## TOUCHING SPACE, PLACING TOUCH

# Touching Space, Placing Touch

Edited by

MARK PATERSON University of Pittsburgh, USA

MARTIN DODGE University of Manchester, UK

# ASHGATE

#### © Mark Paterson, Martin Dodge and the contributors 2012

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.

Mark Paterson and Martin Dodge have asserted their right under the Copyright, Designs and Patents Act, 1988, to be identified as the editors of this work.

Published by	
Ashgate Publishing Limited	Ashgate Publishing Company
Wey Court East	Suite 420
Union Road	101 Cherry Street
Farnham	Burlington
Surrey, GU9 7PT	VT 05401-4405
England	USA

www.ashgate.com

### British Library Cataloguing in Publication Data

Touching space, placing touch. 1. Touch. 2. Touch–Therapeutic use. 3. Human geography. I. Paterson, Mark, 1972– II. Dodge, Martin, 1971– 152.1'82–dc23

#### Library of Congress Cataloging-in-Publication Data

Paterson, Mark, 1972–
Touching space, placing touch / by Mark Paterson and Martin Dodge.
p. cm.
Includes bibliographical references and index.
ISBN 978-1-4094-0215-2 (ebook : alk. paper) — ISBN 978-1-4094-0215-2 (ebook : alk. paper) 1. Touch—Psychological aspects. 2. Touch—Social aspects. 3. Spatial behavior. 4.
Human behavior. 5. Human geography. I. Dodge, Martin, 1971– II. Title.
BF275.P39 2012
152.1'82—dc23

2012012178

ISBN 9781409402145 (hbk) ISBN 9781409402152 (ebk) ISBN 9781409484363 (ePub)



Printed and bound in Great Britain by the MPG Books Group, UK.

## Contents

	f Figures and Tables	vii
	owledgments on Contributors	ix xi
Intro	luction: Placing Touch within Social Theory and Empirical Study Paterson, Martin Dodge and Sara MacKian	1
1	Negotiating Therapeutic Touch: Encountering Massage Through the 'Mixed Bodies' of Michel Serres Jennifer Lea	29
2	Touching the Beach Pau Obrador	47
3	Touching Space in Hurt and Healing: Exploring Experiences of Illness and Recovery Through Tactile Art <i>Amanda Bingley</i>	71
4	Facing Touch in the Beauty Salon: Corporeal Anxiety <i>Elizabeth R. Straughan</i>	89
5	Fieldwork: How to get in(to) Touch. Towards a Haptic Regime of Knowledge in Geography Anne Volvey	103
6	Guiding Visually Impaired Walking Groups: Intercorporeal Experience and Ethical Sensibilities Hannah Macpherson	131
7	Touch, Skin Cultures and the Space of Medicine: The Birth of Biosubjective Care Bernard Andrieu, Anne-Flore Laloë and Alexandre Klein	151
8	Touching Environmentalisms: The Place of Touch in the Fraught Biogeographies of Elephant Captivity Jamie Lorimer	169

vi	Touching Space, Placing Touch	
9	Towards Touch-free Spaces: Sensors, Software and the Automatic Production of Shared Public Toilets <i>Martin Dodge and Rob Kitchin</i>	191
10	In Close Embrace: The Space Between Two Dancers Sarah G. Cant	211
11	Intra-body Touching and the Over-life Sized Paintings of Jenny Saville <i>Rachel Colls</i>	231
12	Touched by Spirit: Sensing the Material Impacts of Intangible Encounters Sara MacKian	249
Index		269

# List of Figures and Tables

### Figures

I.1	<i>The Allegory of Touch</i> , painted by Jan Brueghel the Elder and Peter Paul Rubens	3
I.2	Tactile hostility of school playground by	
	geographer William Bunge	9
2.1	A family working on a castle	53
2.2	Doing 'major engineering works'	54
2.3	A crocodile	56
2.4	A castle	57
2.6	Carrying an octopus in my hands	65
3.1	Touching spaces in sandplay	81
3.2	Fully in touch with clay	82
6.1	The 'c' grip method of guiding	135
6.2	The 'c' grip method of guiding	136
6.3	Linking arms	137
6.4	Touching the back of rucksack	138
6.5	Direct handholding	139
9.1	A typical 'magic eye' sensor in a WC cubicle	197
9.2	Schematics for typical installation of 'no touch' automatic taps	198
9.3	Sales brochure promoting the virtues of automatic taps for	
	shared public toilets	203
9.4	Water savings from updating to no-touch taps over	
	conventional faucets	204
10.1	'Dancing in close embrace'	218
10.2	'Open embrace'	219
11.1	Branded, by Jenny Saville, 1992	240
11.2	Propped, by Jenny Saville, 1992	243

Touching Space, Placing Touch

### Tables

viii

9.1	Evolving WC technologies	199
9.2	Summary of the range of digital technologies available for	
	installation in shared public toilets	200

### Acknowledgments

Touching Space, Placing Touch derived originally from sessions at the RGS-IBG annual conference for geographers in London in 2007, organised by Sara MacKian, Martin Dodge, Chris Perkins, and Mark Paterson. The sessions seemed to ride on the crest of a wave of interest not solely concerned with the culture and spatiality of the sense of touch per se, but also with the social, therapeutic and gendered aspects of tactile encounters and sensual interactions. The conference sessions revealed a healthy diversity of disciplinary and methodological approaches and clearly demonstrated that touch, in its many performances, articulations and practices, was a vibrant area of ongoing research. This was reflected not only by the quality of papers presented but also by the appreciative and engaged audience who supplied numerous questions and critical suggestions. Of course, great conference sessions do not automatically make good books. Since the conference, this edited collection has experienced a somewhat sinuous and protracted development while under the generous stewardship of Ashgate. There have been some inevitable modifications, subtractions and additions to what was presented at the 2007 meeting, but such changes readily indicate that interest in touch within the social sciences and humanities has not abated.

The editors would now like to express their thanks. To Valerie Rose, Senior Commissioning Editor at Ashgate, for her continued support of this book project. To all the contributors for their forbearance in the somewhat protracted editing and production of this volume. Some were involved right from the start and contributed in a very timely manner, while some were involved at a much later stage, under pressure of deadlines. To the former, we apologise for the delay; to the latter, we are grateful that you came on board and made this collection what it is now. But most of all, to Sara MacKian, who was instrumental in initiating the conference sessions and the early stages of the book proposal. We are extremely grateful to her for continuing to be involved, looking over the contributors' texts, writing her own chapter, and co-writing the Introduction. Sara's presence has therefore been integral to the total life of this project and would not have happened without her.

We are grateful to Taylor and Francis. Some of the material for Rachel Colls' chapter is developed from her article 'BodiesTouchingBodies: Jenny Saville's over-life-sized paintings and the 'morpho-logics' of fat, female bodies', *Gender Place and Culture* Vol. 19, No. 2: 175–192.

### Notes on Contributors

#### **Bernard Andrieu**

Bernard is a philosopher of the body. He edited *The Dictionary of the Body* (CNRS 2006), co-founded and edits the journal *International Review of the Body*, and has developed a wide range of work about body ecology, touch and hybridity for the description of the lived body, and the ecological constitution of the self through interaction with others. His key writing includes 'Technophobie ou ecotechno' (*Australian Journal of French Studies*, 2011), 'Trans-body and hybrid identity' (*Scan: Journal of Media Arts Culture*, 2007), the chapter 'Embodying the chimera: Toward a phenobiological subjectivity' in *Signs of Life*, *BiotArt And Beyond* (MIT Press 2007), and 'Brains in the flesh: Prospects for a neurophenomenology' in *Janus Head: Journal of Interdisciplinary Studies in Literature*, *Continental Philosophy, Phenomenology, Psychology and Arts* (2006). His blog is at http:// leblogducorps.over-blog.com.

### **Amanda Bingley**

With a background in psychotherapy and psychoanalytic geographies, Amanda's research interests lie in the relationship between mental health, well-being and place, and includes work with older people and the benefits of gardening, the effects of woodland spaces on mental health in young people, and various projects in palliative care. She has published key work in *Social and Cultural Geography, Children's Geographies, Social Science & Medicine, Palliative Medicine* and contributed to several edited volumes including *Emotional Geographies* (Ashgate 2005) and *Making Sense of Place: Multidisciplinary Perspectives* (Boydell Press 2012).

### Sarah Cant

Sarah is a cultural geographer interested in cultures of creativity, improvisation and dance, with a particular focus on ethnography and observant participation. Her research is informed by interests in embodiment, sensuous experiences/ knowledges, and feminist interpretations of the body and relationships. Projects have included work on public art, improvised performance and theatre, and she is currently researching social dance, specifically Argentine tango in the context of British dance communities.

Touching Space, Placing Touch

### **Rachel Colls**

Rachel's research is concerned with theorising and researching 'the body', and her work is largely informed by engagements with feminist post-structuralist theory including that of Elisabeth Grosz, Judith Butler and Luce Irigaray. She has published on topics including non-representational geographies, women's embodied experiences of clothing consumption and children's healthy food practices. Her most recent work has focused on developing critical geographies of obesity and has involved research concerned with the practices of weighing and measuring children, size accepting spaces and fat materialities.

### **Martin Dodge**

Martin's research focuses on conceptualising the socio-spatial power of digital technologies and virtual geographies, and the theorisation of visual representations, cartographic knowledges and novel methods of geographic visualization. He curated the well-known web-based Atlas of Cyberspaces and has co-authored three books covering aspects of the spatiality of computer technology: *Mapping Cyberspace* (Routledge 2000), *Atlas of Cyberspace* (Addison-Wesley 2001) and *Code/Space* (MIT Press 2011). He's also co-edited three books, *Geographic Visualization* (Wiley 2008), *Rethinking Maps* (Routledge 2009) and *The Map Reader* (Wiley-Blackwell 2011), all focused on examining the social and cultural meanings of new kinds of mapping practice.

### **Rob Kitchin**

Rob is Professor of Human Geography and Director of the National Institute of Regional and Spatial Analysis (NIRSA) at the National University of Ireland, Maynooth and Chair of the Management Board of the Irish Social Sciences Platform (ISSP). He has published twenty books, is editor of the international journal *Progress in Human Geography*, and co-editor-in-chief of the *International Encyclopedia of Human Geography* (Elsevier 2009).

### **Alexandre Klein**

Alexandre is a philosopher and historian of sciences. After two years of teaching in health education he is currently finishing a doctoral thesis about the subject's epistemology in French contemporary medicine. His research focuses on relations between body representations and identity building, particularly in health practices. He has published work on the history, philosophy, epistemology and

xii

#### Notes on Contributors

xiii

ethics of medicine, and has recently edited a volume about health sensations, *Les Sensations de Santé* (Nancy University Press 2010).

### **Anne-Flore Laloë**

Anne-Flore's research is concerned with the historical geographies of oceanography and marine sciences. She is currently pursuing these at the Marine Biological Association of the UK. She is also an honorary fellow at the University of Exeter. In a previous position, however, she worked as a French-language medical interpreter and translator for the National Health Service. It is in this capacity that she contributed to the chapter *Touch, Skin Cultures and the Space of Medicine* in this volume, co-authored with Bernard Andrieu and Alexandre Klein.

#### Jennifer Lea

Jennifer is interested in geographies of the body and embodiment. She is currently working on an ESRC-funded project looking at the social relationships of children with special educational needs in mainstream and special schools. She is also involved in an AHRC-funded project which looks at everyday spiritual practice such as yoga and meditation. Her previous research explored health, care and embodied learning through the practices of therapeutic massage and yoga. Her work has been published in international journals such as *Body & Society* and *Geoforum*.

#### **Jamie Lorimer**

Jamie's research develops interdisciplinary approaches to wildlife conservation. These need not appeal to problematic understandings of a pure Nature, removed from Society and revealed through objective Natural Science. Instead his work combines social and natural sciences to offer a new approach to biogeography that is sensitive to the hybrid character of the environment and the political nature of claims for environmental knowledge. Drawing on fieldwork in the UK, Europe and South Asia he presents ways of theorising and practicing human-environment relations better adapted to the dynamic, diverse and cosmopolitan ecologies of the twenty-first century.

### Sara MacKian

Senior Lecturer in Health and Wellbeing at The Open University, and formerly Lecturer in Health Geographies at the University of Manchester, the driving theme underpinning Sara's research is a curiosity for how people, communities and

Touching Space, Placing Touch

organisations interact around issues of illness, health and well-being. This has led to a range of studies exploring ME, parenting, sexuality, spirituality and aspects of public health. A geographer by training, she has a particular interest in qualitative research methodologies. She is author of *Everyday Spirituality: Social and Spatial Worlds of Enchantment* (Palgrave Macmillan 2012).

### Hannah Macpherson

Hannah's research draws on feminist, post-structural and post-phenomenological theories and contributes to debates on embodied ethics, disability, visual impairment, concepts of landscape and the methodological challenges of representing research encounters. She has numerous peer-reviewed publications including work in *Environment and Planning A*, *Society and Space*, *Cultural Geographies* and *The Senses & Society*. She is co-ordinator of the Disability Ethics and Aesthetics research group at the University of Brighton and is currently conducting research with performance artists with disabilities.

### **Pau Obrador**

Pau has co-edited *Cultures of Mass Tourism* (Ashgate 2009) and has published work in a range of tourism and cultural geography journals. His research interests are in the theorisation of tourism, cultures of mass Mediterranean tourism and the corporeality of the tourist experience. His work on nudity and the beach explores the role of the senses in culture and society, with a special emphasis on touch. He is currently working on various aspects related to mass tourism, family tourism and tourism futures.

### **Mark Paterson**

Based at the University of Pittsburgh, Mark's research centres around haptics, the role of the somatic senses, and extensions of the sensorium through technology. His books include *Consumption and Everyday Life* (Routledge 2005), *The Senses of Touch: Haptics, Affects and Technologies* (Berg 2007), and is currently finishing a book entitled *Seeing with the Hands: A Philosophical History of Blindness* for Reaktion. He has published work in a range of humanities and social science journals and chapters in books on touch, haptics and blindness, and has undertaken funded research projects in the areas of robot skin and the haptic modelling of prehistoric textiles. His research website is http://www.sensesoftouch.co.uk.

xiv

#### Notes on Contributors

XV

### **Elizabeth Straughan**

Elizabeth graduated with a Bachelors Degree from the University of Wales, Aberystwyth and went on to do a Masters and a Ph.D. at the same institute. Focusing on the body through an attendance to the skin as well as the material and metaphorical dynamics of touch, her research seeks to unravel the volatile nature of the body enhanced, manipulated and transformed by technologies, Elizabeth is currently working as an AHRC/NSF funded post-doctoral research fellow on a project exploring art-science collaborations at Aberystwyth University's IGES department.

### Anne Volvey

Anne's research deals with contemporary art and with the epistemology of geography. Fieldwork is the common concern in her research, looking at fieldwork practices and experiences as transitional processes, and elaborating upon these processes through the use of English and French transitional psychoanalytic theories. She has organized international conferences and has (co-)edited books and journal special issues in these areas. They include *Activité artistique et spatialité* (L'Harmattan 2010) and *Terrains de Je. (Du) Sujet (au) géographique (Annales de Géographie,* 5(687), 2012).

### Chapter 3

# Touching Space in Hurt and Healing: Exploring Experiences of Illness and Recovery Through Tactile Art

Amanda Bingley

Tactile and visual art in therapy is a powerful form of communicating feelings that are difficult to express verbally (Malchiodi 2003). Within art making, as art in therapy is termed, the sense of touch at the interface between skin surface and external tactile media plays a crucial role; connecting inner and outer worlds, holding and furnishing personal stories of physical and emotional experience. Touch and the haptic are thought to have this particular resonance in therapy because of specific pathways in the brain that link tactile/haptic perception with activated emotion and other related right sided brain function (Lusebrink 2004). The richness and therapeutic potential of the link between creative play and healing was noticed long before neuroscience confirmed these pathways in the brain. Early twentieth century psychoanalysts, notably the innovators of object relations theory Klein and Winnicott, and analysts who developed their ideas and those of Jung, were aware of the limitations of verbal expression in work with children in particular, but later with adults who had communication difficulties. They were quick to explore the wealth of non-verbal emotional expression through the world of play. Sand play, developed by Jungian therapists such as Kalff (1980) and Lowenfeld (1979), encouraged play with objects in a sand box to represent the child's inner imagined world. Klein, Anna Freud and Winnicott all independently developed observation of play with toys as an analytic tool<sup>1</sup>. In the decades following their pioneering work these concepts were developed in some instances to form distinct professions such as play therapy (Axline 1969) and art therapy (see Vick 2003). More generally a range of therapeutic artistic expression has evolved using visual and tactile art, music, drama and writing, referred to collectively as the 'creative' or 'expressive arts therapies' (Malchiodi 2003, Johnson 1999).

Art therapy has increasingly been offered by therapists working in private and community mental health services and during the last twenty years more routinely provided as part of hospice and charitable psycho-social support for people, and their carers, at different stages of treatment and palliation in life-threatening illness

<sup>1</sup> Winnicott also developed the 'squiggle game', where the child's or adult's randomly drawn 'squiggle' served as a starting point for free association work by therapist and client.

#### Touching Space, Placing Touch

(Wood 1998a and b). Extending the provision of art therapy beyond mental health services to those people with serious, physical conditions is in response to the particular and profound effect of illness on every aspect of the psyche. Whether acute or chronic, all illness results to some degree of feeling 'out of touch' with the familiar self. The moment of diagnosis with a life-threatening illness such as cancer is frequently described as a devastating disruption of oneself, a feeling of one's whole world falling apart - the continuity of self utterly and sometimes irretrievably left disconnected (Bingley et al 2006, Mathieson and Stam 1995). From the moment of diagnosis onwards people describe a constant struggle to regain or even locate their 'old selves' often felt to be more or less impossible during long periods of invasive medical treatments, however necessary (Barnard 1990, Thomas-Maclean 2004a). Öster et al (2007 and 2009) describe this experience as a loss of boundaries at a physical, psycho-social and emotional level. Their research with women during and following breast cancer treatment suggests that a creative activity, such as art making, supports individuals to repair disrupted boundaries and forge a re-connection with the self, a process that very often includes resolving feelings about childhood events and relationships.

An important aspect of art making as a therapeutic activity lies in the nature and function of touch in the physical process of exploring and expressing embodied experience through the medium of art materials. Tactile stimulation in therapeutic art making is, however, often overlooked and a gap remains in theoretical and empirical knowledge about its role, despite an increase in interdisciplinary literature, for example, in the sociology of health and illness, social anthropology, geography and art therapy, which theorises on tactile phenomena in the creative arts, therapeutic interventions, health, sensory perception in place and space, and technologies (Paterson 2007, Sibbett 2005). Touch and the tactile experience in therapeutic art making are the 'ground' from which two crucial therapeutic processes are facilitated. First, the physicality of working with tactile art materials like clay, sand and textiles acts as a highly effective 'mediation' or 'transitional object' between inner and outer self, which actively encourages the 'narration' of complex and often finely nuanced reflections on the illness experience. Second, due to the nature of the tactile as the primal and essential sensory mechanism, tactile art making methods enable a connection with the inner sense of 'authentic', 'true' self or personal 'idiom' (Bollas 1987, Mitchell 1993, Winnicott 1960); and a connection with a sense of the self in play (Winnicott 1971). As Wright (1991, 55) notes, the 'founding of the self' involves, what he describes as, "good" bodily experiences with the mother' and that this is achieved through 'playful and loving interaction'2.

This chapter examines some of these concepts, firstly around the role of the tactile in art techniques used in therapeutic and research contexts. I discuss

<sup>2</sup> Although Wright's (2009) work is concerned with the role of vision in the development of self he suggests that the creation of self starts from the 'primary tactile' and then seeing what is touched.

#### Touching Space in Hurt and Healing

why touch is relegated to the fringe of awareness in a complex and ambivalent relationship, even in therapeutic creative arts. The focus here is on the tactile element of touch, using the terms 'tactile' and 'touch' to describe and discuss the sensory experience of touching, with less emphasis on the collective term 'haptic'.

Secondly, I look at how touch in art making seems to facilitate the expression, resolution and emotional healing of the trauma of a serious illness experience, including where used in palliative care, by enabling a (re)connection with, what may be described as an 'authentic' sense of self. Lastly, building on previous research with tactile art, I theorise from an object relations perspective, that the tactile sense can be imagined as a 'micro-spatial' interface that holds, transmits and creates embodied past and present experience (Bingley 2002 and 2003, Bingley and Milligan 2007). In this way therapeutic art making allows the individual to engage with a fundamental phenomenon of self experience, integral to early development and subsequent adult life, where our relationship between and within inner self and the outer world (other) is mediated in an 'intermediate area of experience' via a 'transitional object' (Winnicott 1971), represented by the object of art making.

### Touch Relegated to the Therapeutic Fringe

Touch is a complex of sensation pathways which includes the tactile (a term that refers specifically to the cutaneous sense of pressure), proprioception (perception of bodily position in space), kinaesthesia (bodily movement), and the cutaneous (skin sensations like temperature and pain) referred to collectively as the 'haptic' (Paterson 2007, ix). Many literatures explore the various aspects of the therapeutic qualities of being touched when someone is in need of medical or psychotherapeutic treatment, nursing, support and healing (Field 2001, Totton 2003), including a significant contribution from the development of specific 'therapeutic touch' techniques (Krieger 1979, Moore 2004). Other literatures debate the crucial importance of being touched as infants and children in order to initiate and promote essential brain development and emotional maturation (Montagu 1986). For example, the result of inadequate tactile stimulation in infancy and early childhood with little or no loving touch of stroking, cuddling and handling, and without the freedom to explore and play using touch, is so serious that our brain cannot develop properly; we are left emotionally and physically impaired and in extremis severe tactile neglect may end in death (Field 2001, Gerhardt 2004). To be able to touch other human beings or domestic pets, natural or made objects, to perceive varied textures, patterns and shapes, to differentiate temperature and pliancy is a crucial element of our sensory development and, literally, a touchstone throughout our adult lives (Field et al 1998).

There is, however, surprisingly little discussion about the sensory processes, specifically touch, involved in therapeutic art making. This lack in the literature is not immediately obvious, even to someone with a passing knowledge of using art as therapy. One might presume that the field of 'creative arts therapy' would be

#### Touching Space, Placing Touch

rich in debate about sensory mechanisms in art making. Creative arts therapy, as a profession, has a well established literature, covering the benefits and challenges of using 'art' therapeutically in myriad forms: visual, tactile, music, drama and writing (Malchiodi 2003). Authors in the field, though, are primarily involved in examining and applying psychoanalytic theories in relation to work with adults and children, and reporting on the use of creative arts in a variety of clinical, therapeutic and community settings including palliative care, psychotherapy, cancer care support and so on (Camic 2008, Staricoff 2004). With the call to develop more research in the profession (Gilroy 2006), interest is slowly starting to coalesce around the sensory, somatic mechanisms of therapeutic art. This is in tandem with the growing interest in the neuroscience behind the effects of creative arts and, for example, their use within the paradigm of cognitive-behaviour approaches to therapeutic interventions (Johnson 2009, Lusebrink 2004). Yet the process of touching, as the primary therapeutic modus operandi in tactile art therapies, remains relatively unexplored, even where tactile art is well established in supporting healing in life limiting illness during recovery, survivorship and at the end of life (Pratt and Wood 1998, Sibbett 2005). The fact that tactile experience is less visible in creative arts therapies echoes a cultural 'hierarchy' of senses that tends to prioritise the visual over the tactile (Paterson 2007, Smith 2007). What drives this ambivalence and why is touch relegated to the fringe of our awareness?

Touch is our primal sense (see Introduction, this volume, Montagu 1986, Streri 2003) and the subject of specific philosophical and scientific study, particularly since the nineteenth century. Integral to total sensory experience, we may underestimate or never bring to conscious awareness how reliant we are on tactility. The first sense to arise in embryo and the last to leave as we die, the conscious and unconscious relationship to touch and the tactile is virtually impossible to grasp. Gilman (1993) contends that it is the 'complex' and 'undifferentiated' nature of touch that make it the most difficult sense to study. He is concerned with the paradox of touch reflected in our socially constructed juxtaposition of medicalised versus sexualised touch and the ways we judge it, separating it as 'the erotic or painful' and as 'good touching or bad touching' (Gilman 1993, 199). Smith (2007, 94), in his work on Western sensory histories, offers a more mundane reason why touch has tended to be ignored, even 'slighted', historically: scholars have often found it hard to grasp and represent the sense of touch in a textual form, tending to prioritise visual imagery in historical accounts of events overlooking, sometimes, very rich tactile description in the written record. Indeed, as both Gilman and Smith note, sensory hierarchy in Western cultures is rarely discussed without revealing some ambivalence about touch. One of the only exceptions is when touch is the subject of scientific research and even this has, until recently, largely been the domain of enquiry into the experience of visually impaired or blind people who are particularly reliant on tactile stimuli.

In the last few decades technological advancements in neuroscience have led to more exacting research in our understanding of touch in biology, physiology and the psychology of touch in blindness including the mechanisms of learning

#### Touching Space in Hurt and Healing

to read Braille (Heller 1991, Millar 1997). Sensory development and modality is still not fully understood but is now thought to be cross-modal (also termed 'intermodal') (Shimojo and Shams 2001). This means that one sense does not develop independently from the others, rather from earliest infancy there is a continual 'modulation' between all five senses to create total sensory perception and interpretation of internal and external stimuli. Streri (2005) argues that crossmodal or intermodal development can be demonstrated in newborn infants. The pivotal sense in this process is the haptic, which Streri (2003, 51) states is the most 'primitive sense', demonstrable in 'the first few weeks of foetal life'. Tactile perception at the cutaneous surface is also found to be exquisitely sensitive, particularly over the surface of the hands and fingertips, an area of the skin rich in nerve endings. Indeed, throughout our lives, we can differentiate, just by touch, between micro millimetres of thickness in textured materials (Gentaz and Hatwell 2003, Hollins et al 1999). Given this capacity and the concentrating of tactile perception in the hands and fingertips, we can appreciate the ways touch is integral to our sensory development and utility. As Streri (2005, 326) affirms:

Hands are a complex system that involves two functions: a perceptual function ("knowing") and an instrumental function ("doing") ... The hands are also the motor organs used to reach, hold, transform and transport objects in our everyday life. This second function is specific to the manual system and gives it a unique and original characteristic among the senses. Thus, we can create events with our hands, even though these productions are often limited.

Therefore, from infancy we engage in what could be termed a continual 'haptic exchange': touching our own body, touching carers and objects in our immediate environment with hands and fingertips, mouths and lips; in active physical movements, learning to roll over, crawl and then walk. Although learning about our internal, embodied and external world may require intermodal sensory interaction, we start with the tactile.

Studies of intermodality using comparative sensory perception between sighted versus visually impaired or blind individuals shows there is a particularly strong relationship between vision and touch<sup>3</sup>. In a study by Heaps and Handel (1999) participants shown two-dimensional images of textured surfaces have no difficulty accurately grouping these into rougher or smoother surfaces, using only visual cues learnt intermodally in conjunction with tactile stimuli. Conversely,

<sup>3</sup> First described by seventeenth century philosopher William Molyneux, there was much philosophical debate, later known as 'Molyneux's question', about whether the senses developed and operated independently or intermodally, and how this process was affected by blindness (Paterson 2007). Although congenital or acquired visual impairment pose constraints on total sensory organisation and perception, individuals are still able to adapt and acquire knowledge of the external world relying on the 'ground' of the haptic and working intermodally with aural, olfactory and gustatory perception.

#### Touching Space, Placing Touch

congenitally blind individuals, whose vision has eventually been restored are unable to accurately identify an object visually they have previously only known through touch, until they are able to explore the object together with vision and touch. These studies do, however, emphasise the essential nature of the sensory 'ground' that tactile experience provides and through which we are able to 'make sense' of perceived external stimuli and internal, embodied (somatic) phenomena.

In the course of childhood development and into adulthood we can and often do, if we are not visually impaired, let the tactile, indeed the full haptic, fade into the background of our awareness. Vision, and the safe distance it affords, allows us such a rapid assessment of our surroundings at any given time that as a result we may imagine and consciously promote vision as the key sense through which taste, smell, sound and touch are interpreted. Touch though, as suggested above, adds a crucial spatial and experiential dimension to the assessment of internal sensation and external stimuli. While we may speak of the eyes as the window to the soul, tactile exchange is the 'ground' from which our visual connection and interpretation arises and the 'ground' through which we reference the other senses of taste, smell, and sound. This idea of a ground or baseline of primal sensory connection with the earliest elements of the foundations of self echoes Streri's (2003) earlier assertion of the primitive (and primal) place of the haptic from earliest infant experience. The ground of tactile exchange is where, we could say, the 'macro space' of our external world interfaces with our inner at what may be conceived as a tactile '*micro* space' on the cutaneous boundary of the physical body. This interface corresponds with Winnicott's (1971) 'intermediate area of experience' or 'potential space' where we mediate inner and outer experience and relationships between our 'self' and 'not self' or 'other'. In other words the tactile 'micro-space' is a crucially important element of mediating our experience of and relationship with self. These concepts are important in understanding the potential therapeutic role of tactile perception in art making, as I shall discuss below. First, I shall define in greater depth the concepts of 'self' and 'not-self' or 'other'.

#### Reconnecting with an Authentic Sense of Self in Hurt and Healing

Focused, aware touching in the form of art making is a creative opportunity to reconnect us to our 'primal ground'. Being in touch, though, does more than connect us with our creativity. The unique primacy and intimacy of touch connects us with a subjective sense of self. The idea of self, however, as an identifiable, defined subjectivity is notoriously elusive. As Pile and Thrift (1995, 9) argue, the self, identity and subjectivity are spatially integral with the social thus the self is always 'multiple, moving, changing'; in other words, the self is always under construction as a social identity and as such can never be defined. The subjective experience of self is no less elusive and mercurial. As fast as we create and recreate a 'trope' of experience, memories, thoughts and ideas that emphasise the continuity of a sense of self as a stable, immutable and authentic identity.

#### Touching Space in Hurt and Healing

77

that moment will be gone risking having to face what Laclau (1994, 3, cited in Pile and Thrift 1995, 9) has described as the lack 'at the root of identity'. Hence, subjectively the sense of self, which must, by default, be experienced as truly 'me' having some authenticity, must be continuously invoked to avoid an imagined catastrophic collapse of identity - a chaos of 'no self' into all that is outside of the physical and psychic boundaries known as 'not-self' or 'other'. The idea of reconnecting with an 'authentic sense of self', requires moving into what Taylor (1989, 175-6, cited in Pile and Thrift 1995, 8), describes as a 'reflexive stance', in which '[w]e have to turn inward and become aware of our own activity and of the processes that form us'. From an object relations theory perspective, despite the individual's capacity to be reflexive, the self is fundamentally 'unknowable' regardless of any subjective experience of feeling the self as 'real' or 'conversely' ... 'false, incoherent, fragmented' (Bingley 2002, 35). In this model the self is imagined as a semi-submerged consciousness, located within our physical, sensory boundaries that flows back and forth from our unconscious in waking and dream life (see Bollas 1987). Despite the elusive nature of self, we will always seek a feeling of authenticity: we are bound to in order to maintain a functioning personhood. An inner sense of self as 'authentic' or 'true' (Mitchell 1993) versus a sense of 'false self' was originally a focus of Winnicott's theorising in his exploration of the differing states that people perceive themselves in mental distress versus in good mental health. Winnicott (1960, 148) suggested that re-finding and living from our sense of 'true self' was part of the successful outcome of analysis:

Only the True Self can be creative, and only the True Self can feel real ... [In contrast] the existence of a False Self results in feeling unreal or a sense of futility ... The True Self comes from the aliveness of the body tissues and the working of the body functions.

Contemporary psychoanalyst Christopher Bollas (1987), in developing Winnicottian theory, further modulates this version of self by focusing on the concept of the 'aliveness' of the 'true self'. He sees the self not as a comparative binary of 'false' or 'true' but rather an experience of authenticity arising from our inner self or 'idiom'. As Bollas (1987, 9) affirms: 'it is important to stress how this core self is the unique presence of being that each of us is; the idiom of our personality'. More recently, he has refined his concept of self as idiom, cogently describing the self, or our reference point of 'me', as an 'inner constellation', that in effect is virtually unknowable and indescribable in totality. As he reflects:

when we think "me" without reference to any other term, we evoke a dense inner constellation, a psychic texture, existing not in the imaginary, although it yields derivatives there, but in the real, an area that can be experienced but cannot be represented in itself ... The me can be conceptually identified and its material discussed. It is composed of memories (including the history of desire), and

#### Touching Space, Placing Touch

78

these constitute the cumulative psychic outcome of idiom's theories and their enacted deployment in a life's experience. (Bollas 1995, 152)

In this psychoanalytic model, therefore, the self can be conceptualised as a 'constellation', or collage, that as a whole and in each part, has a unique story, collection of memories and 'psychic texture' expressing an individual's own 'peculiar essence or a personal idiom'. Realising and connecting with our idiom and then expressing this as a fully conscious, recognisable total experience is, Bollas suggests, an impossibility, not least because much of our self lies beyond our conscious thought in the realms of unconscious dreaming. As such we can never grasp the whole, only the dream shadows of our self as idiom. Being and living our idiom is a process, a continual becoming of self within embodied sensory and somatic experience.

As Wright (2009) emphasises the primal elements of a sense of self are embedded in the primary relationship between infant and the 'holding' by the 'good enough' mother. Thence, development and maturation of embodied self continues in the 'intermediate area of experience' or the Winnicottian 'transitional space' between perceived self and other. Thereafter, to maintain continuity of self, feeling 'in touch' with our 'sense of self' requires sensory (and cognitive) revisiting/ (re) connecting with embodied elements of the primary relationship. Creating art, Wright (2009) contends, whether tactile or visual, has an important function as self-expression, both reiterating and communicating the continuity and continual becoming of self as real and authentic. But what is perceived to happen to the continuity of our embodied self during illness?

In states where the self has been disrupted by some traumatic event or process, as in serious illness and invasive treatments, the self is experienced as incoherent and fragmented, described by the sufferer as feeling 'not my self' and less able to function at every level, physically, mentally or emotionally (see Barnard 1990). The disruptive effects of serious illness on our embodied self start from the point where symptoms impinge on our everyday life, but many people relating their illness narratives report diagnosis as the single biggest impact on their self-identity and on their personal and social relationships (Bingley et al 2006). Subsequent invasive tests, treatments and surgery are experienced at a visceral, primal level as hurts, however well-meaning. As Gilman (1993) notes, this is the paradox of medicalised touch: it hurts. At the most primitive level of subjective embodiment we perceive painful procedures as the body undergoing, what could be termed as, a micro-spatial invasion within the macro-spaces of the medical environment. The resulting disruption, as Öster et al (2009) describe in their work with women in recovery from breast cancer treatment, occurs at both the actual physical and imagined boundaries of self.

In terms of sensory perception the disruption of self occurs within the total haptic experience, internally and externally. The greater the disruption, the greater the impact on the perceived sense of self until there is felt to be a threat to the very authenticity of self. Hence, the individual is in a constant struggle to re-negotiate

#### Touching Space in Hurt and Healing

the 'ground' of the embodied self. If the illness results in a permanent and/or lifelimiting state of chronic ill-health or disability, the individual has to find a way, somehow, however fleetingly, to re-connect with their inner authentic self, to 'feel themselves' again, or risk what is variously described as a state of dislocated, alienated self, in a narrative of chaos and despair, 'out of touch' with self (Frank 1995, Thomas-MacLean 2004b). However, inasmuch as we are hurt by medicalised touch, we can equally heal by using the therapeutic qualities of touch. For instance, in therapeutic art making, at one level we seek to repair the self hurt by 'bad' touch by using 'good' touch to heal the self. At this most primal level the organism as embodied self may perceive and interpret embodied experience at an unconscious and at times conscious level. Bringing somatic responses and emotional feelings into conscious awareness through the art making is a way of facilitating a re-negotiation and repair of boundaries. Wright (2009) expands on this idea of art making as way of reconnecting with the embodied self by invoking the primal relationship. He argues that in creating an expression of self in the art work we also communicate elements of self to the 'not-self'/other and this affirms the subjective sense of authentic self as real. Sensory experience is integral to the primal and subsequent sense of embodied self, and as I argued above, the tactile and haptic are the crucial 'ground' from which elements of self are continuously (re)created.

In attempting to recover from and resolve the traumatic effects of life-limiting illness, then, we can consciously make use of touch in art making in two important ways. Firstly, as I describe above, touch in art making is a way of literally getting 'back in touch' with a sense of the familiar self; to re-establish the primacy of a sense of 'authenticity' of self; those known limits of self that are felt to be lost in the disruption of serious illness and invasive medical treatments. Secondly, the act of art making is reported as facilitating the healing of and reconciliation with past traumas. Past hurts can surface and be re-activated with a particular urgency when we face life threatening illness. In the course of healing, though, there is often an openness to be reconciled with those events whether as a resolution at the end of our life, or as part of our recovery and survivorship. For example, in palliative care art therapy, the urgency to resolve past hurts and reassert a sense of self identity is well-documented (Pratt and Wood 1998, Sibbett 2005). A patient may want to engage in therapeutic art making, even in the last stages of illness when they are barely able to do any of the physical activity, but where they can still touch and feel the texture of an image or artefact. Stone Matho (2005), an art therapist working in supportive and palliative care in France, relates how one patient had benefited from art sessions over many months as a way to resolve feelings from early family relationships thus allowing reconciliation with her father. This patient was so determined to complete her process that she insisted to the end of her life to continue art making actively holding and handling art materials, with Stone Matho eventually taking the materials to the patient's bedside. Although, Stone Matho's description remains focused on the patient's process art as therapy, inevitably touching and working with the art materials was integral to the process.

Touching Space, Placing Touch

#### **Touching in Therapeutic Art Making**

The German art therapist Uwe Herrmann (1995) reports that when he started work in the early 1990s at a residential state school for blind children, he discovered that the pupils had been denied any art making in their education, on the basis that it was visual and thus has no place in a school for the blind. He noted that 'to give not only clay but also paint to blind or partially sighted students was still regarded as a revolutionary act by quite a few staff' (Herrmann, 1995, 229). Yet he was able to counter this situation by instituting art sessions and demonstrating that tactile art was a valuable and therapeutic medium for blind children, some of whom were deeply traumatised refugees from the conflicts in former Yugoslavia. The sessions helped them to express and process their feelings about often harrowing experiences. Herrmann's (1995) paper is, however, a very rare example by an art therapist *specifically* describing the importance of the *tactile* qualities of art making. What is less unusual is that he describes the benefits of tactile art in the context of working with the blind and visually impaired.

In psychoanalytic and psychotherapeutic settings there is great sensitivity towards the subject of touch and touching with some heart-searching scrutiny and debate, much of it concerned with the importance of maintaining integrity and proper conduct of practitioners, whether their work is 'verbal' or 'body' psychotherapy (Totton 2003). Creative arts therapists regard touch and touching, where appropriate, as a natural and integral part of the therapeutic experience, despite the apparent lack of interest in recognising and exploring the tactile element of art making. The few exceptions in the literature include the work of neurobiologist Lusebrink (2004) who has examined which areas of the brain are stimulated during art therapy activities. From an art therapist perspective Sibbett (2005) also describes the importance of 'liminal' spaces in art making, meaning the spaces at the edge or interface of experience, actual and imagined, between the individual and their art. While Wood (1998b) mentions the physicality in art therapy, describing this as 'bodyliness', she also refers to an observation by Erskine and Judd (1994) who, she notes, maintain that art therapy provides an opportunity to feel a 'unity' of 'body and mind'; as Wood (1998b, 34-35) further explains:

This interrelationship of body and mind is extremely difficult to experience. Something of this unity can however be glimpsed in artwork produced in therapy. The physicality of art materials along with their symbolic capacity enables wordless layers of experience to be rendered in concrete form, with the resonances between the two being regarded as therapeutically powerful.

Erskine and Judd, from Wood's interpretation, come closer than other art therapy literatures to a tacit acknowledgement of the importance of the tactile connection in art making, by which we can communicate and make sense of aspects of self experience. In the final section of the chapter, I explore the use of this interface

Touching Space in Hurt and Healing

in tactile art and how these principles may be involved when seeking insight or resolution in illness.

# Touching the Transitional Object: Processes of Self-expression through Tactile Art



# Figure 3.1Touching spaces in sandplaySource: author photograph

In therapeutic art making touch, I suggest, holds an often unacknowledged and hidden primacy in the interaction between an individual and the different materials used in sessions. Art materials may include paints, paper, sand, clay, textiles and metals, and natural materials such as wood and stone. Activities can include holding a brush or pencil, or using fingers and hands to apply paint or create a two-dimensional image or collage; fashioning artefacts and incorporating natural objects into a three dimensional model. Even in painting the very act of picking up a brush or pencil connects us instantly with the tactile connection or conduit, 'grounding' us between and within inner self and outer other (paper or art medium). In art making workshops I have found that highly tactile media such as sand, clay or textiles, are particularly effective as expressive media. Sandplay, for example, a non-verbal technique often used in art therapy, involves literally playing with wet and dry sand as a medium with which to explore and express thoughts and

### Touching Space, Placing Touch

feelings difficult to access or communicate verbally (Figure 3.1). These feelings maybe consciously associated with some specific situation or experience or the participant or client may be feeling some undefined mental and emotional state at the fringes of everyday consciousness, which when accessed and expressed via the non-verbal art making can facilitate insight and / or resolution (Wood 1998a).



### Figure 3.2 Fully in touch with clay

Source: author photograph

Clay is also used extensively, and working with a single medium of sand or clay seems to help focus participants on the therapeutic, mediating expressive process rather than striving to create art<sup>4</sup>. Touching and working with wet or dry sand and clay is a strong, tactile, indeed fully haptic, stimulus of hands and fingers using a range of delicate and rough muscular movements that necessarily involve the whole body; this effectively ensures a total sensory engagement, concentration and focus with the task<sup>5</sup> (Figure 3.2). For example, within minutes of starting to touch the sand, clay or textiles participants will use a variety of interactions:

<sup>4</sup> Theories and practice of sand play are extensively discussed elsewhere (see Bingley, 2003; and Bingley and Milligan 2007 for examples of using this technique in geographic fieldwork).

<sup>5</sup> In comparison tapping a digital keyboard, for example, does not create the same intense tactile stimulus, due to the small, uniform surface area involved and the limited potential for creative tactile interaction with the medium of a digital keyboard.

#### Touching Space in Hurt and Healing

stroking, smoothing, patting or hitting, moulding and fashioning shapes, kneading and sculpting sand or clay. They report feeling almost instantly and intensely absorbed in the activity. For example, research participants in an art making workshop exploring tactile experience with sand, clay, wood and textiles describe working with the different materials in exacting detail with their eyes shut and focused on touch:

an amazing bit of velvet here, really so soft, incredible'... 'soft and warm [velvet] and the clay is cold and clammy'...'the contrast [between clay and velvet] is quite a shock really, your hand on the clay, although I loved it, it was rougher (Bingley 2002, 4498A Notes).

In another workshop sand, in particular, was found to induce:

a dreamy state ...' and that it was possible to 'get completely immersed in it [the sandplay]'... [reminding the participants] 'of being very young' ... 'I really love the texture. I love wet sand a lot more than dry sand, 'cos wet sand it doesn't go straight through your fingers, you know, you can like hold it there and, and everything and I don't know, I was just really enjoying myself. I just sat there and thought 'wow! I'm like a kid again. ... and it's really good. (Bingley and Milligan 2004, QE5 workshop)

The art making, in effect, becomes the psychoanalytic 'object'<sup>6</sup> and this as Wright (2009) argues represents the Winnicottian 'transitional object' which mediates between self and other; a neutral, unconditional object that can be made use of freely by the unconscious self for projection or transference into the conscious self, allowing resolution. Similar to Wright (2009), I suggest that this kind of art making can be a medium by which various primal needs are re-enacted stimulated by touch and touching, including the earliest embodied memories of being soothed and stroked either by our own touch or the touch of our primary carer(s), as well as early disillusionments and traumatic physical, tactile experiences. Thus, either consciously or unconsciously, the object (represented by sand, clay or other art materials) is used to attempt to reconnect with the primal 'ground' and to resolve both the current and any early trauma (whether or not we bring this part of the process to our conscious awareness). In effect, the apparent simplicity of 'just playing' with sand or clay underestimates the power of the tactile medium as transitional object to act as mediator between self and other.

In a situation where the self is disrupted and the boundaries of self traumatised by illness, art making is found to support an individual to resolve the disruption, repair and 'strengthen' the boundaries (Öster et al 2007, 277). Although, as noted

<sup>6</sup> The psychoanalytic 'object' is defined by Bollas (2009, 15) as any 'thing' (object) that 'can stand in for 'parts' of the self in relation to his or her mental objects, usually differing forms of representation of other people'.

#### Touching Space, Placing Touch

by Öster et al (2007) exactly how art making facilitates this process is unknown, there is an extensive, and impressive, literature giving case by case examples of the therapeutic potential and beneficial results of art making (Jones 2005, Thomas-MacLean 2004a, Malchiodi 2003). I suggest that these therapeutic qualities of art making as a way of supporting recovery or resolution in illness is, in part, due to the expression of self through the ground of the tactile and consequent opportunity to reconnect with a sense of the 'old self'; that is the sense of 'authentic' or 'true' self. Recognising this may help us make sense of why embodied processes of art making appear so effective in facilitating a sense of healing from the traumatic disruptions of illness and resolution of difficult emotions.

Tactile art making will almost invariably at some point, as I reported above, bring out childhood memories. This phenomenon is well-documented in creative arts therapy literature (Malchiodi 2003). The individual is emboldened to express and explore these past experiences and embodied thoughts as they arise through the art making process, and to reconnect with the 'playful' self. Through this reconnection with the primal tactile ground and various elements of self, we re-assert our sense of 'authenticity', (re)gaining a sense of inner authority and control, and thus able to re-negotiate current and future self/other relationships (Bollas 1987). In this way, working with the art object can be used to heal the disrupted narratives of self; a process that engages with our creative capacity to communicate and resolve powerful emotions (Wood 1998a).

Another important aspect of the therapeutic art making process is that the sessions are conducted in a 'safe space' where the process is 'held' and acknowledged within a 'facilitating environment'; that space between an individual art-maker and the therapist as witness (Marxen 2009, Winnicott 1971). Marxen (2009, 133), describing art therapy with traumatised young people, emphasises that the 'safe empathetic atmosphere' of the art therapy space allows the individual to safely express aggressive or difficult feelings through symbolism of the art making. Thus, the external space I describe as the 'macro-space' of the art making environment acts to contain and allow some element of the individual controlling the expression of potentially overwhelming feelings that flow through micro-spaces of touching. At least some of this powerful process of art making and the connection with self is only possible in the context of a safe place where the art making can be 'held'. Creative art whether used in therapy or in a therapy research setting, is usually conducted in a space and time specifically set up for this purpose, facilitated by a trained psychotherapist who aims to 'hold' the therapeutic space enabling the participants (Winnicott 1971). In this context the therapist witnesses and supports the individual's process. In my own research with tactile methodologies and in my therapeutic experience as a psychotherapist, this is an essential aspect of the process: the macro-space of the art making needs to be adequately held by the facilitator /therapist, in order that the individual can feel safe enough to connect with self and other via the micro-space of touching the art object. The importance of the 'holding', in Winnicottian terms, is that the therapist

Touching Space in Hurt and Healing

85

protects the macro-space in the same way as 'good enough mothering' protects the child's early play space.

#### Conclusion

Art therapists and the individuals with whom they work have documented the benefits of using creative arts as an approach to healing, suggesting that art making can be a sensitive and effective medium for exploration of thoughts and feelings that are difficult to access and verbalise. Touch is an integral, but often overlooked aspect of art making and the tactile element of art making is a key factor in the therapeutic process. This may be due in part, I suggest, to the primacy of the tactile and haptic 'ground' in our earliest development of a sense of self and identity. The effect of connecting with our creativity via this tactile 'ground' facilitates a re-negotiation with a sense of self that is felt to be 'authentic' or 'true', and this process can be profoundly healing. Whilst the 'self' is acknowledged to be essentially unknowable, subjectively there is a need to maintain a sense of self and identity experienced broadly as feeling 'authentic' or 'true'. The experience of serious and life-threatening illness, fraught with long, often traumatic treatments and the possible end of life, is reported as a profound disruption to the sense and boundaries of self; physically, mentally and emotionally. This can result in a feeling of the self as 'fragmented' or 'false'; feeling 'out of touch' with 'oneself', with past pain and childhood memories often reactivated. Art therapy is found to be a powerful and effective means to seek some resolution and re-establish a sense of 'true' self.

The tactile sense at the physical boundary of hands and fingers is, I propose, a 'micro-space' between inner subjective experience and the macro-space of the external other. Art making using highly tactile media such as sand, clay and textiles can facilitate communication and expression via these micro-spaces of tactile perception between inner thoughts and feelings that are difficult to access and verbalise. An important aspect of the process is having a supportive witness to this expression, a role usually fulfilled by a trained therapist. The tactile element of therapeutic art making is considered to be one key to understanding the process by which creative arts can facilitate insight and emotional resolution for those suffering serious and life threatening illness.

#### References

Axline, V.M. 1969. Play Therapy. New York: Balantine.

- Barnard, D. 1990. Healing the damaged self: identity, intimacy, and meaning in the lives of the chronically ill. *Perspectives in Biology and Medicine*, 33, 535–46.
- Bingley, A.F. 2002. *The Influence of Gender on the Perception of Local Landscape*. University of Edinburgh: Unpublished PhD Thesis.

Touching Space, Placing Touch

- Bingley, A.F. 2003. In here and out there: sensations between self and landscape. *Social and Cultural Geography*, 4(3), 329–45.
- Bingley, A.F. and Milligan, C. 2004. *Climbing Trees and Building Dens* (Unpublished research fieldnotes, Lancaster University)
- Bingley, A.F. and Milligan, C. 2007. Sandplay, clay and sticks: multi-sensory research methods to explore the long-term influence of childhood play experience on mental well-being. *Children's Geographies*, 5(3), 283–96.
- Bingley, A.F., McDermott, E., Thomas, C., Payne, S.A., Seymour, J.E. and Clark, D. 2006. Making sense of dying: a review of narratives written since 1950 by people facing death from cancer and other diseases. *Palliative Medicine*, 20(3), 183–95.
- Bollas, C. 1987. *Forces of Destiny. Psychoanalysis and Human Idiom*. London: Free Association Books.
- Bollas, C. 1995. Cracking Up. The Work of Unconscious Experience. London: Routledge.
- Bollas, C. 2009. The Evocative Object World. London: Routledge.
- Camic, P.M. 2008. Playing in the mud: health psychology, the arts and creative approaches to health care. *Journal of Health Psychology*, 13(2), 287–98.
- Erskine, A. and Judd, D. 1994. *The Imaginative Body: Psychodynamic Therapy in Health Care*. London: Whurr.
- Field, T. 2001. Touch. Cambridge, MA: MIT Press.
- Field, T., Fernandez-Rief, M., Quintino M, Schanberg, S. and Kuhn, C. 1998. Massage therapy – elder retired volunteers benefit from giving massage therapy to infants. *Journal of Applied Gerontology*, 17, 229–39.
- Frank, A.W. 1995. *The Wounded Storyteller: Body, Illness, and Ethics*. Chicago: University of Chicago Press.
- Gentaz, E. and Hatwell, Y. 2003. Haptic processing of spatial and material object properties, in *Touching for Knowing*, edited by Y. Hatwell, A. Streri and E. Gentaz. Amsterdam: John Benjamin), 123–59.
- Gerhardt, S. 2004. *Why Love Matters. How Affection Shapes a Baby's Brain.* London: Routledge.
- Gilman, S. 1993. Touch, sexuality and disease, in *Medicine and the Five Senses*, edited by W.F. Bynum and R. Porter. Cambridge: Cambridge University Press, 198–224.
- Gilroy, A. 2006. Art Therapy, Research and Evidence-based Practice. London: Sage.
- Heaps, C. and Handel, S. 1999. Similarity and features of natural textures. *Journal of Experiment Psychology: Human Perception and Performance*, 25(2), 299–320.
- Heller, M.A. 1991. Haptic perception in blind people, in *The Psychology of Touch*, edited by M.A. Morton and W. Schiff. Hillsdale NJ: Lawrence Erlbaum.
- Herrmann, U. 1995. A Trojan horse of clay: art in a residential school for the blind. *The Arts in Psychotherapy*, 22(3), 229–34.

Touching Space in Hurt and Healing

- Hollins, M., Faldowski, R., Rao, S. and Young, F. 1999. Perceptual dimensions of tactile surface texture: a multidimensional scaling analysis. *Perception & Psychophysics*, 54(6), 697–705.
- Johnson, D.R. 1999. *Essays on the Creative Arts Therapies*. Springfield, IL: Charles C Thomas.
- Johnson, D.R. 2009. Commentary: examining underlying paradigms in the creative arts therapies of trauma. *The Arts in Psychotherapy*, 36, 114–20.
- Jones, P. 2005. *The Arts Therapies: A Revolution in Healthcare*. Hove: Brunner-Routledge.
- Kalff, D.M. 1980. Sandplay. Boston, MA: Sigo Press.
- Krieger, D. 1979. The Therapeutic Touch. New York: Fireside.
- Laclau, E. 1994. Introduction, in *The Making of Political Identities*, edited by E. Laclau. London: Verso, 1–8.
- Lowenfeld, M. 1979. The World Technique. London: Allen & Unwin.

Lusebrink, V.B. 2004. Art therapy and the brain: an attempt to understand the underlying processes of art expression in therapy. *Art Therapy: Journal of the American Art Therapy Association*, 21(3), 125–35.

- Malchiodi, C.A. 2003. Using art with medical support groups, in *Handbook of Art Therapy*, edited by C.A. Malchiodi. New York: Guilford Press, 351–61.
- Marxen, E. 2009. Therapeutic thinking in contemporary art. Or psychotherapy in the arts. *The Arts in Psychotherapy*, 36, 131–39.
- Mathieson, C.M. and Stam, H.J. 1995. Renegotiating identity: cancer narratives. *Sociology of Health & Illness*, 17(3), 283–306.
- Millar, S. 1997. Reading by Touch. London: Routledge.
- Mitchell, S.A. 1993 Hope and Dread in Psychoanalysis .New York: Basic Books.
- Montagu, A. 1986. *Touching: The Human Significance of Skin, Third Edition*. London: Harper Collins.
- Moore, T. 2004. Annotated Bibliography of Published Therapeutic Touch Research: 1975 to July 2004. Toronto: Therapeutic Touch Network of Ontario.
- Öster, I., Magnusson, E., Thyme, K.E., Lindh, J. and Åström, S. 2007. Art therapy for women with breast cancer: the therapeutic consequences of boundary strengthening. *The Arts in Psychotherapy*, 34, 277–88.
- Öster, I., Åström, S. Lindh, J. and Magnusson, E. 2009. Women with breast cancer and gendered limits and boundaries: art therapy as a 'safe space' for enacting alternative subject positions. *The Arts in Psychotherapy*, 36, 29–38.
- Paterson, M. 2007. The Senses of Touch: Haptics, Affects and Technologies. Oxford: Berg.
- Pile, S. and Thrift, N. 1995. Introduction, in *Mapping the Subject: Geographies of Cultural Transformation*, edited by S.Pile and N. Thrift. London: Routledge), 1–12.
- Pratt, M. and Wood, M.J.M. 1998. Art Therapy in Palliative Care. London: Routledge.
- Shimojo, S. and Shams, L. 2001. Sensory modalities are not separate modalities: plasticity and interactions. *Current Opinion in Neurobiology*, 11, 505–09.

Touching Space, Placing Touch

- Sibbett C. 2005. Liminal embodiment: embodied and sensory experience in cancer care and art therapy, in *Art Therapy and Cancer Care*, edited by D. Waller and C. Sibbett. Maidenhead, England: Open University Press, 50–81.
- Smith, M.M. 2007. Sensory History. Oxford: Berg
- Stone Matho, E. 2005. A woman with breast cancer in art therapy, in Art therapy and Cancer Care, edited by D. Waller and C. Sibbett. Maidenhead, England: Open University Press, 102–18.
- Staricoff, R. 2004. *Arts in Health: a review of the medical literature*. Arts Council England, <www.artscouncil.org.uk/documents/publications/phpc0eMaS.pdf>.
- Streri, A. 2003. Manual exploration and haptic perception in infants, in *Touching for Knowing*, edited by Y. Hatwell, A. Streri and E. Gentaz. Amsterdam: John Benjamin, 51–66.
- Streri, A. 2005. Touching for knowing in infancy: the development of manual abilities in very young infants. *European Journal of Developmental Psychology*, 2(4), 325–43.
- Taylor, C. 1989. *Sources of the Self: The Making of Modern Identity*. Cambridge: Cambridge University Press.
- Thomas-MacLean, R. 2004a. Memories of treatment: the immediacy of breast cancer. *Qualitative Health Research*, 14(5), 628–43.
- Thomas-MacLean, R. 2004b. Understanding breast stories via Frank's narrative types. *Social Science & Medicine*, 58, 1647–57.
- Totton, N. 2003. *Body Psychotherapy: An Introduction*. Maidenhead, England: Open University Press.
- Vick, R.M. 2003. A brief history of art therapy, in *Handbook of Art Therapy*, edited by C.A. Malchiodi. New York: Guilford Press, 5–15.
- Wood, M.J.M. 1998a. What is art therapy?, in *Art Therapy in Palliative Care*, edited by M. Pratt and M.J.M. Wood. London: Routledge, 1–11.
- Wood, M.J.M. 1998b. Art therapy in palliative care, in *Art Therapy in Palliative Care*, edited by M. Pratt and M.J.M. Wood. London: Routledge, 26–37.
- Winnicott, D.W. 1960. Ego distortion in terms of true and false self, in *The Maturational Processes and the Facilitating Environment*, by D.W. Winnicott. London: Karnac Books, 37–55.
- Winnicott, D.W. 1971. Playing and Reality. Harmondsworth, England: Penguin.
- Wright, K. 1991. *Vision and Separation: Between Mother and Baby*. London: Free Association Books.
- Wright, K. 2009. *Mirroring and Attunement: Self-realisation in Psychoanalysis and Art.* London: Routledge.