest, by promptings, or impulsors in the socio-physical world in much the same way as height and patterning of the visual and proprioceptive field stimulates a bodily response. Personifications of desires, with evocative music, coloured lights, and the physical design of the Midland Workshops serve as impulsors for my varied psychological responses. An impulsor, to reiterate from an earlier chapter, is an element that the body “identifies” from an immediate milieu that best affords participation. Undoubtedly, the nature of my responses were strongly shaped by my cultural conditioning. I suggest, however, that cultural conditioning may not necessarily account for all my responses. Perhaps, as much as a set of stairs stimulates movement for the Parkinsonian (see chapter three), a patterning of sound and/or colour of light may stimulate a mood response. For example, in my account on the Root Chakra, I noted:

The location was lit in the colour red (with its extra long light wavelengths) and the music welled up from a deep harmonic chant (two celli, bassoons, clarinets, voices, saxophones). It resonated with the Root Chakra in my own body (space, harmony, location, visual description, and sound became an inner/outer perception). This warming bodily sensation contrasted strangely with the cold deck chair on which I sat and the icy wind that blew down the pathway (see above).

Was my feeling of warmth the response to a pitch of sound and a colour of light, or was this a persuasion of conditioning (given that I am steeped in the literature and practice of qi gong)? Varela, Thompson and Rosch note that as far as colour is concerned, there is no “first” thing. They write,

colours are not “out there” independent of our perceptual and cognitive capacities. .... colours are not “in here” independent of our surrounding biological and cultural world. Contrary to the objectivist view, colour categories are experiential; contrary to the subjectivist view, colour categories

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belong to our shared biological and cultural world. Thus colour as a study
case enables us to appreciate the obvious point that child and egg, world and
perceiver, specify each other. (Varela, Thompson and Rosch, 1993: 172).

Conditioning through culture, education, persuasion cannot, thus, finally
be separated from the physiological. There was a chiasmic connection of
sound, space, light (shaped by shadows), and the people around me
(including the persuasive presence of a Tibetan lama) providing *impulsors*
that created a narrative which enhanced the implicit narrative of the
*Bardo'i-thos-grol* itself (not a story, as such, but an account of the ego
grappling with its own fears of dismissal).

The ego needs these attachments in order to exist, at least according to the
Buddhist perspective, which means that it can never be fully satisfied, nor
independently present. Levin (1989: 268) notes that the ‘ego lives in a
time-zone between the forgetting of Being and the beginning of an
ontological recollection.’ Ego, as Sogyal says, ‘is ... defined as incessant
movements of grasping at a delusory notion of “I” and “mine,” self and
other, and all the concepts, ideas, desires, and activity that will sustain
that false construction’ (1992: 117). It arises in the *bardo* realm out of old
reactions. To be understood in terms of a theory of the self as that which
is participatory with the heavenly realm and the realm of earthly affairs,
it is a failure of consciousness, and openness to the interrelationality of all
things. Indeed, the idea of ego in Tibetan language is *dak dzin*, meaning
‘grasping to a self’ (Sogyal, 1992: 116). Ego, seen thus, is not an entity (as it
is in psychoanalytic thought) but a clinging to a stable self. It is hard to
face the primordial self in the new moment of consciousness without the

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*Psychoanalysis (including Jungian analysis), a philosophy of being where the ego is given
independent existence, cannot provide a point of liberation from struggle and suffering. It is
interesting that Jung, in his commentary to the Evans-Wentz edition of *The Tibetan Book of the Dead*
(1960), considers the *Bardo'i-thos-grol* to represent the ‘archetypal contents of the unconscious’ (p. 68)
and liberation, the sacrifice of the ego. This interpretation allows Jung to suggest that a natural
analogue to the Book is the ‘transformation of the unconscious that occurs under analysis’.

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familiar clothing of the ego.

If we consider the attached responses to the patterns of light, sound, and the presence of other people as also to that which the ego clings, what the ego grapples with is more than ephemeral psychic arisings. The Tibetan Buddhist notion of mind thus takes in more than what we in the West are familiar with. Sense perception is understood as a category of mind (Western thought considers perception a category of the body). As Napper notes in her introduction to Lati’s book,

> sense consciousnesses do know, do realize (adhipam, rto gs) their object. Not only that, but sense consciousnesses can also be trained such that an eye consciousness can know not only that a person being seen is a man but also that that person is one’s father. This is not to say that the eye consciousness labels the person, ‘This is my father,’ but it does know it, and that knowledge induces the subsequent conceptual consciousness which actually affixes the name ‘father’ without any intervening reflection (Napper, in Lati, 1980: 18).

It is important to observe that the mind is not thought of by Tibetan Buddhism as a ‘reservoir of information or just the brain mechanism’ (Napper, in Lati, 1980: 15), nor as transcendental spirit - theirs is an ecological perspective. Minds are ‘active agents of knowing’, they are ‘individual moments of knowing, the continuum of which makes up our sense of knowing’ (Napper, in Lati, 1980: 15). The contents of mind arise as we encounter our world. This emergent concept of mind parallels other ecologically inspired concepts. I note here the Gibsonian model already included in this dissertation and Varela, Thompson and Rosch’s (1993) account of embodied action:

> cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and ... that these individual
sensorimotor capacities are themselves embedded in a more encompassing biological, psychological, and cultural context. By using the term action we mean to emphasize ... that sensory and motor processes, perception and action, are fundamentally inseparable in lived cognition. Indeed, the two are not merely contingently linked in individuals; they have also evolved together (Varela, Thompson and Rosch, 1993: 173).

By considering mind as thus much more than a reservoir of knowledge or a mere brain mechanism, the idea that this space between is a ground for arisings of thought and feelings has also to contend with the realization that these attach themselves to socio-environmental impulsors and congruent and possibly non-congruent perceptions. This proposal needs further thorough investigation. I suggest, though, that, for instance, feeling afraid when climbing uneven stairs in the dark, arises out of a disruption to our normal autonomic responsivity to the impulsors of regular patterning by our vestibular, visual and proprioceptive systems. In chapter one I noticed this relationship in terms of the hyper-hyposensitivities of Asperger's Syndrome. People with AS 'seem fearful in space' (Hatch-Rasmussen: internet) and clumsy with people (not able to "read" the signs of social intercourse, where there is a pattern to talk, gesture, and body movements, see Kendon, 1990). I suggest, following my general idea that relational disorders show us a way to understanding normal reciprocal encounter, the "pooling" of abnormal (e.g. fear) response to physical and social encounters illustrates how impulsors operate in all human encounters.

How, though, may we realize the contents of the bardo state? In the next section I shall suggest that part of the process of realization is literally an acknowledgement or the real-ization (the "making real") of bardo contents. Various techniques have evolved for this process, including meditation
and, as I shall soon suggest, the theatricalization of the process. I have already also suggested that self analysis and such particularizing techniques as practised by ethnomethodology also permits access to the arisings in the *bardo* realm. I am in no way suggesting that these analytic stances are all the same, with similar aims. Such an idea is nonsensical. I am, however, interested in the way these techniques open us to possibilities, particularities and a greater sense of relationale.

**Real-izing bardo**

The purpose of meditation is to provide a milieu for dispassionate observation of the ordinary mind (*sems*) and its monkey-like behaviour. The performance of the *Bardo'i-thos-grol* could be said to fulfil a similar function. It created physical space as much as psychological space for the observation of an unfolding drama. The lack of ease of this detachment well illustrates the lack of ease of any meditative detachment. The body as much as the mind is affected by sound and colour, and dancing shadows, and fears, and memories. Within the *bardo* practice, perhaps in preparation for death, or after death, the meditative concern is the freedom of attachments.

Participation in a theatrical performance requires a suspension of disbelief, as Coleridge put it. It is relatively easy to detach oneself from the activities of a performance - at least in the normal course of things. It is possible to sit in a theatre and sometimes become involved in the action and sometimes to withdraw, in Gestalt fashion. In the presentation of the *Bardo'i-thos-grol* this possibility was somewhat confounded given the alien setting and time of performances, for as I noted before, the drive to Midland in the middle of the night, the disturbing wasteland in which the
workshops exist, the twisted iron, the concrete, and empty buildings of the site all contributed to deeply involving me in the drama that is the bardo realm.

How we sat in the performance presentation mattered, as much as sitting in meditation benefits dispassionate observation. Minimal body movement and contact minimizes perceptual interference. What the Midland Workshop lacked was comfort and inherent warmth. We often sat upon cushions on hard concrete (there were few chairs), rugs barely fought off the biting cold, although these performances were in March (a season usually associated with heat in Perth). The physical discomfort extended to unpleasant smells sometimes wafting from a nearby rubbish dump. These assaults on our senses thus paralleled, at least to some degree, the physiological assaults during the dying process. In this way, the nature of the performances gave a very good account - through illustration and impact - of the bardo realms.

Dispassionate detachment from psychophysical risings in the bardo realm is what the Tibetan Buddhist practice of focussing on this realm seeks to attain. If we imagine our ball game and follow Heidegger in saying that, as humans we are thrown into being, then awareness of the bardo is a thownness into conscious awareness. Here, in this moment of awareness is a gap between the old consciousness and this new consciousness. It is in this way, only, that the bardo is a transition into a clearing (wu). While the ego clings to the old moment, the bardo is a place of attachment. In the possibility of thownness into wu, is a possibility for sharing in one another. I will conclude this chapter with exploring such a possibility.
Thrown into an openness of being

Dispassionate observation could release us from the cycle of \textit{samsara} to a state of awareness (\textit{rigpa}). Such space between (which is the meaning of meditation: \textit{medi} meaning “middle” and \textit{tare} referring to “stay”, or “ground”) is, in the language of \textit{bardo}, the point of clearing, of a hearkening. We are \textit{Da-sein}, ‘thrown,’ as Levin puts it, ‘into the openness or clearing of Being’ (1988: 38). In this space-between, if we are open, do hearken, we live ekstasis, we are Buddha nature.

The ekstatic connecting of awareness between this moment and the next and the embodying process tears apart habitual being, a being that contracts “I can” into “I do” (cf. Leder, 1990: 32) and opens us to what Thich Nhat Hanh (1987, quoted by Evan Thompson, 1999: internet) calls ‘interbeing.’ This is a sense of continuity of self and other, yet without an actual dissolution into the other.

As much as this interbeing realizes its interrelationships with the world, it also recognizes its ‘interpersonal dynamic of self and other’ (Thompson, 1999: internet). The recognition of such interplay and entwinement necessarily leads to a greater awareness of mutual self-world responsibility. This level of awareness contrasts and extends the rising of empathy from a physical calmness that expresses gentleness towards other people and animals (see chapter one) to active compassion.

In compassion there is a chiasm that opens my world into your world and your world into mine. To paraphrase Merleau-Ponty, ‘this one is also what makes us belong to the same world - a world which is not projective, but forms its unity across incompossibilities such as that of my world and the
world of the other’ (1968: 214).

By reason of this mediation through reversal, this chiasm, there is not simply a for- Oneself for-the-Other antithesis, there is Being as containing all that, first as sensible Being and then as Being without restriction (Merleau-Ponty, 1968: 215).

This chiasm reveals self as flowing through compassionate action into the other. A self acting for the other. Thus compassion is more than sympathy or empathy, as Sogyal notes,

[Compassion] is not simply a sense of sympathy or caring for the person suffering, not simply a warmth of heart toward the person before you, or a sharp clarity of recognition of their needs and pain, it is also a sustained and practical determination to do whatever is possible and necessary to help alleviate their suffering (Sogyal, 1992: 187).

The bardo realm is experientially dense with arising thoughts and feelings and, as we move from this moment to that moment, we have the opportunity to realize these thoughts and emotions as usually habitual or conditioned responses. This realization itself is the “arousing” or hearkening of conscious awareness which strips away all that conceals the awareness of our entwinement with the world. In this place of disclosure, we begin to see everything, including ourselves, embedded in relationship with everything else. This relationship is ‘perceived in the same way as when we meet a friend’ (Guenther, 1972: 27). It is in this opening, this birthing of a familiar if unidentified\textsuperscript{\textcopyright} relatioality, that compassion comes to light. Here is the point at which I am not a ‘for-Oneself’ who is also ‘for-the-Other’ (by, perhaps, an act of imagination), but a participator in the ‘Being [that contains] ‘all that, first as sensible Being and then as

\textsuperscript{\textcopyright} The identification through conscious awareness is an awareness of the tacit realm, thus its familiarity.

This Being that embraces all does not, however, abolish differences but allows us to see past them. Such differences are inevitably present (for you have your particular physiology, social background, history, and I have mine; this is the nature of embodiment) but our attitude to these differences is altered. In the case of the possibility for mutual sharing in sensuous psychophysical experiences, as occurs in hugging (possibly preparatory to empathy), for instance, there is a “sliding” of objective “other-hood” into subjective “self-hood”; perceiving of another’s pain as one’s own, though not, obviously, in the same manner. This experience alters our manner of dealing with the world (which is, of course, a reciprocal transaction). ‘You feel the other people -- isn’t that what compassion is?’ (Gendlin, 1997: internet).

Understanding bardo is understanding embodiment
Understanding embodiment is understanding the process of embodying encounter. It is thus also a matter of becoming conscious of the dense field of tacit and responsive encounters in all moments, all possible bardos. The process of becoming conscious may be compared to the quest of human beings asking the meaning of life (at least according to Tantric thought). Guenther points out that this, indeed, is the aim of the Tantric quest (or any quest of self-discovery): the act of seeking the meaning of human existence is the Way of Being human. Tantrism has already foreseen the needs of the human being and, reflexively, describes the human being as

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This idea is inspired by Abram’s comment on having the sense of timelessness. He writes,

I found my way into this living expanse by dissolving past and future into the sensorial present that envelopes me, did I thereby do away with them entirely? I think not. I simply did away with these dimensions as they are conventionally conceived - as autonomous realms existing apart from the sensuous present. By letting past and future dissolve into the present moment, I have opened the way for their gradual rediscovery - no longer as autonomous, mental realms, but now as aspects of the corporeal present, of this capacious terrain that bodily enfolds me (Abram, 1997: 206).
one who seeks her own meaning. Man's 'Being,' according to Guenther, 'is not only precious (rin-po-che) but also the very mystery gsang-ba) of life as a problem involving man for whom it is a problem' (1972: 12).

Underlying the Tibetan position, though, is the Buddhist theory of consciousness and a theory of embodiment that is based on this theory of consciousness. Consciousness, as noted earlier, is thought by Buddhists to be the fading out and re-arising of a previous moment's consciousness. The present mind is a 'unit born from the death of the last moment's mind' (Mullin, 1986: 10). In terms of embodiment, to reiterate my earlier quote of Varela, Thompson and Rosch, instead of 'being embodied (more accurately, reembodied moment after moment) out of struggle, habit, and sense of self, the goal is to become embodied out of compassion for the world' (1993: 251 - 252). Consciousness, in this view, is integral to embodiment; they are mutually dependent arisings.

**Some final thoughts on two kinds of philosophizing**

The Tibetan perspective on embodiment has two aspects relevant to my thesis: that while our awareness of interconnectedness shifts with our state of consciousness, we are entwined in three-foldness of human beings, earth and heavenly realms. What is lacking in this philosophy, however, is an account of the flux and flow of bodily awareness and its association with psychological awareness. Indeed, by tying embodiment to a theory of consciousness that sees human beings as entwined in threefold engagement in all creation (which is a valuable thing), Tantric thought cannot consider the body as anything except a being that is in a threefold entwinement. There is no room in this system of thought (for that is what it is) for a statement which considers the state of our
awareness as not only due to our level of consciousness, but as part of the flux and flow of human bodily awareness.

By virtue of Western accounts we are able to see that human awareness (psychological and somatic) feeds forward and back upon our relationships, beliefs, conditioning, cultural ideas, physiological states of pain in its diversity of expression, neurological health, etc. (cf. Leder, 1990; Abram, 1997; Levin and Solomon, 1990). This dimension of our being, this insight - out of reach from Tantric Buddhist thought - is uniquely the result of Western philosophical thinking, particularly Merleau-Ponty’s phenomenology of perception. It is this I shall now explore further.

Merleau-Ponty’s phenomenology of the body, that allows us to contemplate the body’s contribution to the flux and flow of awareness, is one of the most important outcomes of Western philosophic method. It is a dimension that is impossible to indicate via Tantrism or any other Eastern philosophy. The reason, as noted above, is that the latter sees the body/self as only relational to the universe (in a threefold way); it does not have the means to examine bodily perception of itself as having a valuable contribution to make to better understanding embodiment as an open-ended process. Though Tantric thought is a philosophy of embodiment (which is a process) it is only so in a preconceived model of process. In other words, Tantrism is a philosophy of being; it is not a metaphilosophy. It has no means of self-reflection and no means of opening to other ways of seeing, except insofar as it sees the quest for self-reflection as the human condition. Merleau-Pontyian phenomenology, on the other hand, points to

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24 The system of Abhidharma psychology of India (later adopted as part of Tibetan Buddhism) aimed at bringing about the closure of dualisms, has a component that aims to experientially analyze bodily felt forms as a Gestalt (cf. Levin, 1988: 476). This identification of foreground-backgrounded bodily sensation, though, is aimed at revealing the illusory nature of all things.
the body as both a source of philosophic thinking and a means for philosophizing philosophy. It is this latter move that allows us to think about the body as containing within itself a capacity for generating philosophical ideas of itself, for instance, subjectivity and objectivity, self and others, etc.

Merleau-Ponty, by focusing attention on the perception of the body and using the rigorous tools of phenomenology, shows us accounts of things bodily as they appear to an experiencing consciousness. In doing this, he, as Abram (1988: 103) notes, ‘was the first phenomenologist to identify the body, itself, as the conscious subject of experience.’ This move is integral to discovering the body as a site for philosophizing and a philosophizing site (thus making the study of embodiment also a study of metaphilosophy). ‘My body is the system of all systems of perspectives; I am this system unfolding itself’ (Wu, 1997: 226). So, even though the examination of the body has been foreign to Western philosophy, the West’s method of scrupulous examination and analysis has permitted us to enter the perceptual domain of the body and thus to place it in the midst of things.

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*The Greek expression *phantomenon* comes from the verb *phantainesthai*, meaning “to show itself”. Thus *phantomenon* means what shows itself, the self showing, the manifest.*
To catch a ball, the player must adjust her movements to the flying object in such a way as to align herself along similar triangles with the oncoming ball. In other words, the player chooses a collision course. But she does not stand passively waiting to be hit; instead she activates a panoply of speedy, finely tuned, proprioceptive and adaptive locomotory actions relative to the surface on which she runs. She needs, at a moment's notice, to be able to run backwards, or sideways, should this prove necessary. She needs vision acute enough and arms strong enough to withstand the inevitable impact.

Proprioceptive locomotory actions have two aspects: static and dynamic. The static sense gives us a conscious orientation of one body part in relation to another. Dynamic sense provides us with neuromuscular feedback concerning the rate and direction of our movement.

We leap in readiness to catch the ball, wondering even then, will we make it in time?

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\[ \frac{a}{c} = \frac{a+b}{d} \]

Of course in a ball game these calculations are not made consciously, the player merely aligns her body with the course of the ball.

Conclusion

An overview of relationality and particularity

When we study the reciprocity of embodiment we need to take account of both relationality and particularity, for both arise in ordinary bodily experience. The promulgation of relationality in the Eastern philosophy of Tantrism and particularity in mainstream Cartesian-style Western philosophy and life is not merely a factor of ideas, but an entwinement of culture and perceptual-physiological conditioning. This also means that people from both traditions take for granted, within their bodily experience, characteristics of both relationality and particularity. Both corporealized philosophies assume certain bodily experiences, while they focus on other ones to support their philosophic thrust. However, because we are shaped by our perceptual-physiological conditioning, much of this tacit realm remains unknown and - to some degree - sensuously dulled by social and architectural disuse.

What we do and what we say we do is still open to question. I attempted to illustrate the apparent negligence of Western thinking to relationality in the splices of a ball game (called Bados), by showing that - contrary to its own method - relationality is, nevertheless, intrinsic to the nature of Western theoretical description and method.

In the first Bardo, Preparing to throw the language of human movement studies is employed to show a relational sequence of ideas:

There are three phases of an overhead throw: the winding or cocking phase, delivery and follow-through. The wind-up phase signals the preparation of a throw. Here the joints of the shoulder slowly twist around like a spring
resulting in maximal stretch of the anterior structures at the glenohumeral joint and internal rotators of the humerus, assisted by the supraspinatus, infraspinatus and teres minor, which also contract to stabilize the head of the humerus. A burst of concentric and isometric contractions from these muscles accelerates the limb towards a posterior, externally rotated position (cf. Welsh and Woodhouse, 1992: 511-512).

The very linearity of Western scientific method, reveals the relationality, indeed, it is a requirement for comprehending a sequence of thoughts. The kind of relationality here, while it is not apparent in the definition of linearity, necessarily takes account of more than merely a consecutive relationship, i.e., a sense of “this follows that”. In the above example, the whole body is assumed and envisaged as each part of the sequence is described. In the second Bardo, The ball’s trajectory, I illustrate this inherent multidimensional relationality by building up a picture of a ball in transit, thrust by air pressure, etc.,

The ball proceeds in its motion by interacting with the surrounding air pressure. Its trajectory is influenced by the way the ball is thrown (spun, pitched downward, fast, etc.), the roughness of the ball (furry, pitted, smooth, stitched, etc.) which influences the drag (a very low drag, such as may be produced by a dimpled ball, increases the range of the trajectory)... (see the second Bardo)

together in a relational fashion.\textsuperscript{146}

Relationality is thus necessarily multidimensional even while it appears, in some cases, linear. Particularity is more than the identification of static entities; indeed, it is only known as a particularity if it is studied in a number of different ways.

In the third Bardo: The moment before, illustrates that we can see the same problem in a number of ways. In order to catch a ball, the player must put herself on a collision course with the ball. The science of biomechanics is more interested in the mathematics of catching than the psychology, as the footnote to this Bardo shows, i.e., ‘Similar triangles have two common angles’ etc. What this account does not include is human intention, human consciousness, fears, exaltations, and so on. The bardo realm is not a space-place for calculations - though it might be on occasion - but where psychological experiences arise and where the body responds to its environment. This is the space-place of encounter, of reciprocal act, of responsivity.

Building up a picture of the multidynamics of a ball game (or more broadly, the reciprocity of embodiment) often merely means filling out a scientific discourse by the application of related scientific discourses in the same piece. In these Bardo pieces and throughout the dissertation, by giving splices of different scientific approaches, I attempt to show how these different approaches actually slot into one another. Particularities

\textsuperscript{146} NISMAT’s piece on body linkage notes:

An underlying principle of the human body during sports and physical activity is that every movement of a limb segment is influenced by the movement or stability of body segments which are its immediate neighbors. While the activity may have as its main purpose the propulsion of an object, e.g. as in throwing a ball, the effectiveness and velocity of that trajectory is a product of forces and movements generated by body segments as far away as the foot. A deficiency in stabilization or movement of any segment between the hand and the foot will influence the speed and trajectory of the object. (internet)
are not estranged from relationalities in the domain of embodiment.

The use of mainstream Western thought to illustrate a tradition most interested in particularities (but where the consideration of relationality is never far away) and Tantric thought to illustrate a tradition of relationalities (but where particularities are assumed) served to suggest that - contrary to both traditions, both particularity and relationality are central concepts in these traditions. Further, the perceptions of particularity and relationality are characteristics that arise in the repertoire of the body's ordinary experiences.

The attention to particularity in Tantrism is illustrated in the *bardo* literature and the Tantric Buddhist theory of consciousness. Here the task of the human being is to learn to detach from the ego's strivings for existence. Thus the particularities of the characteristics of the ego are carefully identified, in a way not paralleled in Western science. The overall thesis of relationality by Tantrism, in some ways, therefore stands as an ideal. The struggle of humans to detach from particularity is the mission. Particularity, for Westerners (shaped in mainstream Western philosophic ideas), offers us a valuable position with which to understand our world. This position is ourselves and our body, as Merleau-Ponty and Gendlin observe. The problem for us Westerners is how to traverse our understanding of our particular selves to real-ize (make conscious) our relationality. This, I have suggested, is not an actual problem, but one that arises from belief in our Western philosophic ideas. When we begin to consider the body, we have to begin to consider our own bodily experiences. In bodily experience we have the capacity for focussing on particulars and relationals. The body, and the study of embodiment,
opens our understanding of our own tradition in such a way that declares to us our conditioning, our shaping by a tradition of thought. The supposed difficulty of empathy, for instance, is shown to dissolve as we notice a relationship between bodily comfort and gentleness towards others.

A thesis of relationality recognizes our embeddedness in our world, our universe. Tantric thought in its many manifestations, emphasizes this embeddedness. The aim of its practice is to know in one’s sinews this embeddedness. Liberation from suffering is the sensuous recognition of relational being.

Both relationality and particularity are crucial to embodiment studies. Unless something is extracted from its multiple encounters, it is not possible to understand it fully as a thing-in-itself. This extraction of a particular need not be considered something “held down” and made static; indeed, as Gibson puts it (I quoted this earlier), ‘the identity of a thing, its constancy, can emerge in perception only when it is observed under changing circumstances in various aspects. The static form of a thing, its image or picture, is not at all what is permanent about it’ (Gibson, 1982: 178). The thingly particularized nature of the body is always counterpoised with its relationality.

In terms of embodiment, the particular may be experienced as either part of the subjective realm or as object. Sensuous abstraction, for instance, highlights particular sensory experience as part of normal bodily experience. I consider this highlighting as part of subjective experience. Some bodily experience is objectified, such as in certain kinds of pain, or
opens our understanding of our own tradition in such a way that declares to us our conditioning, our shaping by a tradition of thought. The supposed difficulty of empathy, for instance, is shown to dissolve as we notice a relationship between bodily comfort and gentleness towards others.

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the Touretter tic (which has a semi-voluntary character). The self contemplation of our own recessive inner organs (e.g. the brain, the heart, the liver, etc.) is also the contemplation of objectively known body parts. In terms of embodiment, the study of objectivity thus moves from philosophic dimension to be part of lived experience.

Particularity also occurs at a bodily responsive level (at an autonomic level). It is here that the body responds to those *impulsors* that readily provides a good relationship with the social and physical environments. A set of stairs, or patterns on the ground, or pleasing music provide *impulsors* for a person with Parkinson's Disease, *affording* them the ability to move.

Relationality and particularity lie at the heart of all human experience. Our experience of a body and a mind is felt as separate and yet entwined. My body - my mind: my fingers hit the keys of the keyboard (I watch them as though they are objective fact), at the same time I feel the smoothness and the identifying bumps under keys *f* and *j*, the uncanny proprioceptive skill of my fingers to "know" where the keys are, at the same time I become conscious that in order to identify the parts that make up the whole experience I focus on the particulars of the act and notice how each particular fits into other particulars. I notice also in this little exercise a certain anxiety (my thesis is nearly ready for submission), an aching throat, the taste of spicy coffee, the wafting strains of a Bach unaccompanied cello sarabande from a CD in another room, the view of a street framed by brown-leafed straggly bush, a chirping minute long-beaked bird, a stillness in the air (is it about to rain?).... a life-world of particulars in relationship. This is a life-world that is not solipsistic, my
experience only gathers my immediate milieux together even while it spreads endless possibilities out from me.

Our psychophysical being is an interactive emergent (Hendriks-Jansen, 1996)\(^{18}\) with particularities (impulsors) of the socio-physical world. While it might be tempting to say that there is no first thing here, there are basic requirements for the good working of body-mind integration. These basic requirements are neurophysiological; their impact is upon both cognitive and movement sequencing and an agentive sense, a sense of will and also a sense of meaningfulness.

Before culture, there is neurophysiology. Co-emergence of self and cultural praxis with philosophic thought is illustrated in chapter five, through an examination of the Zen Buddhist art of flower arranging. Reflection on ikebana illustrates that embodiment studies mean more than simply having a body to study. Studying embodiment means corporealizing our world. At the heart of cultural studies lies the bodyself-in-interaction. Chapter five also elaborates the concept of ontology as a process of clearing where being is embedded in non-being; life and death are entwined. The clearing (wu), being and non-being, at once speaks of an opening up and a situatedness; an opening to possibilities that are en-nested in particular milieux.

We can identify the particulars of these milieux in terms of the socio-physical characteristics that are responded to by the body. These characteristics I call impulsors. The identification of impulsors is valuable in a number of ways:- It gives us a clearer view of the tacit dimension of the

\(^{18}\) Hendriks-Jansen is a cognitive scientist with expertise in robotics. The term is not used by me because it does not adequately take account of the body itself (the neurophysiology, perception, will, etc.).

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physical and psychological aspect of everyday encounter. It provides the possibility for analytical examination of the body-mind tacit knowledge (cognition, skills, etc.) and an understanding of the body’s (visual, proprioceptive, vestibular and possibly the other senses) responsivity to pattern, rhythm, and height of obstacles. Following from this, such identification aids clinical understanding so that optimum assistance for those suffering relational disorders may be facilitated.

In chapter three, ‘The shapes we sculpt in space-place,’ I describe those *impulsors* that best *afford* movement in those with Parkinson’s Disease. Height, pattern, and rhythm are identified as being the primary *impulsors* that initiate movement in sufferers of Parkinson’s Disease. I suggest that what is true for those with PD may be also true for all human beings. The way the body responds to these is more than visual: it is proprioceptive, vestibular, aural (in certain cases) and probably engages all the senses.

In chapter six, I move my discussion of *impulsors* to another level. I suggest, following a Buddhist understanding of consciousness, that there are psychological *impulsors*. The value of this identification aids us in avoiding ego attachment to feelings, thoughts, and senses that inhibit a capacity to let go and recognize our co-emergent relational being in the world. This thesis depends upon a theory of consciousness that may be thought questionable. I assert, however, that this is a theory of mind that is very ecological for it ‘reveals consciousness to be a mode of being-in-the-world, not a peculiar set of mental states inside the head’ (Thompson, 1999: internet). Such a thesis allows us to think about an ability to move beyond our conditioning to a spontaneous and lucid interaction and compassionate intersubjectivity.
The way in which we are conditioned by our philosophic tradition is discussed in both chapters two and four. In chapter two, 'Tourette's Syndrome and the sensuous impulse' I show the relation between certain characteristics of Tourette's Syndrome that are socially unacceptable and the way in which the condition has been diagnosed and treated (a reflection of philosophic stance). I also reflect upon the way diagnosis and subjectively felt experience and a sense of will form a möbius strip, a chiasmic crossing such that the one feeds into the other. In chapter four, 'Is it necessary to know the date in order to brew tea? (The en-nested nature of memory)' in my examination of sequential enacted memory, I critique the use of a short clinical assessment test used to assess life competency in people with Alzheimer's Disease. This mini test is heavily biased towards the measurement of cognitive skills, which excludes those skills that are actually situated knowledges. The memory for tea making is a situated knowledge; it is a set of skills en-nested in a familiar milieu.

While it is true that we are conditioned by our philosophic tradition, this is not to say that other experiences outside the rubric of a philosophic tradition do not bear upon our interactions in the world. I explore this in chapter one through my examination of the empathic response. There I suggest that empathy arises first in the personal experience of bodily comfort. My use of Temple Grandin's experimentation with her adaptation of the squeeze machine usually employed to calm cattle illustrates this. It is in the way bodily comfort facilitates feelings of gentleness towards others that we can begin to suggest that subjective experience opens us to the intersubjective realm.
I value subjective experience in this dissertation. Subjective experience provides meaning and incentive for a person. Meaningfulness, as I noted in chapter three, is critical for the initiation of body movement when voluntary movement has been "forgotten", as the studies of Leont’ev and Zaporozhets (1960) show. The will to move is linked to an autonomic ability to move, which itself is linked to a narrative sense of meaningfulness for a person. The will to move is therefore not just a psychological determination, nor a physiological one; it is gathered up into the person’s sense of being embodied, of embodying the world. Meaningfulness describes our sense of being embodied. This is not only important at a semantic level but actually influences our capacity to embody our world. The act of making meaning is part of our naïve philosophizing that arises as we engage this world.

Embodiment is a curious mix of new perceptual acts, new psychological and physiological participatory encounters in the socio-physical world and old patterns of behaviour influenced by cultural and philosophic traditions. Embodiment also requires the performance of action within a familiar context or a meaningful one. Embodiment is memory en-nested in meaningful milieux; experiences captured in the flesh and movements (cf. Sacks: 1982); re-membering (re-putting together) habitual, conditioned practices and skills (that emerged from special interests and talents [genes and nurturing]) (cf. Dreyfus: 1996). It is ‘com-prehension’: ‘prehending together, in one mind, a diversity of items whose colligation at a given point in time amounts to increased understanding not because of their mere juxtaposition in memory but because they are co-remembered in reference and relevance to one another,’ as Casey (1993: 184) eloquently puts it.
The process of embodiment is an open-ended one. It is not locked in individuals, even though individuals individually express their embodied uniqueness. Social practices, norms and inhibitions, are “caught” in bodily expression. Languages, beliefs, practices (taboos and techniques), and histories (orally, by way of written texts, artworks, artistic, philosophic, therapeutic, architectural and other expressions) are passed along chains of people in various cultural groups (cf. Connerton: 1989; Jackson: 1989) and between cultural groups. Being embodied is sharing a mutually participative life in the world. This recognition of being-in-the-world-together opens us to the ‘possibility of a local attunement, a local consonance’ (Levin, 1989: 246), and a ‘disembedding of the egocentric self of self’ (Thompson, 1999: internet). Such a change of attitude, reflected in an inclusive philosophy, is necessary - if we are to survive as responsible and caring beings in a sustainable environment. This attitudinal change does not require a shift that takes us outside our experiential selves. Indeed, we are already, as Abram puts it, ‘tuned for relationship.’

The eyes, the skin, the tongue, ears, and nostrils - all are gates where our body receives the nourishment of otherness. This landscape of shadowed voices, these feathered bodies and antlers and tumbling streams - these breathing shapes are our family, the beings with whom we are engaged, with whom we struggle and suffer and celebrate... (Abram, 1997: ix).

We do not embody an alien world; our embodiment is with, and of, shared spaces and places and temporalities. The matter of opening ourselves, clearing a path by participating and being aware of our participation, is a matter of perceiving our earth-relationship ‘in the same way as when we meet a friend’ (Guenther, 1972: 27). It is in this opening, this birthing of a familiar relationality, that compassion comes to light.
Here is the point at which I am not a ‘for-Oneself’ who is also ‘for-the-
Other’ (by, perhaps, an act of imagination), but a participator in the ‘Being
[that contains] ‘all that, first as sensible Being and then as Being without

Final methodological reflections

I suggest we can learn from both Cartesian-style Western thought and
Tantric Buddhism (in its various forms and influences). There is no doubt
that this dissertation would not be possible if I situated my ideas strictly
within one or the other tradition. The combination, indeed, has allowed
me to think “between the cracks,” as it were. I note here a contribution I
made to a Traditional Chinese Medicine conference in Nanjing in 1997
where I spoke of the possible value of massaging movements in
preventing hallucination in bed-ridden patients. This subject has not been
discussed in either TCM literature nor Western-style health care, yet the
proposition arises out of certain insights and researches of both systems of
health care (e.g. qi gong, the research with Parkinsonian patients using
immersive therapeutic environments, the autobiographical observations
embodied mind, ecological psychology, and so on).

In this dissertation I use the Tantric method of taking ‘the materials of
everyday life, including both the inner resources of the mind and body as
well as the outer resources of the intellectual, cultural, and material
environment’ (Cleary, 1998: 6 - 7) and situating the self in relation to the
cosmos. I also use the approach of Merleau-Pontyian and Heideggerian
phenomenology that starts from this place, here, now, as experienced by a
perceiving body. Such a strategy thus melds two approaches: the
relational with the particular. This move allows us to discover the body as a site for philosophizing as well as a philosophizing site. It also gives us a way to take seriously subjective perceptual experience as an entrée to a possible intersubjective sharing.

Both philosophies of Tantric Buddhism and phenomenology are very valuable for a construction of the reciprocity of embodiment. Both start in the midst of things, but each tackles the problem of self in the world by two different, yet, compatible paths. Both paths are within the normal range of bodily experience and both tacitly contain elements of the other. The clinical sciences and cultural studies would both be enhanced by the study and application of this double approach.
Glossary

Aboulia: Difficulty initiating movement. Literally, “absence of will”.

Affordances: What an environment (its surfaces, objects, substances and events) provides us; the resources at the scale of behaviour, that are “measured” and understood relative to us.

Akinesia: Difficulty initiating movement. Literally, “not move”.

Bardo: Literally, “thrown between”, or gap.

Bardo'i-thos-grol: Collection of bardo literatures popularly known as ‘The Tibetan Book of the Dead’.

Basal Ganglia: A collection of interconnected subcortical nuclei found in the forebrain and the midbrain. They are composed of the striatum, the globus pallidus, the subthalamic nucleus, the ventral tegmental area and the substantia nigra. Generally associated with regulating motor control and activity, emotions, timing, inhibiting muscle tone throughout the body, selecting and maintaining purposeful motor activity while suppressing useless or unwanted patterns of movement and helping monitor and co-ordinate sustained contractions, especially those related to posture and support.

Body Responsivity: The automatic way the body responds to the impulsons (see below) within the social and physical environments.

Brain: [The Whole Brain Atlas, internet, is an excellent guide to the normal and pathological anatomy of the brain. Slides include images of Alzheimer brains.]

Catching the ball: Describes the reciprocal nature of the embodying process. This is a dense field of “betweens” that takes in multidimensions and influences.

Chiasm: In optical physiology, describes the bundle of nerve fibres that cross behind the eyes feeding information to opposite hemispheres of the brain. Literally, “crossover”.

Co-inherence: Interactive relationship of the persons of the Holy Trinity. The idea of co-inherence indicates that there is no single progenitor in the relationship, but that each person, or part, is mutually dependent on the other persons or parts.

Consciousness: Consists of the fading out and re-arising of the previous
moment’s consciousness.

**Dopamine**: A neurotransmitter that is released by neurones in the brain and throughout the body. Dopamine is found in greatest quantities in those cells which originate in the medulla-oblongata. These cells are called the substanta nigra which project upwards into an area of the brain called the corpus striatum, which is involved in the regulation of movement, muscle tone (static and dynamic) and inhibition of tropic functions.

**Encephalitis lethargica**: “Sleeping sickness”.

**En-nesting**: The sensual embedding of the contents of memory (or any other function) in the situatedness of a particular socio-physical milieu. The term derives from Ulric Neisser’s (1988) term *nesting*. **En-nesting** allows the embodied self to autonomically respond to identifiable elements in this milieu (see **impulsors**).

**Enzo**: Circle (Japanese).

**Gestalt**: A configuration, pattern or organized whole with components that are different from the whole when considered separately.

**Kinesphere**: The three-dimensional space around the body (its height, width, and depth).


**Impulsors**: Identifiable elements that the embodied self autonomically responds to in any milieu that affords interactive participation for that particular organism.


**Li**: Organic order, e.g. found in the “grain in the jade-and-wood of things.”

**Möbius strip**: A topological mathematical figure: a loop with a single twist, such that Surface A becomes Surface B when followed around; inside becomes outside, outside inside.

**Naïve philosophy**: Philosophic account that arises, unfolds, as I sensually experience my reciprocal relationship with the world.

**Neurotransmitters**: Chemical compounds that cross synaptic gaps between nerve fibres to act upon the nerve receptors, where they produce specific effects. Receptors are sites on the membranes of neurones that recognize neurotransmitters, hormones or drugs in very specific ways.
The firing of one neurone influences others only when the receiving neurone possesses a specific receptor for that neurotransmitter.

**Praktognosia**: Knowing through doing.

**Recessive body**: Those parts of the body hidden from view.

**Relational disorders**: Usually basal ganglia disorders, where - through too much or too little dopamine - a person is unable to engage in smooth relationships with both other people and their physical milieux.

**Relationality**: Process condition of smooth interaction in a milieu.

**Rigpa, or Buddha mind**: A ‘primordial, pure, pristine awareness that is at once intelligent, cognisant, radiant, and always awake’ (Sogyal, 1992: 47).

**Samsara**: Literally, “circularity of experiences”.

**Sems**: Ordinary human awareness or mind. (Tibetan)

**Sensual abstraction**: The sensual experience of particulars, e.g. the tactile experience of caressing the smooth soft curves of a piano.

**Sensuosility**: A heightened perception and thus engagement of the particulars of the life-world.

**Skandhas**: Broadly, “sense perception”. Includes form, feeling, perception, intellect, and consciousness. The skandhas are the aggregates of the mental and physical existence which fill the dense field that is the bardo.

**Space-place**: Captures a simultaneity of the sense of situation (“place”) and place for occupation (“space”).

**SPT effect**: Subject-performed tasks.

**Wu**: Conveys Being and Non-Being. Literally, “a place that was originally covered in luxuriant vegetation, as in a thicket in a wood, but where trees have been felled so that there is now an open space, a clearing.”
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