

Catching the Ball:
Constructing the reciprocity of embodiment

Elizabeth Eve McCardell, B.A. *Curtin University*, B.A. (Hons) *Murdoch University*

This thesis is presented for the degree of Doctor of Philosophy of
Murdoch University

2001

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.

E E M Cardell

Elizabeth Eve McCardell



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.

Acknowledgements

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;¹ 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,² 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.

Contents

Abstract	1
Acknowledgements	3
Contents	5
Bardo: Preparing to throw	8
Introduction	9
Nature of this study	9
Extent of this study	14
Human interaction studies	15
Some dimensions of interaction: tacit, focal, and responsive	20
Introducing a method for studying embodiment	25
Strategy of the chapters of this dissertation	30
Part One	
Chapter one: <i>Chiasm of the heart - towards a mutuality of personhood</i> <i>(setting up a strategy for studying embodiment)</i>	34
Traditional views of empathy	41
Embodiment-environment entwining	51
Culture-nature chiasm	52
<i>Affordances</i>	59
The psychophysical chiasm	63
Asperger's Syndrome	66
Conclusion	73
Chapter two: <i>Tourette's Syndrome and the sensuous impulse</i>	78
<i>Möbius strip: Surface A</i>	81
Theorizing body-mind from body experiences	81
Tourette's Syndrome	86
Ticcing	89
Seeking the sensuous through ticcing	91
Ticcing as enfleshment of experience	94
Stability as a condition for archiving experience	99
<i>Möbius strip: Surface B</i>	102
Denial of the sensual: Western society on Haloperidol?	104

Returning to the beginning 112

Chapter three: <i>The shapes we sculpt in space-place: the meaningfulness of encounter</i>	116
Embodying time and space-place	118
Spatio-temporal perceptual experience	121
Re-embodying time and space-place theoretically	122
Parkinson's Disease	127
Shaping space-place through movement	135
Catching a moment of being in physiology	139
The <i>en-nesting</i> of doing in action	140
The language of difficulty in the initiation of movement	144

Chapter four: <i>Is it necessary to know the date in order to brew tea? (The en-nested nature of memory)</i>	149
Contributing another way of thinking: Chinese Body Thinking	154
Tea making as the 'grain in the jade-and-wood of things' (<i>li</i>)	159
Making tea	161
En-nested in situ	162
Alzheimer's Disease	168
Assessing memory in the light of Alzheimer's Disease	170
Enacted memory research	175
Tea making as physical performance	178
Doing memory	180
Framing the concept of memory	181
Conclusion	186

Bardo: The ball's trajectory 190

Part Two

Introduction to Part Two 191

Chapter five: <i>Flowers in a clearing</i>	199
Whole and art	199
Clearing (<i>wu</i>)	201
Living flowers	204
Participation in entwinement	207
The flower and the heart	208
The narrative of flowers	210
Learning <i>ikebana</i>	211

Chiasm: continuum	215
The Zen art of ending dualities	219
Arranging	223
Chapter six: <i>Experiencing bardo</i>	229
Buddhist theory of consciousness	230
Tantric Buddhist understanding of the body	233
<i>Bardo'i-thos-grol</i> : manuscript and performance	238
My journey along the road of the body, city and universe	245
<i>Between</i> : recollections, March 1995	250
Arising states in the <i>bardo</i>	251
Real-izing <i>bardo</i>	257
Thrown into an openness of being	259
Understanding <i>bardo</i> is understanding embodiment	261
Some final thoughts on two kinds of philosophizing	262
Bardo: The moment before	262
Conclusion	266
An overview of relationality and particularity	266
Final methodological reflections	277
Glossary	279
Bibliography	282

Bardo

Preparing to throw

An overhead throw comprises a well orchestrated series of coordinated 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).